



# Leading Inverter Manufacturer

String Inverter | Hybrid Inverter | Microinverter



#### Note:

The technical data above mentioned may be updated or revised due to product development.

The data in this brochure is subject to change without notice.

The latest datasheet and catalogue can be acquired via [market@deye.com.cn](mailto:market@deye.com.cn)

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Deye Inverter



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Ver: 5.1.06.18.25





# Company Profile

1

**Ningbo Deye Inverter Technology Co., Ltd.**, founded in 2007 with registered capital of 56 million USD, is one of the China's high-tech enterprises and a subsidiary of Deye Group. With a plant area over 600,000m<sup>2</sup> and complete production and testing equipment, Deye has become a major player in the global solar inverter market.

2

**Ningbo Deye Inverter Technology Co., Ltd** is dedicated to providing complete photovoltaic power system solutions, including residential and commercial power plants solutions. Also, Deye offers solar energy storage system solutions. Among them, PV grid-connected inverter power range from 1-136kW, Hybrid inverter 3kW-80kW, and microinverter 300W-2250W.

3

As a technology-oriented company, Deye has always been committed to researching and developing new cutting-edge technologies to provide efficiency and reliable products. For example, Deye adopts T-type three-level topology and enhanced SVPWM algorithm to further improve the conversion efficiency by 0.7% compared with common SPWM. With frequency droop control technology, Deye string inverter is able to work with diesel generator, which greatly expands the scope of the product application.

# Milestones

## 2023

Cumulative shipments of hybrid inverters surpass **1 million** units.

## 2021

Deye Group was successfully listed on SSE of China in 2021, Stock Code **605117.SH**.

## 2017

Deye has launched first generation hybrid inverter and attracted a lot of attention with many unique features such as V/f droop control technology and battery DC / DC topology etc...

## 2024

Launch of the next-generation hybrid inverters and microinverters with a fresh design.

## 2022

Launched the latest generation of **50kW** hybrid inverter, equipped with independent two-way battery terminal port.

## 2019

By the end of 2019, with total shipments **30,000+**, Deye hybrid inverter has become Top 3 in SouthAfrica, Pakistan and **Top 1** Chinese brand in USA.

## 2007

Founded in 2007 with registered capital of **56 million USD**.

# Core Technology

Deye hybrid inverter 3-80kW with 208/230/240/400Vac

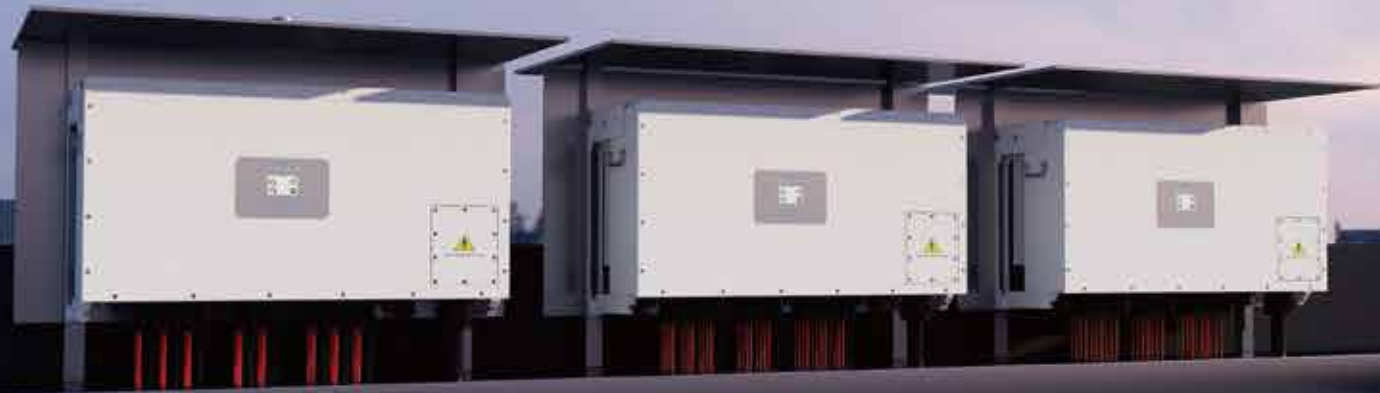
- ◆ Automatic switching time 4ms
- ◆ 6 time periods for battery charging/discharging
- ◆ V/f droop control, Max. 16pcs in parallel
- ◆ Supports using diesel generator to charge battery directly, ensuring system energy supply 7\* 24H
- ◆ Max. conversion efficiency of 97.6%; Max. battery charge efficiency of 96.5%



# Core Features

## Deye grid-connected inverter 1-136kW

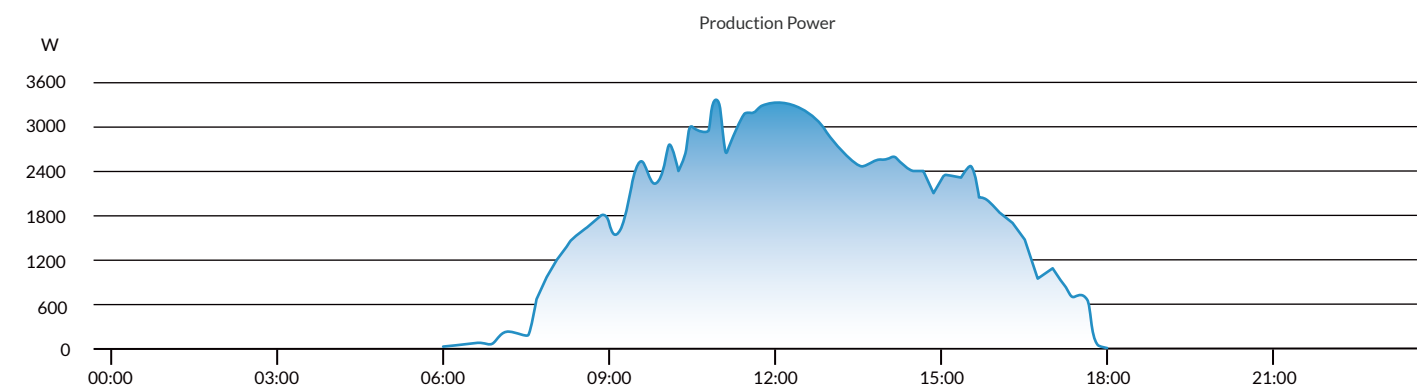
- ◆ Max. 8 MPP trackers, Max. efficiency up to 98.9%
- ◆ High DC/AC ratio 1.5 times for more yields
- ◆ Wide output voltage range 277-520Vac
- ◆ Zero export application, response speed within 0.5S
- ◆ T-type three-level topology and enhanced SVPWM
- ◆ Type II DC / AC SPD, frequency droop control technology
- ◆ Max. DC input current of 16A/string, adapt to 600W solar panel
- ◆ String intelligent monitoring (optional), Ani-PID function (Optional)



# Main Highlights

## Deye microinverter 300-2250W

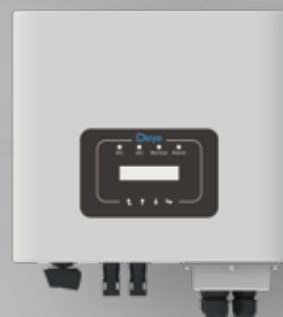
- ◆ Support reactive power compensation, comply with UL code.
- ◆ Module level monitoring, Max. 4 MPPTs design
- ◆ Max. DC input current 18A, adapt to 790W PV module
- ◆ Rapid shutdown function, safe and reliable
- ◆ WIFI communication
- ◆ IP67 protection degree, 15 years warranty



Physical Layout

|       |       |       |       |
|-------|-------|-------|-------|
| 0W    | 200 W | 180 W | 150 W |
| 170 W | 170 W | 280 W | 250 W |
| 270 W | 280 W | 260 W | 240 W |





Single Phase  
String Inverter



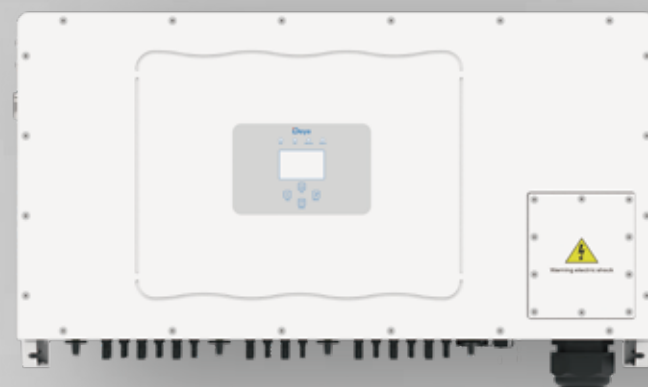
Microinverter



Three Phase  
String Inverter (LV)



Single Phase  
Hybrid Inverter



Three Phase  
String Inverter



Three Phase  
Hybrid Inverter



Accessory & monitoring

# Single Phase String Inverter

SUN-1/1.5/2/2.2/2.5/2.7/3/3.3/3.6/4K-G04P1-EU-AM1



-  1 MPP tracker, Max. efficiency up to 97.5%
-  Zero export application, VSG application
-  String intelligent monitoring (optional)
-  Wide output voltage range
-  Anti-PID function (Optional)
-  Low start-up voltage of 80V

## Technical Data

| Model                                              | SUN-1K-G04<br>P1-EU-AM1                                                                        | SUN-1.5K-G04<br>P1-EU-AM1 | SUN-2K-G04<br>P1-EU-AM1 | SUN-2.2K-G04<br>P1-EU-AM1 | SUN-2.5K-G04<br>P1-EU-AM1 | SUN-2.7K-G04<br>P1-EU-AM1 | SUN-3K-G04<br>P1-EU-AM1 | SUN-3.3K-G04<br>P1-EU-AM1 | SUN-3.6K-G04<br>P1-EU-AM1 | SUN-4K-G04<br>P1-EU-AM1 |
|----------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------|-------------------------|---------------------------|---------------------------|---------------------------|-------------------------|---------------------------|---------------------------|-------------------------|
| PV String Input Data                               |                                                                                                |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Max. PV Input Power (kW)                           | 1.3                                                                                            | 2                         | 2.6                     | 2.9                       | 3.3                       | 3.5                       | 3.9                     | 4.3                       | 4.7                       | 5.2                     |
| Max. PV Input Voltage (V)                          | 550                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Start-up Voltage (V)                               | 80                                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| MPPT Voltage Range (V)                             | 70-500                                                                                         |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Rated PV Input Voltage (V)                         | 360                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           | 420                     |
| Max. Operating PV Input Current (A)                | 20                                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Max. Input Short Circuit Current (A)               | 30                                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 1/1                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| AC Output Side                                     |                                                                                                |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Rated AC Output Active Power (kW)                  | 1                                                                                              | 1.5                       | 2                       | 2.2                       | 2.5                       | 2.7                       | 3                       | 3.3                       | 3.6                       | 4                       |
| Max. AC Output Apparent Power (kVA)                | 1.1                                                                                            | 1.65                      | 2.2                     | 2.42                      | 2.75                      | 2.97                      | 3.3                     | 3.63                      | 3.96                      | 4.4                     |
| Rated AC Output Current (A)                        | 4.6/4.4                                                                                        | 6.8/6.5                   | 9.1/8.7                 | 10/9.6                    | 11.4/10.9                 | 12.3/11.8                 | 13.7/13.1               | 15/14.4                   | 16.4/15.7                 | 18.2/17.4               |
| Max. AC Output Current (A)                         | 5/4.8                                                                                          | 7.5/7.2                   | 10/9.6                  | 11/10.6                   | 12.5/12                   | 13.5/13                   | 15/14.4                 | 16.5/15.8                 | 18/17.3                   | 20/19.2                 |
| Rated Output Voltage/Range (V)                     | 220/230 0.85Un-1.1Un                                                                           |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Grid Connection Form                               | L/N/PE                                                                                         |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Rated Output Grid Frequency/Range(Hz)              | 50/45-55, 60/55-65                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                     |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Total Current Harmonic Distortion THDi             | <3%                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| DC Injection Current                               | <0.5%In                                                                                        |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Efficiency                                         |                                                                                                |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Max. Efficiency                                    | 97.3%                                                                                          |                           |                         |                           |                           |                           | 97.5%                   |                           |                           |                         |
| Euro Efficiency                                    | 96.9%                                                                                          |                           |                         |                           |                           |                           | 97.0%                   |                           |                           |                         |
| MPPT Efficiency                                    | >99%                                                                                           |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Equipment Protection                               |                                                                                                |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| DC Reverse Polarity Protection                     | Yes                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| AC Output Overcurrent Protection                   | Yes                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| AC Output Overvoltage Protection                   | Yes                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| AC Output Short Circuit Protection                 | Yes                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Thermal Protection                                 | Yes                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Insulation Impedance Detection                     | Yes                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| DC Component Monitoring                            | Yes                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Arc Fault Circuit Interrupter (AFCI)               | Optional                                                                                       |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Anti-islanding Protection                          | Yes                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Residual Current Detection                         | Yes                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                       |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| DC Switch                                          | Yes                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Interface                                          |                                                                                                |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Communication Interface                            | RS485/RS232                                                                                    |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                           |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| General Data                                       |                                                                                                |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Operating Temperature Range (°C)                   | -25 to +65°C, >45°C Derating                                                                   |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Permissible Ambient Humidity                       | 0-100%                                                                                         |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Permissible Altitude (m)                           | 2000m                                                                                          |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Noise (dB)                                         | ≤35                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Ingress Protection(IP) Rating                      | IP 65                                                                                          |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Inverter Topology                                  | Non-Isolated                                                                                   |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                        |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Cabinet Size (WxHxD mm)                            | 280×310×184 (Excluding Connectors and Brackets)                                                |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Weight (kg)                                        | 6.35                                                                                           |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Warranty                                           | 5 Years                                                                                        |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Type of Cooling                                    | Natural Cooling                                                                                |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, G99, VDE-AR-N 4105 |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Safety EMC/Standard                                | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                         |                           |                         |                           |                           |                           |                         |                           |                           |                         |

# Single Phase String Inverter

SUN-3.6/4/4.2/4.6/5/5.2/6/6.2K-G04



-  2 MPP trackers, Max. efficiency up to 97.5%
-  Zero export application, VSG application
-  String intelligent monitoring (optional)
-  Wide output voltage range
-  Anti-PID function (Optional)
-  Low start-up voltage of 80V

## Technical Data

| Model                                              | SUN-3.6K-G04                                                                              | SUN-4K-G04 | SUN-4.2K-G04 | SUN-4.6K-G04 | SUN-5K-G04 | SUN-5.2K-G04 | SUN-6K-G04 | SUN-6.2K-G04 |
|----------------------------------------------------|-------------------------------------------------------------------------------------------|------------|--------------|--------------|------------|--------------|------------|--------------|
| PV String Input Data                               |                                                                                           |            |              |              |            |              |            |              |
| Max. PV Input Power (kW)                           | 4.7                                                                                       | 5.2        | 5.46         | 5.98         | 6.5        | 6.76         | 7.8        | 8.06         |
| Max. PV Input Voltage (V)                          | 550                                                                                       |            |              |              |            |              |            |              |
| Start-up Voltage (V)                               | 80                                                                                        |            |              |              |            |              |            |              |
| MPPT Voltage Range (V)                             | 70-500                                                                                    |            |              |              |            |              |            |              |
| Rated PV Input Voltage (V)                         | 360                                                                                       |            |              |              |            |              |            |              |
| Max. Operating PV Input Current (A)                | 13+13                                                                                     |            |              |              |            |              |            |              |
| Max. Input Short Circuit Current (A)               | 19.5+19.5                                                                                 |            |              |              |            |              |            |              |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/1+1                                                                                     |            |              |              |            |              |            |              |
| AC Output Side                                     |                                                                                           |            |              |              |            |              |            |              |
| Rated AC Output Active Power (kW)                  | 3.6                                                                                       | 4          | 4.2          | 4.6          | 5          | 5.2          | 6          | 6.2          |
| Max. AC Output Apparent Power (kVA)                | 3.96                                                                                      | 4.4        | 4.62         | 5.06         | 5.5        | 5.27         | 6.6        | 6.82         |
| Rated AC Output Current (A)                        | 16.4/15.7                                                                                 | 18.2/17.4  | 19.1/18.3    | 20.9/20      | 22.7/21.7  | 23.7/22.7    | 27.3/26.1  | 28.2/27      |
| Max. AC Output Current (A)                         | 18/17.2                                                                                   | 20/19.1    | 21/20.1      | 23/22        | 25/23.9    | 26/24.9      | 30/28.7    | 31/29.7      |
| Rated Output Voltage/Range (V)                     | 220/230 0.85Un-1.1Un                                                                      |            |              |              |            |              |            |              |
| Grid Connection Form                               | L/N/PE                                                                                    |            |              |              |            |              |            |              |
| Rated Output Grid Frequency/Range(Hz)              | 50/45-55, 60/55-65                                                                        |            |              |              |            |              |            |              |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                |            |              |              |            |              |            |              |
| Total Current Harmonic Distortion THDi             | <3%                                                                                       |            |              |              |            |              |            |              |
| DC Injection Current                               | <0.5In                                                                                    |            |              |              |            |              |            |              |
| Efficiency                                         |                                                                                           |            |              |              |            |              |            |              |
| Max. Efficiency                                    | 97.3%                                                                                     | 97.5%      |              |              |            |              |            |              |
| Euro Efficiency                                    | 96.9%                                                                                     | 97.0%      |              |              |            |              |            |              |
| MPPT Efficiency                                    | >99%                                                                                      |            |              |              |            |              |            |              |
| Equipment Protection                               |                                                                                           |            |              |              |            |              |            |              |
| DC Reverse Polarity Protection                     | Yes                                                                                       |            |              |              |            |              |            |              |
| AC Output Overcurrent Protection                   | Yes                                                                                       |            |              |              |            |              |            |              |
| AC Output Overvoltage Protection                   | Yes                                                                                       |            |              |              |            |              |            |              |
| AC Output Short Circuit Protection                 | Yes                                                                                       |            |              |              |            |              |            |              |
| Thermal Protection                                 | Yes                                                                                       |            |              |              |            |              |            |              |
| Insulation Impedance Detection                     | Yes                                                                                       |            |              |              |            |              |            |              |
| DC Component Monitoring                            | Yes                                                                                       |            |              |              |            |              |            |              |
| Arc Fault Circuit Interrupter (AFCI)               | Optional                                                                                  |            |              |              |            |              |            |              |
| Anti-islanding Protection                          | Yes                                                                                       |            |              |              |            |              |            |              |
| Residual Current Detection                         | Yes                                                                                       |            |              |              |            |              |            |              |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                  |            |              |              |            |              |            |              |
| DC Switch                                          | Yes                                                                                       |            |              |              |            |              |            |              |
| Interface                                          |                                                                                           |            |              |              |            |              |            |              |
| Communication Interface                            | RS485/RS232                                                                               |            |              |              |            |              |            |              |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                      |            |              |              |            |              |            |              |
| General Data                                       |                                                                                           |            |              |              |            |              |            |              |
| Operating Temperature Range (°C)                   | -25 to +65°C, >45°C Derating                                                              |            |              |              |            |              |            |              |
| Permissible Ambient Humidity                       | 0-100%                                                                                    |            |              |              |            |              |            |              |
| Permissible Altitude (m)                           | 2000m                                                                                     |            |              |              |            |              |            |              |
| Noise (dB)                                         | ≤35                                                                                       |            |              |              |            |              |            |              |
| Ingress Protection(IP) Rating                      | IP 65                                                                                     |            |              |              |            |              |            |              |
| Inverter Topology                                  | Non-Isolated                                                                              |            |              |              |            |              |            |              |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                   |            |              |              |            |              |            |              |
| Cabinet Size (WxHxD mm)                            | 330×323×190 (Excluding Connectors and Brackets)                                           |            |              |              |            |              |            |              |
| Weight (kg)                                        | 8                                                                                         |            |              |              |            |              |            |              |
| Warranty                                           | 5 Years                                                                                   |            |              |              |            |              |            |              |
| Type of Cooling                                    | Natural Cooling                                                                           |            |              |              |            |              |            |              |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G99, VDE-AR-N 4105 |            |              |              |            |              |            |              |
| Safety EMC/Standard                                | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                    |            |              |              |            |              |            |              |

# Single Phase String Inverter

SUN-3.6/4/4.2/4.6/5/5.2/6/6.2K-G05P1-EU-AM2



-  2 MPP trackers, Max. efficiency up to 97.5%
-  Zero export application, VSG application
-  String intelligent monitoring (optional)
-  Wide output voltage range
-  Anti-PID function (Optional)
-  Low start-up voltage of 80V

## Technical Data

| Model                                              | SUN-3.6K-G05<br>P1-EU-AM2                                        | SUN-4K-G05<br>P1-EU-AM2 | SUN-4.2K-G05<br>P1-EU-AM2 | SUN-4.6K-G05<br>P1-EU-AM2 | SUN-5K-G05<br>P1-EU-AM2 | SUN-5.2K-G05<br>P1-EU-AM2 | SUN-6K-G05<br>P1-EU-AM2 | SUN-6.2K-G05<br>P1-EU-AM2 |
|----------------------------------------------------|------------------------------------------------------------------|-------------------------|---------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|
| PV String Input Data                               |                                                                  |                         |                           |                           |                         |                           |                         |                           |
| Max. PV Input Power (kW)                           | 5.4                                                              | 6                       | 6.3                       | 6.9                       | 7.5                     | 7.8                       | 9                       | 9.3                       |
| Max. PV Input Voltage (V)                          | 550                                                              |                         |                           |                           |                         |                           |                         |                           |
| Start-up Voltage (V)                               | 80                                                               |                         |                           |                           |                         |                           |                         |                           |
| MPPT Voltage Range (V)                             | 70-500                                                           |                         |                           |                           |                         |                           |                         |                           |
| Rated PV Input Voltage (V)                         | 360                                                              |                         |                           |                           |                         |                           |                         |                           |
| Max. Operating PV Input Current (A)                | 18+18                                                            |                         |                           |                           |                         |                           |                         |                           |
| Max. Input Short Circuit Current (A)               | 27+27                                                            |                         |                           |                           |                         |                           |                         |                           |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/1+1                                                            |                         |                           |                           |                         |                           |                         |                           |
| AC Output Side                                     |                                                                  |                         |                           |                           |                         |                           |                         |                           |
| Rated AC Output Active Power (kW)                  | 3.6                                                              | 4                       | 4.2                       | 4.6                       | 5                       | 5.2                       | 6                       | 6.2                       |
| Max. AC Output Apparent Power (kVA)                | 3.96                                                             | 4.4                     | 4.62                      | 5.06                      | 5.5                     | 5.72                      | 6.6                     | 6.82                      |
| Rated AC Output Current (A)                        | 16.4/15.7                                                        | 18.2/17.4               | 19.1/18.3                 | 21/20                     | 22.8/21.8               | 23.7/22.7                 | 27.3/26.1               | 28.2/27                   |
| Max. AC Output Current (A)                         | 18/17.3                                                          | 20/19.2                 | 21/20.1                   | 23/22                     | 25/24                   | 26/24.9                   | 30/28.7                 | 31/29.7                   |
| Rated Output Voltage/Range (V)                     | 220/230 0.85Un-1.1Un                                             |                         |                           |                           |                         |                           |                         |                           |
| Grid Connection Form                               | L/N/PE                                                           |                         |                           |                           |                         |                           |                         |                           |
| Rated Output Grid Frequency/Range(Hz)              | 50/45-55, 60/55-65                                               |                         |                           |                           |                         |                           |                         |                           |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                       |                         |                           |                           |                         |                           |                         |                           |
| Total Current Harmonic Distortion THDi             | <3%                                                              |                         |                           |                           |                         |                           |                         |                           |
| DC Injection Current                               | <0.5%In                                                          |                         |                           |                           |                         |                           |                         |                           |
| Efficiency                                         |                                                                  |                         |                           |                           |                         |                           |                         |                           |
| Max. Efficiency                                    | 97.3%                                                            | 97.5%                   |                           |                           |                         |                           |                         |                           |
| Euro Efficiency                                    | 96.9%                                                            | 97.0%                   |                           |                           |                         |                           |                         |                           |
| MPPT Efficiency                                    | >99%                                                             |                         |                           |                           |                         |                           |                         |                           |
| Equipment Protection                               |                                                                  |                         |                           |                           |                         |                           |                         |                           |
| DC Reverse Polarity Protection                     | Yes                                                              |                         |                           |                           |                         |                           |                         |                           |
| AC Output Overcurrent Protection                   | Yes                                                              |                         |                           |                           |                         |                           |                         |                           |
| AC Output Overvoltage Protection                   | Yes                                                              |                         |                           |                           |                         |                           |                         |                           |
| AC Output Short Circuit Protection                 | Yes                                                              |                         |                           |                           |                         |                           |                         |                           |
| Thermal Protection                                 | Yes                                                              |                         |                           |                           |                         |                           |                         |                           |
| Insulation Impedance Detection                     | Yes                                                              |                         |                           |                           |                         |                           |                         |                           |
| DC Component Monitoring                            | Yes                                                              |                         |                           |                           |                         |                           |                         |                           |
| Arc Fault Circuit Interrupter (AFCI)               | Optional                                                         |                         |                           |                           |                         |                           |                         |                           |
| Anti-islanding Protection                          | Yes                                                              |                         |                           |                           |                         |                           |                         |                           |
| Residual Current Detection                         | Yes                                                              |                         |                           |                           |                         |                           |                         |                           |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                         |                         |                           |                           |                         |                           |                         |                           |
| DC Switch                                          | Yes                                                              |                         |                           |                           |                         |                           |                         |                           |
| Interface                                          |                                                                  |                         |                           |                           |                         |                           |                         |                           |
| Communication Interface                            | RS485/RS232                                                      |                         |                           |                           |                         |                           |                         |                           |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                             |                         |                           |                           |                         |                           |                         |                           |
| General Data                                       |                                                                  |                         |                           |                           |                         |                           |                         |                           |
| Operating Temperature Range (°C)                   | -25 to +60°C, >45°C Derating                                     |                         |                           |                           |                         |                           |                         |                           |
| Permissible Ambient Humidity                       | 0-100%                                                           |                         |                           |                           |                         |                           |                         |                           |
| Permissible Altitude (m)                           | 3000m                                                            |                         |                           |                           |                         |                           |                         |                           |
| Noise (dB)                                         | ≤35                                                              |                         |                           |                           |                         |                           |                         |                           |
| Ingress Protection(IP) Rating                      | IP 65                                                            |                         |                           |                           |                         |                           |                         |                           |
| Inverter Topology                                  | Non-Isolated                                                     |                         |                           |                           |                         |                           |                         |                           |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                          |                         |                           |                           |                         |                           |                         |                           |
| Cabinet Size (WxHxD mm)                            | 305×280×180 (Excluding Connectors and Brackets)                  |                         |                           |                           |                         |                           |                         |                           |
| Weight (kg)                                        | 7.7                                                              |                         |                           |                           |                         |                           |                         |                           |
| Warranty                                           | 5 Years                                                          |                         |                           |                           |                         |                           |                         |                           |
| Type of Cooling                                    | Natural Cooling                                                  |                         |                           |                           |                         |                           |                         |                           |
| Grid Regulation                                    | IEC 61727, IEC 62116, EN 50549, NRS 097, RD 140, UNE 217002, G99 |                         |                           |                           |                         |                           |                         |                           |
| Safety EMC/Standard                                | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2           |                         |                           |                           |                         |                           |                         |                           |

# Single Phase String Inverter

SUN-7/7.5/8K-G02P1-EU-AM2



2 MPP trackers, Max. efficiency up to 97.7%



Zero export application, VSG application



String intelligent monitoring (optional)



Wide output voltage range



Anti-PID function (Optional)



Low start-up voltage of 80V

## Technical Data

| Model                                              | SUN-7K-G02P1-EU-AM2                                              |  | SUN-7.5K-G02P1-EU-AM2 |  | SUN-8K-G02P1-EU-AM2 |  |
|----------------------------------------------------|------------------------------------------------------------------|--|-----------------------|--|---------------------|--|
| PV String Input Data                               |                                                                  |  |                       |  |                     |  |
| Max. PV Input Power (kW)                           | 10.5                                                             |  | 11.3                  |  | 12                  |  |
| Max. PV Input Voltage (V)                          |                                                                  |  | 550                   |  |                     |  |
| Start-up Voltage (V)                               |                                                                  |  | 80                    |  |                     |  |
| MPPT Voltage Range (V)                             |                                                                  |  | 70-500                |  |                     |  |
| Rated PV Input Voltage (V)                         |                                                                  |  | 360                   |  |                     |  |
| Max. Operating PV Input Current (A)                |                                                                  |  | 18+26                 |  |                     |  |
| Max. Input Short Circuit Current (A)               |                                                                  |  | 27+39                 |  |                     |  |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker |                                                                  |  | 2/1+2                 |  |                     |  |
| AC Output Side                                     |                                                                  |  |                       |  |                     |  |
| Rated AC Output Active Power (kW)                  | 7                                                                |  | 7.5                   |  | 8                   |  |
| Max. AC Output Apparent Power (kVA)                | 7.7                                                              |  | 8.25                  |  | 8.8                 |  |
| Rated AC Output Current (A)                        | 31.9/30.5                                                        |  | 34.1/32.7             |  | 36.4/34.8           |  |
| Max. AC Output Current (A)                         | 35/33.5                                                          |  | 37.5/35.9             |  | 40/38.3             |  |
| Rated Output Voltage/Range (V)                     | 220/230 0.85Un-1.1Un                                             |  |                       |  |                     |  |
| Grid Connection Form                               | L/N/PE                                                           |  |                       |  |                     |  |
| Rated Output Grid Frequency/Range(Hz)              | 50/45-55, 60/55-65                                               |  |                       |  |                     |  |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                       |  |                       |  |                     |  |
| Total Current Harmonic Distortion THDi             | <3%                                                              |  |                       |  |                     |  |
| DC Injection Current                               | <0.5%In                                                          |  |                       |  |                     |  |
| Efficiency                                         |                                                                  |  |                       |  |                     |  |
| Max. Efficiency                                    | 97.7%                                                            |  |                       |  |                     |  |
| Euro Efficiency                                    | 97.2%                                                            |  |                       |  |                     |  |
| MPPT Efficiency                                    | >99%                                                             |  |                       |  |                     |  |
| Equipment Protection                               |                                                                  |  |                       |  |                     |  |
| DC Reverse Polarity Protection                     | Yes                                                              |  |                       |  |                     |  |
| AC Output Overcurrent Protection                   | Yes                                                              |  |                       |  |                     |  |
| AC Output Overvoltage Protection                   | Yes                                                              |  |                       |  |                     |  |
| AC Output Short Circuit Protection                 | Yes                                                              |  |                       |  |                     |  |
| Thermal Protection                                 | Yes                                                              |  |                       |  |                     |  |
| Insulation Impedance Detection                     | Yes                                                              |  |                       |  |                     |  |
| DC Component Monitoring                            | Yes                                                              |  |                       |  |                     |  |
| Arc Fault Circuit Interrupter (AFCI)               | Optional                                                         |  |                       |  |                     |  |
| Anti-islanding Protection                          | Yes                                                              |  |                       |  |                     |  |
| Residual Current Detection                         | Yes                                                              |  |                       |  |                     |  |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                         |  |                       |  |                     |  |
| DC Switch                                          | Yes                                                              |  |                       |  |                     |  |
| Interface                                          |                                                                  |  |                       |  |                     |  |
| Communication Interface                            | RS485/RS232                                                      |  |                       |  |                     |  |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                             |  |                       |  |                     |  |
| General Data                                       |                                                                  |  |                       |  |                     |  |
| Operating Temperature Range (°C)                   | -25 to +60°C, >45°C Derating                                     |  |                       |  |                     |  |
| Permissible Ambient Humidity                       | 0-100%                                                           |  |                       |  |                     |  |
| Permissible Altitude (m)                           | 3000m                                                            |  |                       |  |                     |  |
| Noise (dB)                                         | ≤35                                                              |  |                       |  |                     |  |
| Ingress Protection(IP) Rating                      | IP 65                                                            |  |                       |  |                     |  |
| Inverter Topology                                  | Non-Isolated                                                     |  |                       |  |                     |  |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                          |  |                       |  |                     |  |
| Cabinet Size (WxHxD mm)                            | 330×310×208.5 (Excluding Connectors and Brackets)                |  |                       |  |                     |  |
| Weight (kg)                                        | 12.1                                                             |  |                       |  |                     |  |
| Warranty                                           | 5 Years                                                          |  |                       |  |                     |  |
| Type of Cooling                                    | Natural Cooling                                                  |  |                       |  |                     |  |
| Grid Regulation                                    | IEC 61727, IEC 62116, EN 50549, NRS 097, RD 140, UNE 217002, G99 |  |                       |  |                     |  |
| Safety EMC/Standard                                | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2           |  |                       |  |                     |  |

# Single Phase String Inverter

SUN-9/10/10.5K-G02P1-EU-AM2



2 MPP trackers, Max. efficiency up to 97.7%



Zero export application, VSG application



String intelligent monitoring (optional)



Wide output voltage range



Anti-PID function (Optional)



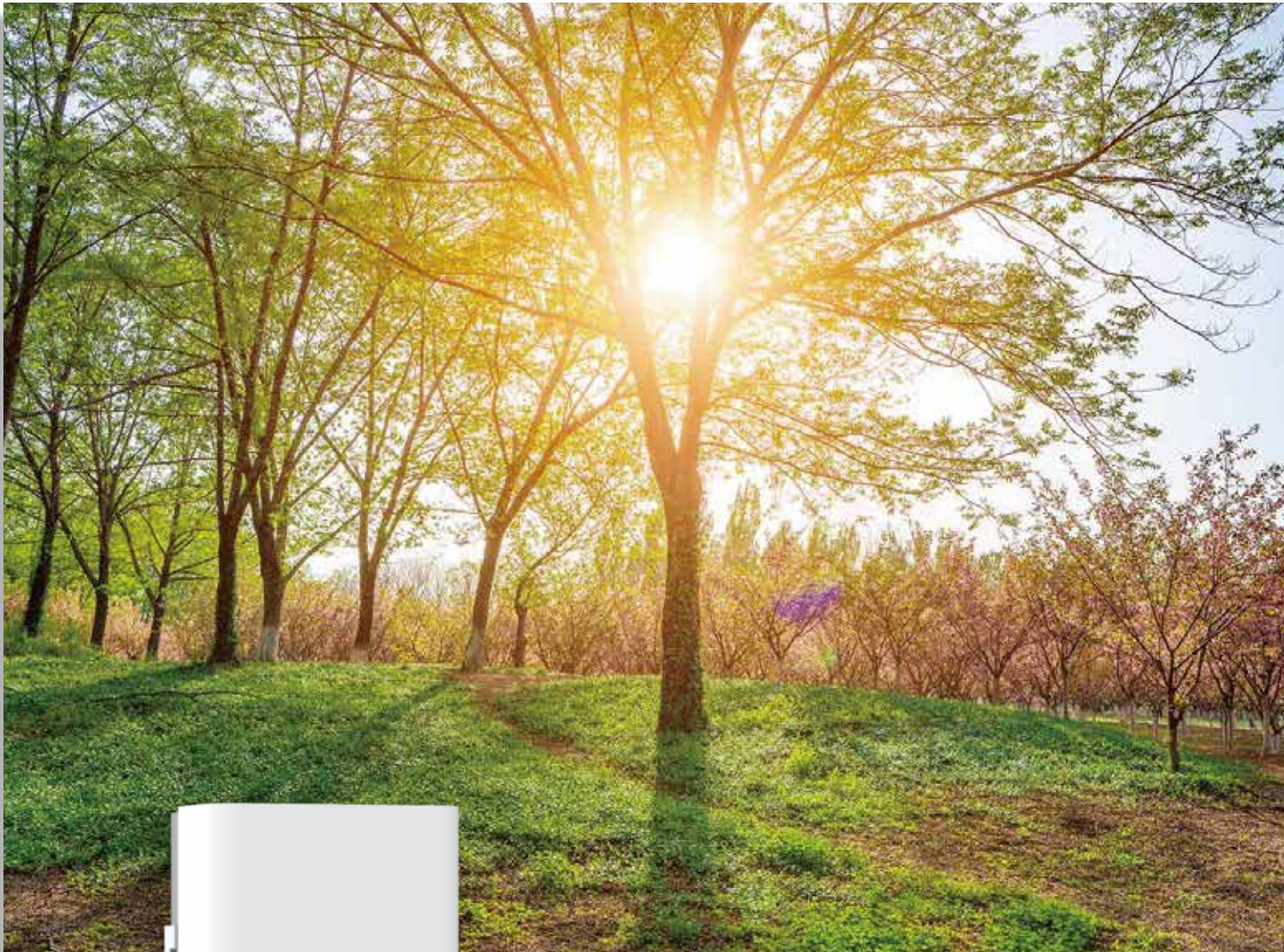
Low start-up voltage of 80V

## Technical Data

| Model                                              | SUN-9K-G02P1-EU-AM2                                              |  | SUN-10K-G02P1-EU-AM2 |  | SUN-10.5K-G02P1-EU-AM2 |  |
|----------------------------------------------------|------------------------------------------------------------------|--|----------------------|--|------------------------|--|
| PV String Input Data                               |                                                                  |  |                      |  |                        |  |
| Max. PV Input Power (kW)                           | 13.5                                                             |  | 15                   |  | 15.8                   |  |
| Max. PV Input Voltage (V)                          | 550                                                              |  |                      |  |                        |  |
| Start-up Voltage (V)                               | 80                                                               |  |                      |  |                        |  |
| MPPT Voltage Range (V)                             | 70-500                                                           |  |                      |  |                        |  |
| Rated PV Input Voltage (V)                         | 360                                                              |  |                      |  |                        |  |
| Max. Operating PV Input Current (A)                | 26+26                                                            |  |                      |  |                        |  |
| Max. Input Short Circuit Current (A)               | 39+39                                                            |  |                      |  |                        |  |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/2+2                                                            |  |                      |  |                        |  |
| AC Output Side                                     |                                                                  |  |                      |  |                        |  |
| Rated AC Output Active Power (kW)                  | 9                                                                |  | 10                   |  | 10.5                   |  |
| Max. AC Output Apparent Power (kVA)                | 9.9                                                              |  | 11                   |  | 11.55                  |  |
| Rated AC Output Current (A)                        | 41/39.2                                                          |  | 45.5/43.5            |  | 47.8/45.7              |  |
| Max. AC Output Current (A)                         | 45/43.1                                                          |  | 50/47.9              |  | 52.5/50.3              |  |
| Rated Output Voltage/Range (V)                     | 220/230 0.85Un-1.1Un                                             |  |                      |  |                        |  |
| Grid Connection Form                               | L/N/PE                                                           |  |                      |  |                        |  |
| Rated Output Grid Frequency/Range(Hz)              | 50/45-55, 60/55-65                                               |  |                      |  |                        |  |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                       |  |                      |  |                        |  |
| Total Current Harmonic Distortion THDi             | <3%                                                              |  |                      |  |                        |  |
| DC Injection Current                               | <0.5%In                                                          |  |                      |  |                        |  |
| Efficiency                                         |                                                                  |  |                      |  |                        |  |
| Max. Efficiency                                    | 97.7%                                                            |  |                      |  |                        |  |
| Euro Efficiency                                    | 97.2%                                                            |  |                      |  |                        |  |
| MPPT Efficiency                                    | >99%                                                             |  |                      |  |                        |  |
| Equipment Protection                               |                                                                  |  |                      |  |                        |  |
| DC Reverse Polarity Protection                     | Yes                                                              |  |                      |  |                        |  |
| AC Output Overcurrent Protection                   | Yes                                                              |  |                      |  |                        |  |
| AC Output Overvoltage Protection                   | Yes                                                              |  |                      |  |                        |  |
| AC Output Short Circuit Protection                 | Yes                                                              |  |                      |  |                        |  |
| Thermal Protection                                 | Yes                                                              |  |                      |  |                        |  |
| Insulation Impedance Detection                     | Yes                                                              |  |                      |  |                        |  |
| DC Component Monitoring                            | Yes                                                              |  |                      |  |                        |  |
| Arc Fault Circuit Interrupter (AFCI)               | Optional                                                         |  |                      |  |                        |  |
| Anti-islanding Protection                          | Yes                                                              |  |                      |  |                        |  |
| Residual Current Detection                         | Yes                                                              |  |                      |  |                        |  |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                         |  |                      |  |                        |  |
| DC Switch                                          | Yes                                                              |  |                      |  |                        |  |
| Interface                                          |                                                                  |  |                      |  |                        |  |
| Communication Interface                            | RS485/RS232                                                      |  |                      |  |                        |  |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                             |  |                      |  |                        |  |
| General Data                                       |                                                                  |  |                      |  |                        |  |
| Operating Temperature Range (°C)                   | -25 to +60°C, >45°C Derating                                     |  |                      |  |                        |  |
| Permissible Ambient Humidity                       | 0-100%                                                           |  |                      |  |                        |  |
| Permissible Altitude (m)                           | 3000m                                                            |  |                      |  |                        |  |
| Noise (dB)                                         | ≤35                                                              |  |                      |  |                        |  |
| Ingress Protection(IP) Rating                      | IP 65                                                            |  |                      |  |                        |  |
| Inverter Topology                                  | Non-Isolated                                                     |  |                      |  |                        |  |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                          |  |                      |  |                        |  |
| Cabinet Size (WxHxD mm)                            | 330×410×213.5 (Excluding Connectors and Brackets)                |  |                      |  |                        |  |
| Weight (kg)                                        | 14.8                                                             |  |                      |  |                        |  |
| Warranty                                           | 5 Years                                                          |  |                      |  |                        |  |
| Type of Cooling                                    | Natural Cooling                                                  |  |                      |  |                        |  |
| Grid Regulation                                    | IEC 61727, IEC 62116, EN 50549, NRS 097, RD 140, UNE 217002, G99 |  |                      |  |                        |  |
| Safety EMC/Standard                                | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2           |  |                      |  |                        |  |

# Three Phase String Inverter

## SUN-3/4/5/6/7/8/9/10/12/15K-G06P3-EU-BM2-P1



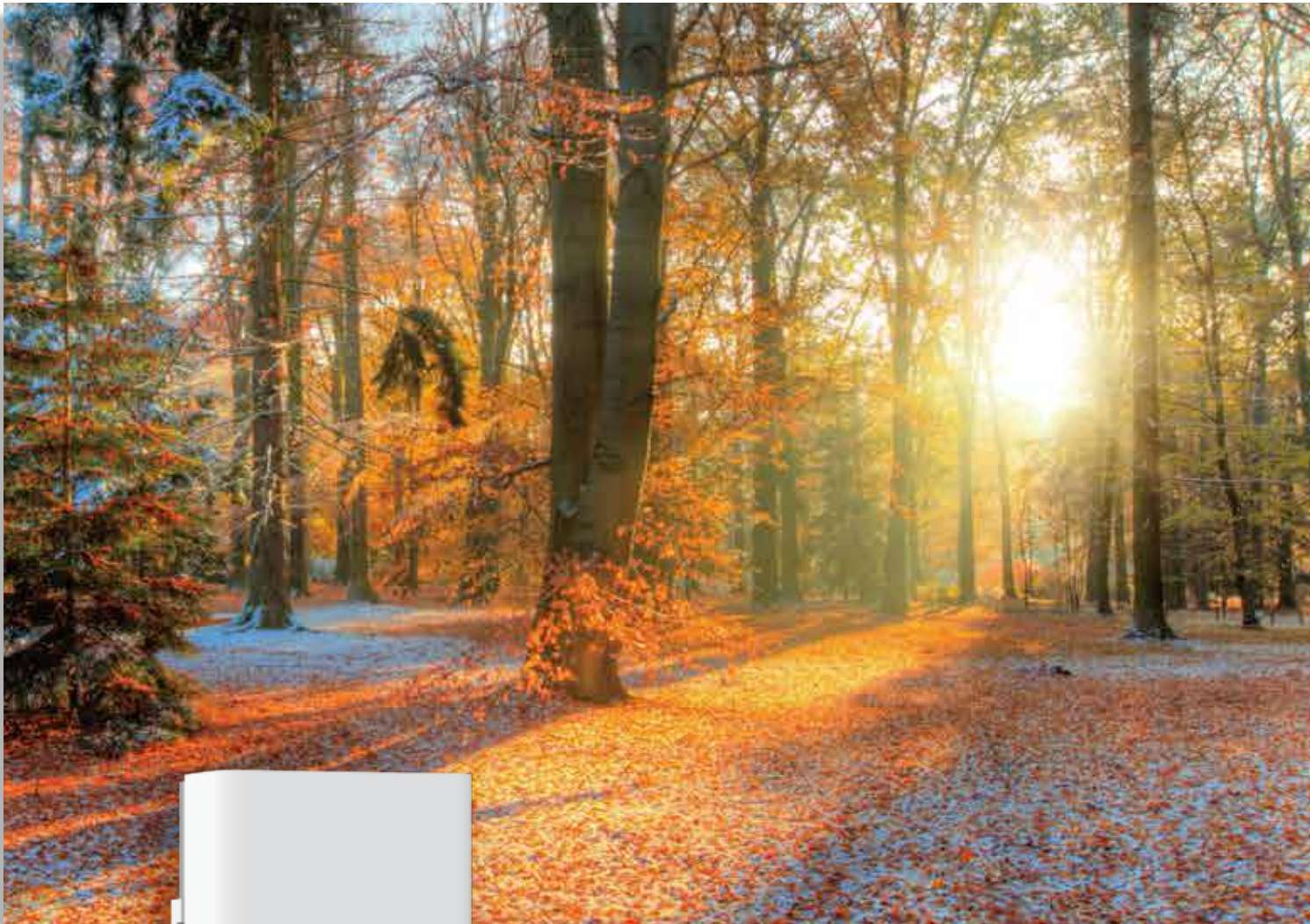
-  2 MPP trackers, Max. efficiency up to 98.5%
-  Zero export application, VSG application
-  String intelligent monitoring (optional)
-  Wide output voltage range
-  Anti-PID function (Optional)

### Technical Data

| Model                                                          | SUN-3K-G06<br>P3-EU-BM2<br>-P1                                                                                     | SUN-4K-G06<br>P3-EU-BM2<br>-P1 | SUN-5K-G06<br>P3-EU-BM2<br>-P1 | SUN-6K-G06<br>P3-EU-BM2<br>-P1 | SUN-7K-G06<br>P3-EU-BM2<br>-P1 | SUN-8K-G06<br>P3-EU-BM2<br>-P1 | SUN-9K-G06<br>P3-EU-BM2<br>-P1 | SUN-10K-G06<br>P3-EU-BM2<br>-P1 | SUN-12K-G06<br>P3-EU-BM2<br>-P1 | SUN-15K-G06<br>P3-EU-BM2<br>-P1 |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------|---------------------------------|
| PV String Input Data                                           |                                                                                                                    |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Max. PV Input Power (kW)                                       | 4.5                                                                                                                | 6                              | 7.5                            | 9                              | 10.5                           | 12                             | 13.5                           | 15                              | 18                              | 22.5                            |
| Max. PV Input Voltage (V)                                      | 1100                                                                                                               |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Start-up Voltage (V)                                           | 140                                                                                                                |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| MPPT Voltage Range (V)                                         | 120-1000                                                                                                           |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Rated PV Input Voltage (V)                                     | 600                                                                                                                |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Max. Operating PV Input Current (A)                            | 20+20                                                                                                              |                                |                                |                                |                                |                                |                                |                                 |                                 | 20+26                           |
| Max. Input Short Circuit Current (A)                           | 30+30                                                                                                              |                                |                                |                                |                                |                                |                                |                                 |                                 | 30+39                           |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker             | 2/1+1                                                                                                              |                                |                                |                                |                                |                                |                                |                                 |                                 | 2/1+2                           |
| AC Output Side                                                 |                                                                                                                    |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Rated AC Output Active Power (kW)                              | 3                                                                                                                  | 4                              | 5                              | 6                              | 7                              | 8                              | 9                              | 10                              | 12                              | 15                              |
| Max. AC Output Apparent Power (kVA)                            | 3.3                                                                                                                | 4.4                            | 5.5                            | 6.6                            | 7.7                            | 8.8                            | 9.9                            | 11                              | 13.2                            | 16.5                            |
| Rated AC Output Current (A)                                    | 4.6/4.4                                                                                                            | 6.1/5.8                        | 7.6/7.3                        | 9.1/8.7                        | 10.7/10.2                      | 12.2/11.6                      | 13.7/13.1                      | 15.2/14.5                       | 18.2/17.4                       | 22.8/21.8                       |
| Max. AC Output Current (A)                                     | 5/4.8                                                                                                              | 6.7/6.4                        | 8.4/8                          | 10/9.6                         | 11.7/11.2                      | 13.4/12.8                      | 15/14.4                        | 16.7/16                         | 20/19.2                         | 25/24                           |
| Rated Output Voltage/Range (V)                                 | 220/380V, 230/400V 0.85Un-1.1Un                                                                                    |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Grid Connection Form                                           | 3L/N/PE                                                                                                            |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Rated Output Grid Frequency/Range(Hz)                          | 50/45-55, 60/55-65                                                                                                 |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Power Factor Adjustment Range                                  | 0.8 leading to 0.8 lagging                                                                                         |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Total Current Harmonic Distortion THDi                         | <3%                                                                                                                |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| DC Injection Current                                           | <0.5%In                                                                                                            |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Efficiency                                                     |                                                                                                                    |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Max. Efficiency                                                | 98.1%                                                                                                              |                                | 98.2%                          |                                | 98.3%                          |                                |                                |                                 | 98.5%                           |                                 |
| Euro Efficiency                                                | 97.5%                                                                                                              |                                | 97.6%                          |                                | 97.8%                          |                                |                                |                                 | 98%                             |                                 |
| MPPT Efficiency                                                | >99%                                                                                                               |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Equipment Protection                                           |                                                                                                                    |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| DC Reverse Polarity Protection                                 |                                                                                                                    |                                |                                |                                |                                | Yes                            |                                |                                 |                                 |                                 |
| AC Output Overcurrent Protection                               |                                                                                                                    |                                |                                |                                |                                | Yes                            |                                |                                 |                                 |                                 |
| AC Output Overvoltage Protection                               |                                                                                                                    |                                |                                |                                |                                | Yes                            |                                |                                 |                                 |                                 |
| AC Output Short Circuit Protection                             |                                                                                                                    |                                |                                |                                |                                | Yes                            |                                |                                 |                                 |                                 |
| Thermal Protection                                             |                                                                                                                    |                                |                                |                                |                                | Yes                            |                                |                                 |                                 |                                 |
| Insulation Impedance Detection                                 |                                                                                                                    |                                |                                |                                |                                | Yes                            |                                |                                 |                                 |                                 |
| DC Component Monitoring                                        |                                                                                                                    |                                |                                |                                |                                | Yes                            |                                |                                 |                                 |                                 |
| Arc Fault Circuit Interrupter (AFCI)                           |                                                                                                                    |                                |                                |                                |                                | Optional                       |                                |                                 |                                 |                                 |
| Anti-islanding Protection                                      |                                                                                                                    |                                |                                |                                |                                | Yes                            |                                |                                 |                                 |                                 |
| Residual Current Detection                                     |                                                                                                                    |                                |                                |                                |                                | Yes                            |                                |                                 |                                 |                                 |
| Surge Protection Level                                         | TYPE II(DC), TYPE II(AC)                                                                                           |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| DC Switch                                                      | Yes                                                                                                                |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Interface                                                      |                                                                                                                    |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Communication Interface                                        | RS485/RS232                                                                                                        |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Monitor Mode                                                   | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                               |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| General Data                                                   |                                                                                                                    |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Operating Temperature Range (°C)                               | -25 to +60°C, >45°C Derating                                                                                       |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Permissible Ambient Humidity                                   | 0-100%                                                                                                             |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Permissible Altitude (m)                                       | 4000m                                                                                                              |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Noise (dB)                                                     | <45                                                                                                                |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Ingress Protection(IP) Rating                                  | IP 65                                                                                                              |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Inverter Topology                                              | Non-Isolated                                                                                                       |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Over Voltage Category                                          | OVC II(DC), OVC III(AC)                                                                                            |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Cabinet Size (WxHxD mm)<br>(Excluding Connectors and Brackets) | 283×525×178                                                                                                        |                                |                                |                                |                                |                                |                                |                                 |                                 | 283×525×188                     |
| Weight (kg)                                                    | 11.5                                                                                                               |                                |                                |                                |                                |                                |                                |                                 |                                 | 12                              |
| Warranty                                                       | 5 Years                                                                                                            |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Type of Cooling                                                | Natural Cooling                                                                                                    |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Grid Regulation                                                | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, G99, VDE-AR-N 4105 |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |
| Safety EMC/Standard                                            | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                             |                                |                                |                                |                                |                                |                                |                                 |                                 |                                 |

# Three Phase String Inverter

SUN-18/20K-G06P3-EU-BM2-P1



-  2 MPP trackers, Max. efficiency up to 98.5%
-  Zero export application, VSG application
-  String intelligent monitoring (optional)
-  Wide output voltage range
-  Anti-PID function (Optional)

## Technical Data

| Model                                              | SUN-18K-G06P3-EU-BM2-P1                                                                                       |  | SUN-20K-G06P3-EU-BM2-P1 |  |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--|-------------------------|--|
| PV String Input Data                               |                                                                                                               |  |                         |  |
| Max. PV Input Power (kW)                           | 27                                                                                                            |  | 30                      |  |
| Max. PV Input Voltage (V)                          |                                                                                                               |  | 1100                    |  |
| Start-up Voltage (V)                               |                                                                                                               |  | 140                     |  |
| MPPT Voltage Range (V)                             |                                                                                                               |  | 120-1000                |  |
| Rated PV Input Voltage (V)                         |                                                                                                               |  | 600                     |  |
| Max. Operating PV Input Current (A)                |                                                                                                               |  | 32+32                   |  |
| Max. Input Short Circuit Current (A)               |                                                                                                               |  | 48+48                   |  |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker |                                                                                                               |  | 2/2+2                   |  |
| AC Output Side                                     |                                                                                                               |  |                         |  |
| Rated AC Output Active Power (kW)                  | 18                                                                                                            |  | 20                      |  |
| Max. AC Output Apparent Power (kVA)                | 19.8                                                                                                          |  | 22                      |  |
| Rated AC Output Current (A)                        | 27.3/26.1                                                                                                     |  | 30.4/29                 |  |
| Max. AC Output Current (A)                         | 30/28.7                                                                                                       |  | 33.4/31.9               |  |
| Rated Output Voltage/Range (V)                     | 220/380V, 230/400V 0.85Un-1.1Un                                                                               |  |                         |  |
| Grid Connection Form                               | 3L/N/PE                                                                                                       |  |                         |  |
| Rated Output Grid Frequency/Range(Hz)              | 50/45-55, 60/55-65                                                                                            |  |                         |  |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                    |  |                         |  |
| Total Current Harmonic Distortion THDi             | <3%                                                                                                           |  |                         |  |
| DC Injection Current                               | <0.5%In                                                                                                       |  |                         |  |
| Efficiency                                         |                                                                                                               |  |                         |  |
| Max. Efficiency                                    | 98.5%                                                                                                         |  |                         |  |
| Euro Efficiency                                    | 98.0%                                                                                                         |  |                         |  |
| MPPT Efficiency                                    | >99%                                                                                                          |  |                         |  |
| Equipment Protection                               |                                                                                                               |  |                         |  |
| DC Reverse Polarity Protection                     | Yes                                                                                                           |  |                         |  |
| AC Output Overcurrent Protection                   | Yes                                                                                                           |  |                         |  |
| AC Output Overvoltage Protection                   | Yes                                                                                                           |  |                         |  |
| AC Output Short Circuit Protection                 | Yes                                                                                                           |  |                         |  |
| Thermal Protection                                 | Yes                                                                                                           |  |                         |  |
| Insulation Impedance Detection                     | Yes                                                                                                           |  |                         |  |
| DC Component Monitoring                            | Yes                                                                                                           |  |                         |  |
| Arc Fault Circuit Interrupter (AFCI)               | Optional                                                                                                      |  |                         |  |
| Anti-islanding Protection                          | Yes                                                                                                           |  |                         |  |
| Residual Current Detection                         | Yes                                                                                                           |  |                         |  |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                      |  |                         |  |
| DC Switch                                          | Yes                                                                                                           |  |                         |  |
| Interface                                          |                                                                                                               |  |                         |  |
| Communication Interface                            | RS485/RS232/WiFi/LAN                                                                                          |  |                         |  |
| LCD/LED Display                                    | LCD 1602                                                                                                      |  |                         |  |
| General Data                                       |                                                                                                               |  |                         |  |
| Operating Temperature Range (°C)                   | -25 to -60°C                                                                                                  |  |                         |  |
| Permissible Ambient Humidity                       | 0-100%                                                                                                        |  |                         |  |
| Permissible Altitude (m)                           | 4000m                                                                                                         |  |                         |  |
| Noise (dB)                                         | <45                                                                                                           |  |                         |  |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                         |  |                         |  |
| Inverter Topology                                  | Non-Isolated                                                                                                  |  |                         |  |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                       |  |                         |  |
| Cabinet Size (WxHxD mm)                            | 283×525×188(Excluding Connectors and Brackets)                                                                |  |                         |  |
| Weight (kg)                                        | 12                                                                                                            |  |                         |  |
| Warranty                                           | Standard 5 years, extended warranty                                                                           |  |                         |  |
| Type of Cooling                                    | natural cooling                                                                                               |  |                         |  |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105 |  |                         |  |
| Safety EMC/Standard                                | IEC/EN 62109-1,IEC/EN 62109-2, IEC/EN 61000-6-1,IEC/EN 61000-6-2,IEC/EN 61000-6-3,IEC/EN 61000-6-4            |  |                         |  |

# Three Phase String Inverter

SUN-18/20/22/23/25K-G05



2 MPP trackers, Max. efficiency up to 98.5%



Zero export application, VSG application



String intelligent monitoring (optional)



Wide output voltage range



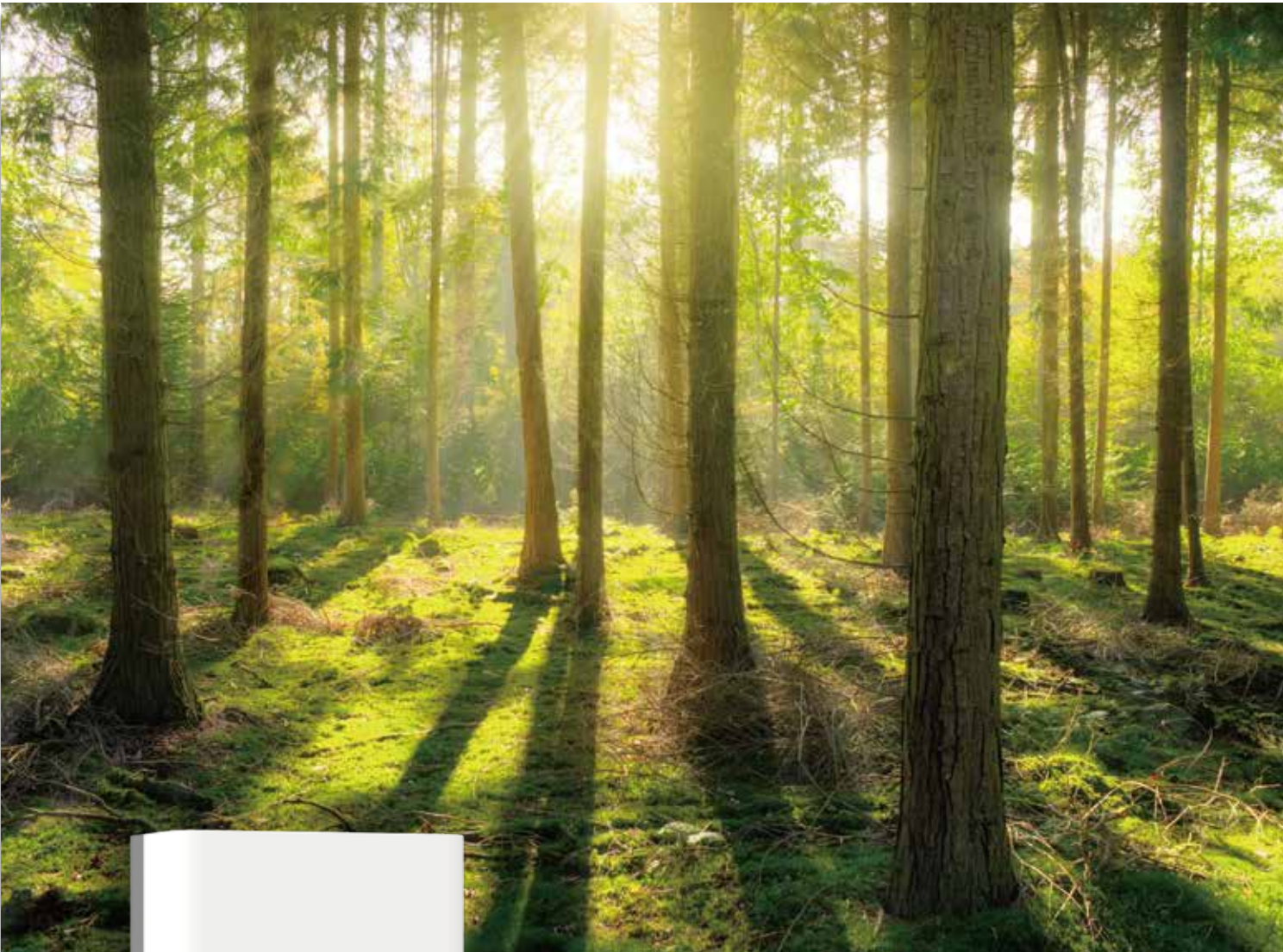
Anti-PID function (Optional)

## Technical Data

| Model                                              | SUN-18K-G05                                                                                                   | SUN-20K-G05 | SUN-22K-G05 | SUN-23K-G05 | SUN-25K-G05 |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|
| PV String Input Data                               |                                                                                                               |             |             |             |             |
| Max. PV Input Power (kW)                           | 23.4                                                                                                          | 26          | 28.6        | 29.9        | 32.5        |
| Max. PV Input Voltage (V)                          | 1100                                                                                                          |             |             |             |             |
| Start-up Voltage (V)                               | 250                                                                                                           |             |             |             |             |
| MPPT Voltage Range (V)                             | 200-1000                                                                                                      |             |             |             |             |
| Rated PV Input Voltage (V)                         | 600                                                                                                           |             |             |             |             |
| Max. Operating PV Input Current (A)                | 26+26                                                                                                         |             |             |             |             |
| Max. Input Short Circuit Current (A)               | 39+39                                                                                                         |             |             |             |             |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/2+2                                                                                                         |             |             |             |             |
| AC Output Side                                     |                                                                                                               |             |             |             |             |
| Rated AC Output Active Power (kW)                  | 18                                                                                                            | 20          | 22          | 23          | 25          |
| Max. AC Output Apparent Power (kVA)                | 19.8                                                                                                          | 22          | 24.2        | 25.3        | 27.5        |
| Rated AC Output Current (A)                        | 27.3/26.1                                                                                                     | 30.3/29     | 33.4/31.9   | 34.9/33.4   | 37.9/36.2   |
| Max. AC Output Current (A)                         | 30/28.7                                                                                                       | 33.3/31.9   | 36.7/35.1   | 38.4/36.7   | 41.7/39.8   |
| Rated Output Voltage/Range (V)                     | 220/380V, 230/400V 0.85Un-1.1Un                                                                               |             |             |             |             |
| Grid Connection Form                               | 3L/N/PE                                                                                                       |             |             |             |             |
| Rated Output Grid Frequency/Range(Hz)              | 50/45-55, 60/55-65                                                                                            |             |             |             |             |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                    |             |             |             |             |
| Total Current Harmonic Distortion THDi             | <3%                                                                                                           |             |             |             |             |
| DC Injection Current                               | <0.5%In                                                                                                       |             |             |             |             |
| Efficiency                                         |                                                                                                               |             |             |             |             |
| Max. Efficiency                                    | 98.5%                                                                                                         |             |             |             |             |
| Euro Efficiency                                    | 98%                                                                                                           |             |             |             |             |
| MPPT Efficiency                                    | >99%                                                                                                          |             |             |             |             |
| Equipment Protection                               |                                                                                                               |             |             |             |             |
| DC Reverse Polarity Protection                     | Yes                                                                                                           |             |             |             |             |
| AC Output Overcurrent Protection                   | Yes                                                                                                           |             |             |             |             |
| AC Output Overvoltage Protection                   | Yes                                                                                                           |             |             |             |             |
| AC Output Short Circuit Protection                 | Yes                                                                                                           |             |             |             |             |
| Thermal Protection                                 | Yes                                                                                                           |             |             |             |             |
| Insulation Impedance Detection                     | Yes                                                                                                           |             |             |             |             |
| DC Component Monitoring                            | Yes                                                                                                           |             |             |             |             |
| Arc Fault Circuit Interrupter (AFCI)               | Optional                                                                                                      |             |             |             |             |
| Anti-islanding Protection                          | Yes                                                                                                           |             |             |             |             |
| Residual Current Detection                         | Yes                                                                                                           |             |             |             |             |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                      |             |             |             |             |
| DC Switch                                          | Yes                                                                                                           |             |             |             |             |
| Interface                                          |                                                                                                               |             |             |             |             |
| Communication Interface                            | RS485/RS232                                                                                                   |             |             |             |             |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                          |             |             |             |             |
| General Data                                       |                                                                                                               |             |             |             |             |
| Operating Temperature Range (°C)                   | -25 to +60°C, >45°C Derating                                                                                  |             |             |             |             |
| Permissible Ambient Humidity                       | 0-100%                                                                                                        |             |             |             |             |
| Permissible Altitude (m)                           | 4000m                                                                                                         |             |             |             |             |
| Noise (dB)                                         | ≤50                                                                                                           |             |             |             |             |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                         |             |             |             |             |
| Inverter Topology                                  | Non-Isolated                                                                                                  |             |             |             |             |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                       |             |             |             |             |
| Cabinet Size (WxHxD mm)                            | 362×527×220 (Excluding Connectors and Brackets)                                                               |             |             |             |             |
| Weight (kg)                                        | 20                                                                                                            |             |             |             |             |
| Warranty                                           | 5 Years                                                                                                       |             |             |             |             |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                       |             |             |             |             |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105 |             |             |             |             |
| Safety EMC/Standard                                | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                        |             |             |             |             |

# Three Phase String Inverter

SUN-30/33/35/36K-G04



-  2 MPP trackers, Max. efficiency up to 98.6%
-  Zero export application, VSG application
-  String intelligent monitoring (optional)
-  Wide output voltage range
-  Anti-PID function (Optional)

## Technical Data

| Model                                              | SUN-30K-G04                                                                                                   |  | SUN-33K-G04 |  | SUN-35K-G04 |  | SUN-36K-G04 |  |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--|-------------|--|-------------|--|-------------|--|
| PV String Input Data                               |                                                                                                               |  |             |  |             |  |             |  |
| Max. PV Input Power (kW)                           | 39                                                                                                            |  | 42.9        |  | 45.5        |  | 46.8        |  |
| Max. PV Input Voltage (V)                          | 1100                                                                                                          |  |             |  |             |  |             |  |
| Start-up Voltage (V)                               | 250                                                                                                           |  |             |  |             |  |             |  |
| MPPT Voltage Range (V)                             | 200-1000                                                                                                      |  |             |  |             |  |             |  |
| Rated PV Input Voltage (V)                         | 600                                                                                                           |  |             |  |             |  |             |  |
| Max. Operating PV Input Current (A)                | 40+40                                                                                                         |  |             |  |             |  |             |  |
| Max. Input Short Circuit Current (A)               | 60+60                                                                                                         |  |             |  |             |  |             |  |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/3+3                                                                                                         |  |             |  |             |  |             |  |
| AC Output Side                                     |                                                                                                               |  |             |  |             |  |             |  |
| Rated AC Output Active Power (kW)                  | 30                                                                                                            |  | 33          |  | 35          |  | 36          |  |
| Max. AC Output Apparent Power (kVA)                | 33                                                                                                            |  | 36.3        |  | 38.5        |  | 39.6        |  |
| Rated AC Output Current (A)                        | 45.5/43.5                                                                                                     |  | 50/47.8     |  | 53/50.7     |  | 54.5/52.2   |  |
| Max. AC Output Current (A)                         | 50/47.9                                                                                                       |  | 55/52.6     |  | 58.3/55.8   |  | 60/57.4     |  |
| Rated Output Voltage/Range (V)                     | 220/380V, 230/400V 0.85Un-1.1Un                                                                               |  |             |  |             |  |             |  |
| Grid Connection Form                               | 3L/N/PE                                                                                                       |  |             |  |             |  |             |  |
| Rated Output Grid Frequency/Range(Hz)              | 50/45-55, 60/55-65                                                                                            |  |             |  |             |  |             |  |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                    |  |             |  |             |  |             |  |
| Total Current Harmonic Distortion THDi             | <3%                                                                                                           |  |             |  |             |  |             |  |
| DC Injection Current                               | <0.5In                                                                                                        |  |             |  |             |  |             |  |
| Efficiency                                         |                                                                                                               |  |             |  |             |  |             |  |
| Max. Efficiency                                    | 98.6%                                                                                                         |  |             |  |             |  |             |  |
| Euro Efficiency                                    | 98.1%                                                                                                         |  |             |  |             |  |             |  |
| MPPT Efficiency                                    | >99%                                                                                                          |  |             |  |             |  |             |  |
| Equipment Protection                               |                                                                                                               |  |             |  |             |  |             |  |
| DC Reverse Polarity Protection                     | Yes                                                                                                           |  |             |  |             |  |             |  |
| AC Output Overcurrent Protection                   | Yes                                                                                                           |  |             |  |             |  |             |  |
| AC Output Overvoltage Protection                   | Yes                                                                                                           |  |             |  |             |  |             |  |
| AC Output Short Circuit Protection                 | Yes                                                                                                           |  |             |  |             |  |             |  |
| Thermal Protection                                 | Yes                                                                                                           |  |             |  |             |  |             |  |
| Insulation Impedance Detection                     | Yes                                                                                                           |  |             |  |             |  |             |  |
| DC Component Monitoring                            | Yes                                                                                                           |  |             |  |             |  |             |  |
| Arc Fault Circuit Interrupter (AFCI)               | Optional                                                                                                      |  |             |  |             |  |             |  |
| Anti-islanding Protection                          | Yes                                                                                                           |  |             |  |             |  |             |  |
| Residual Current Detection                         | Yes                                                                                                           |  |             |  |             |  |             |  |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                      |  |             |  |             |  |             |  |
| DC Switch                                          | Yes                                                                                                           |  |             |  |             |  |             |  |
| Interface                                          |                                                                                                               |  |             |  |             |  |             |  |
| Communication Interface                            | RS485/RS232                                                                                                   |  |             |  |             |  |             |  |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                          |  |             |  |             |  |             |  |
| General Data                                       |                                                                                                               |  |             |  |             |  |             |  |
| Operating Temperature Range (°C)                   | -25 to +60°C, >45°C Derating                                                                                  |  |             |  |             |  |             |  |
| Permissible Ambient Humidity                       | 0-100%                                                                                                        |  |             |  |             |  |             |  |
| Permissible Altitude (m)                           | 4000m                                                                                                         |  |             |  |             |  |             |  |
| Noise (dB)                                         | ≤60                                                                                                           |  |             |  |             |  |             |  |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                         |  |             |  |             |  |             |  |
| Inverter Topology                                  | Non-Isolated                                                                                                  |  |             |  |             |  |             |  |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                       |  |             |  |             |  |             |  |
| Cabinet Size (WxHxD mm)                            | 330×572×206 (Excluding Connectors and Brackets)                                                               |  |             |  |             |  |             |  |
| Weight (kg)                                        | 28.7                                                                                                          |  |             |  |             |  |             |  |
| Warranty                                           | 5 Years                                                                                                       |  |             |  |             |  |             |  |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                       |  |             |  |             |  |             |  |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105 |  |             |  |             |  |             |  |
| Safety EMC/Standard                                | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                        |  |             |  |             |  |             |  |

# Three Phase String Inverter

SUN-40/45/50K-G04



-  Max. 4 MPP trackers,  
Max. efficiency up to 98.7%
-  Zero export application, VSG application
-  String intelligent monitoring (optional)
-  Wide output voltage range
-  Anti-PID function (Optional)

## Technical Data

| Model                                              | SUN-40K-G04                                                                                                   |  | SUN-45K-G04 |             | SUN-50K-G04 |  |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--|-------------|-------------|-------------|--|
| PV String Input Data                               |                                                                                                               |  |             |             |             |  |
| Max. PV Input Power (kW)                           | 52                                                                                                            |  | 58.5        |             | 65          |  |
| Max. PV Input Voltage (V)                          | 1100                                                                                                          |  |             |             |             |  |
| Start-up Voltage (V)                               | 250                                                                                                           |  |             |             |             |  |
| MPPT Voltage Range (V)                             | 200-1000                                                                                                      |  |             |             |             |  |
| Rated PV Input Voltage (V)                         | 600                                                                                                           |  |             |             |             |  |
| Max. Operating PV Input Current (A)                | 40+40+40                                                                                                      |  |             | 40+40+40+40 |             |  |
| Max. Input Short Circuit Current (A)               | 60+60+60                                                                                                      |  |             | 60+60+60+60 |             |  |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 3/3+3+3                                                                                                       |  |             | 4/3+3+3+3   |             |  |
| AC Output Side                                     |                                                                                                               |  |             |             |             |  |
| Rated AC Output Active Power (kW)                  | 40                                                                                                            |  | 45          |             | 50          |  |
| Max. AC Output Apparent Power (kVA)                | 44                                                                                                            |  | 49.5        |             | 55          |  |
| Rated AC Output Current (A)                        | 60.6/58                                                                                                       |  | 68.2/65.2   |             | 75.8/72.5   |  |
| Max. AC Output Current (A)                         | 66.7/63.8                                                                                                     |  | 75/71.7     |             | 83.3/79.7   |  |
| Rated Output Voltage/Range (V)                     | 220/380V, 230/400V 0.85Un-1.1Un                                                                               |  |             |             |             |  |
| Grid Connection Form                               | 3L/N/PE                                                                                                       |  |             |             |             |  |
| Rated Output Grid Frequency/Range(Hz)              | 50/45-55, 60/55-65                                                                                            |  |             |             |             |  |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                    |  |             |             |             |  |
| Total Current Harmonic Distortion THDi             | <3%                                                                                                           |  |             |             |             |  |
| DC Injection Current                               | <0.5%In                                                                                                       |  |             |             |             |  |
| Efficiency                                         |                                                                                                               |  |             |             |             |  |
| Max. Efficiency                                    | 98.7%                                                                                                         |  |             |             |             |  |
| Euro Efficiency                                    | 98.1%                                                                                                         |  |             |             |             |  |
| MPPT Efficiency                                    | >99%                                                                                                          |  |             |             |             |  |
| Equipment Protection                               |                                                                                                               |  |             |             |             |  |
| DC Reverse Polarity Protection                     | Yes                                                                                                           |  |             |             |             |  |
| AC Output Overcurrent Protection                   | Yes                                                                                                           |  |             |             |             |  |
| AC Output Overvoltage Protection                   | Yes                                                                                                           |  |             |             |             |  |
| AC Output Short Circuit Protection                 | Yes                                                                                                           |  |             |             |             |  |
| Thermal Protection                                 | Yes                                                                                                           |  |             |             |             |  |
| Insulation Impedance Detection                     | Yes                                                                                                           |  |             |             |             |  |
| DC Component Monitoring                            | Yes                                                                                                           |  |             |             |             |  |
| Arc Fault Circuit Interrupter (AFCI)               | Optional                                                                                                      |  |             |             |             |  |
| Anti-islanding Protection                          | Yes                                                                                                           |  |             |             |             |  |
| Residual Current Detection                         | Yes                                                                                                           |  |             |             |             |  |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                      |  |             |             |             |  |
| DC Switch                                          | Yes                                                                                                           |  |             |             |             |  |
| Interface                                          |                                                                                                               |  |             |             |             |  |
| Communication Interface                            | RS485/RS232                                                                                                   |  |             |             |             |  |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                          |  |             |             |             |  |
| General Data                                       |                                                                                                               |  |             |             |             |  |
| Operating Temperature Range (°C)                   | -25 to +60°C, >45°C Derating                                                                                  |  |             |             |             |  |
| Permissible Ambient Humidity                       | 0-100%                                                                                                        |  |             |             |             |  |
| Permissible Altitude (m)                           | 4000m                                                                                                         |  |             |             |             |  |
| Noise (dB)                                         | <65                                                                                                           |  |             |             |             |  |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                         |  |             |             |             |  |
| Inverter Topology                                  | Non-Isolated                                                                                                  |  |             |             |             |  |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                       |  |             |             |             |  |
| Cabinet Size (WxHxD mm)                            | 434×570×243 (Excluding Connectors and Brackets)                                                               |  |             |             |             |  |
| Weight (kg)                                        | 39                                                                                                            |  |             |             |             |  |
| Warranty                                           | 5 Years                                                                                                       |  |             |             |             |  |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                       |  |             |             |             |  |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105 |  |             |             |             |  |
| Safety EMC/Standard                                | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                        |  |             |             |             |  |

# Three Phase String Inverter

## SUN-60/70/75/80K-G04P3-EU-AM4



4 MPP trackers, Max. efficiency up to 98.7%



Zero export application, VSG application



String intelligent monitoring (optional)



Wide output voltage range



Anti-PID function (Optional)



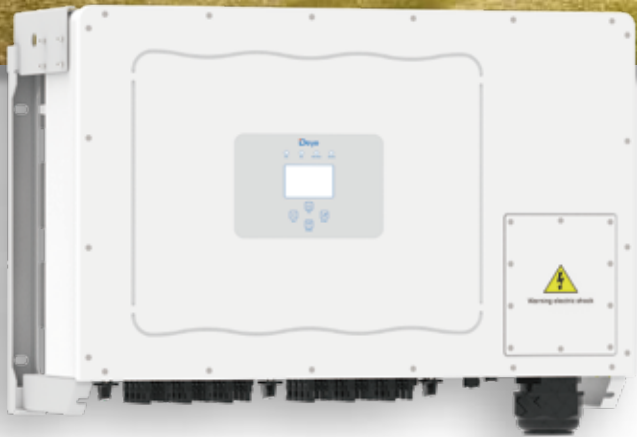
Type II DC/AC SPD

### Technical Data

| Model                                              | SUN-60K-G04P3-EU-AM4   SUN-70K-G04P3-EU-AM4   SUN-75K-G04P3-EU-AM4   SUN-80K-G04P3-EU-AM4                     |             |             |             |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|
| PV String Input Data                               |                                                                                                               |             |             |             |
| Max. PV Input Power (kW)                           | 90                                                                                                            | 105         | 112.5       | 120         |
| Max. PV Input Voltage (V)                          | 1100                                                                                                          |             |             |             |
| Start-up Voltage (V)                               | 250                                                                                                           |             |             |             |
| MPPT Voltage Range (V)                             | 200-1000                                                                                                      |             |             |             |
| Rated PV Input Voltage (V)                         | 600                                                                                                           | 720         |             |             |
| Max. Operating PV Input Current (A)                | 40+40+40+40                                                                                                   |             |             |             |
| Max. Input Short Circuit Current (A)               | 60+60+60+60                                                                                                   |             |             |             |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 4/3+3+3+3                                                                                                     | 4/4+4+4+4   |             |             |
| AC Output Side                                     |                                                                                                               |             |             |             |
| Rated AC Output Active Power (kW)                  | 60                                                                                                            | 70          | 75          | 80          |
| Max. AC Output Apparent Power (kVA)                | 66                                                                                                            | 77          | 82.5        | 88          |
| Rated AC Output Current (A)                        | 90.9/87                                                                                                       | 106.1/101.5 | 113.6/108.7 | 121.2/115.9 |
| Max. AC Output Current (A)                         | 100/95.7                                                                                                      | 116.7/111.6 | 125/119.6   | 133.3/127.5 |
| Rated Output Voltage/Range (V)                     | 220/380V, 230/400V   0.85Un-1.1Un                                                                             |             |             |             |
| Grid Connection Form                               | 3L/N/PE                                                                                                       |             |             |             |
| Rated Output Grid Frequency/Range(Hz)              | 50/45-55, 60/55-65                                                                                            |             |             |             |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                    |             |             |             |
| Total Current Harmonic Distortion THDi             | <3%                                                                                                           |             |             |             |
| DC Injection Current                               | <0.5%In                                                                                                       |             |             |             |
| Efficiency                                         |                                                                                                               |             |             |             |
| Max. Efficiency                                    | 98.6%                                                                                                         | 98.7%       |             |             |
| Euro Efficiency                                    | 98.0%                                                                                                         | 98.1%       |             |             |
| MPPT Efficiency                                    | >99%                                                                                                          |             |             |             |
| Equipment Protection                               |                                                                                                               |             |             |             |
| DC Reverse Polarity Protection                     | Yes                                                                                                           |             |             |             |
| AC Output Overcurrent Protection                   | Yes                                                                                                           |             |             |             |
| AC Output Overvoltage Protection                   | Yes                                                                                                           |             |             |             |
| AC Output Short Circuit Protection                 | Yes                                                                                                           |             |             |             |
| Thermal Protection                                 | Yes                                                                                                           |             |             |             |
| Insulation Impedance Detection                     | Yes                                                                                                           |             |             |             |
| DC Component Monitoring                            | Yes                                                                                                           |             |             |             |
| Arc Fault Circuit Interrupter (AFCI)               | Optional                                                                                                      |             |             |             |
| Anti-islanding Protection                          | Yes                                                                                                           |             |             |             |
| Residual Current Detection                         | Yes                                                                                                           |             |             |             |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                      |             |             |             |
| DC Switch                                          | Yes                                                                                                           |             |             |             |
| Interface                                          |                                                                                                               |             |             |             |
| Communication Interface                            | RS485/RS232                                                                                                   |             |             |             |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                          |             |             |             |
| General Data                                       |                                                                                                               |             |             |             |
| Operating Temperature Range (°C)                   | -25 to +60°C, >45°C Derating                                                                                  |             |             |             |
| Permissible Ambient Humidity                       | 0-100%                                                                                                        |             |             |             |
| Permissible Altitude (m)                           | 4000m                                                                                                         |             |             |             |
| Noise (dB)                                         | ≤55                                                                                                           |             |             |             |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                         |             |             |             |
| Inverter Topology                                  | Non-Isolated                                                                                                  |             |             |             |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                       |             |             |             |
| Cabinet Size (WxHxD mm)                            | 698×613×236.5 (Excluding Connectors and Brackets)                                                             |             |             |             |
| Weight (kg)                                        | 53.7                                                                                                          |             |             |             |
| Warranty                                           | 5 Years                                                                                                       |             |             |             |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                       |             |             |             |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105 |             |             |             |
| Safety EMC/Standard                                | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                        |             |             |             |

# Three Phase String Inverter

## SUN-70/75/80/90/100/110K-G03



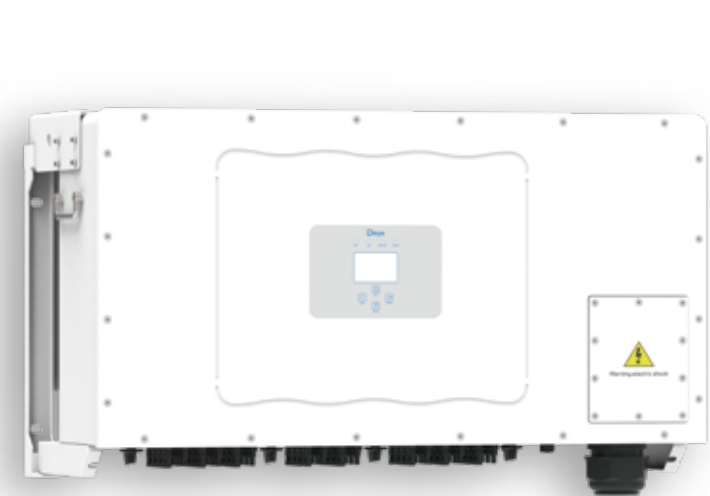
-  Max. 6 MPP trackers,  
Max. efficiency up to 98.8%
-  Zero export application, VSG application
-  String intelligent monitoring (optional)
-  Wide output voltage range
-  Anti-PID function (Optional)
-  Type II DC/AC SPD

### Technical Data

| Model                                              | SUN-70K-G03                                                                                                   | SUN-75K-G03 | SUN-80K-G03 | SUN-90K-G03       | SUN-100K-G03 | SUN-110K-G03 |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------------|--------------|--------------|
| PV String Input Data                               |                                                                                                               |             |             |                   |              |              |
| Max. PV Input Power (kW)                           | 91                                                                                                            | 97.5        | 104         | 135               | 150          | 150          |
| Max. PV Input Voltage (V)                          | 1000                                                                                                          |             |             |                   |              |              |
| Start-up Voltage (V)                               | 250                                                                                                           |             |             |                   |              |              |
| MPPT Voltage Range (V)                             | 200-850                                                                                                       |             |             |                   |              |              |
| Rated PV Input Voltage (V)                         | 600                                                                                                           |             |             |                   |              |              |
| Max. Operating PV Input Current (A)                | 40+40+40+40                                                                                                   |             |             | 40+40+40+40+40+40 |              |              |
| Max. Input Short Circuit Current (A)               | 60+60+60+60                                                                                                   |             |             | 60+60+60+60+60+60 |              |              |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 4/4+4+4+4                                                                                                     |             |             | 6/4+4+4+4+4+4     |              |              |
| AC Output Side                                     |                                                                                                               |             |             |                   |              |              |
| Rated AC Output Active Power (kW)                  | 70                                                                                                            | 75          | 80          | 90                | 100          | 110          |
| Max. AC Output Apparent Power (kVA)                | 77                                                                                                            | 82.5        | 88          | 99                | 110          | 121          |
| Rated AC Output Current (A)                        | 106.1/101.5                                                                                                   | 113.6/108.7 | 121.2/115.9 | 136.4/130.4       | 151.5/144.9  | 166.7/159.4  |
| Max. AC Output Current (A)                         | 116.7/111.6                                                                                                   | 125/119.6   | 133.3/127.5 | 150/143.5         | 166.7/159.4  | 183.3/175.4  |
| Rated Output Voltage/Range (V)                     | 220/380V, 230/400V 0.85Un-1.1Un                                                                               |             |             |                   |              |              |
| Grid Connection Form                               | 3L/N/PE                                                                                                       |             |             |                   |              |              |
| Rated Output Grid Frequency/Range(Hz)              | 50/45-55, 60/55-65                                                                                            |             |             |                   |              |              |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                    |             |             |                   |              |              |
| Total Current Harmonic Distortion THDi             | <3%                                                                                                           |             |             |                   |              |              |
| DC Injection Current                               | <0.5%In                                                                                                       |             |             |                   |              |              |
| Efficiency                                         |                                                                                                               |             |             |                   |              |              |
| Max. Efficiency                                    | 98.7%                                                                                                         |             |             | 98.8%             |              |              |
| Euro Efficiency                                    | 98.1%                                                                                                         |             |             | 98.2%             |              |              |
| MPPT Efficiency                                    | >99%                                                                                                          |             |             |                   |              |              |
| Equipment Protection                               |                                                                                                               |             |             |                   |              |              |
| DC Reverse Polarity Protection                     | Yes                                                                                                           |             |             |                   |              |              |
| AC Output Overcurrent Protection                   | Yes                                                                                                           |             |             |                   |              |              |
| AC Output Overvoltage Protection                   | Yes                                                                                                           |             |             |                   |              |              |
| AC Output Short Circuit Protection                 | Yes                                                                                                           |             |             |                   |              |              |
| Thermal Protection                                 | Yes                                                                                                           |             |             |                   |              |              |
| Insulation Impedance Detection                     | Yes                                                                                                           |             |             |                   |              |              |
| DC Component Monitoring                            | Yes                                                                                                           |             |             |                   |              |              |
| Arc Fault Circuit Interrupter (AFCI)               | Optional                                                                                                      |             |             |                   |              |              |
| Anti-islanding Protection                          | Yes                                                                                                           |             |             |                   |              |              |
| Residual Current Detection                         | Yes                                                                                                           |             |             |                   |              |              |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                      |             |             |                   |              |              |
| DC Switch                                          | Yes                                                                                                           |             |             |                   |              |              |
| Interface                                          |                                                                                                               |             |             |                   |              |              |
| Communication Interface                            | RS485/RS232                                                                                                   |             |             |                   |              |              |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                          |             |             |                   |              |              |
| General Data                                       |                                                                                                               |             |             |                   |              |              |
| Operating Temperature Range (°C)                   | -25 to +60°C, >45°C Derating                                                                                  |             |             |                   |              |              |
| Permissible Ambient Humidity                       | 0-100%                                                                                                        |             |             |                   |              |              |
| Permissible Altitude (m)                           | 4000m                                                                                                         |             |             |                   |              |              |
| Noise (dB)                                         | ≤55                                                                                                           |             |             |                   |              |              |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                         |             |             |                   |              |              |
| Inverter Topology                                  | Non-Isolated                                                                                                  |             |             |                   |              |              |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                       |             |             |                   |              |              |
| Cabinet Size (WxHxD mm)                            | 824×516×312.7 (Excluding Connectors and Brackets)                                                             |             |             |                   |              |              |
| Weight (kg)                                        | 81                                                                                                            |             |             |                   |              |              |
| Warranty                                           | 5 Years                                                                                                       |             |             |                   |              |              |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                       |             |             |                   |              |              |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105 |             |             |                   |              |              |
| Safety EMC/Standard                                | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                        |             |             |                   |              |              |

# Three Phase String Inverter

## SUN-120/125/130/135/136K-G01P3-EU-AM8



-  8 MPP trackers,  
Max. efficiency up to 98.8%
-  Zero export application, VSG application
-  String intelligent monitoring (optional)
-  Wide output voltage range
-  Anti-PID function (Optional)
-  Type II DC/AC SPD

### Technical Data

| Model                                              | SUN-120K-G01P3<br>-EU-AM8                                                                                     | SUN-125K-G01P3<br>-EU-AM8 | SUN-130K-G01P3<br>-EU-AM8 | SUN-135K-G01P3<br>-EU-AM8 | SUN-136K-G01P3<br>-EU-AM8 |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| PV String Input Data                               |                                                                                                               |                           |                           |                           |                           |
| Max. PV Input Power (kW)                           | 180                                                                                                           | 187.5                     | 195                       | 202.5                     | 204                       |
| Max. PV Input Voltage (V)                          | 1100                                                                                                          |                           |                           |                           |                           |
| Start-up Voltage (V)                               | 250                                                                                                           |                           |                           |                           |                           |
| MPPT Voltage Range (V)                             | 200-1000                                                                                                      |                           |                           |                           |                           |
| Rated PV Input Voltage (V)                         | 600                                                                                                           |                           |                           |                           |                           |
| Max. Operating PV Input Current (A)                | 40+40+40+40+40+40+40                                                                                          |                           |                           |                           |                           |
| Max. Input Short Circuit Current (A)               | 60+60+60+60+60+60+60                                                                                          |                           |                           |                           |                           |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 8/4+4+4+4+4+4+4                                                                                               |                           |                           |                           |                           |
| AC Output Side                                     |                                                                                                               |                           |                           |                           |                           |
| Rated AC Output Active Power (kW)                  | 120                                                                                                           | 125                       | 130                       | 135                       | 136                       |
| Max. AC Output Apparent Power (kVA)                | 132                                                                                                           | 135                       | 135                       | 135                       | 136                       |
| Rated AC Output Current (A)                        | 181.9/174                                                                                                     | 189.4/181.2               | 197/188.5                 | 204.6/195.7               | 206.1/197.2               |
| Max. AC Output Current (A)                         | 200/191.4                                                                                                     | 204.6/195.7               | 204.6/195.7               | 204.6/195.7               | 206.1/197.2               |
| Rated Output Voltage/Range (V)                     | 220/380V, 230/400V 0.85Un-1.1Un                                                                               |                           |                           |                           |                           |
| Grid Connection Form                               | 3L/N/PE                                                                                                       |                           |                           |                           |                           |
| Rated Output Grid Frequency/Range(Hz)              | 50/45-55, 60/55-65                                                                                            |                           |                           |                           |                           |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                    |                           |                           |                           |                           |
| Total Current Harmonic Distortion THDi             | <3%                                                                                                           |                           |                           |                           |                           |
| DC Injection Current                               | <0.5%In                                                                                                       |                           |                           |                           |                           |
| Efficiency                                         |                                                                                                               |                           |                           |                           |                           |
| Max. Efficiency                                    | 98.8%                                                                                                         |                           |                           |                           |                           |
| Euro Efficiency                                    | 98.2%                                                                                                         |                           |                           |                           |                           |
| MPPT Efficiency                                    | >99%                                                                                                          |                           |                           |                           |                           |
| Equipment Protection                               |                                                                                                               |                           |                           |                           |                           |
| DC Reverse Polarity Protection                     | Yes                                                                                                           |                           |                           |                           |                           |
| AC Output Overcurrent Protection                   | Yes                                                                                                           |                           |                           |                           |                           |
| AC Output Overvoltage Protection                   | Yes                                                                                                           |                           |                           |                           |                           |
| AC Output Short Circuit Protection                 | Yes                                                                                                           |                           |                           |                           |                           |
| Thermal Protection                                 | Yes                                                                                                           |                           |                           |                           |                           |
| Insulation Impedance Detection                     | Yes                                                                                                           |                           |                           |                           |                           |
| DC Component Monitoring                            | Yes                                                                                                           |                           |                           |                           |                           |
| Arc Fault Circuit Interrupter (AFCI)               | Optional                                                                                                      |                           |                           |                           |                           |
| Anti-islanding Protection                          | Yes                                                                                                           |                           |                           |                           |                           |
| Residual Current Detection                         | Yes                                                                                                           |                           |                           |                           |                           |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                      |                           |                           |                           |                           |
| DC Switch                                          | Yes                                                                                                           |                           |                           |                           |                           |
| Interface                                          |                                                                                                               |                           |                           |                           |                           |
| Communication Interface                            | RS485/RS232                                                                                                   |                           |                           |                           |                           |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                          |                           |                           |                           |                           |
| General Data                                       |                                                                                                               |                           |                           |                           |                           |
| Operating Temperature Range (°C)                   | -25 to +60°C, >45°C Derating                                                                                  |                           |                           |                           |                           |
| Permissible Ambient Humidity                       | 0-100%                                                                                                        |                           |                           |                           |                           |
| Permissible Altitude (m)                           | 4000m                                                                                                         |                           |                           |                           |                           |
| Noise (dB)                                         | ≤65                                                                                                           |                           |                           |                           |                           |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                         |                           |                           |                           |                           |
| Inverter Topology                                  | Non-Isolated                                                                                                  |                           |                           |                           |                           |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                       |                           |                           |                           |                           |
| Cabinet Size (WxHxD mm)                            | 1006×516×325.5 (Excluding Connectors and Brackets)                                                            |                           |                           |                           |                           |
| Weight (kg)                                        | 103                                                                                                           |                           |                           |                           |                           |
| Warranty                                           | 5 Years                                                                                                       |                           |                           |                           |                           |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                       |                           |                           |                           |                           |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105 |                           |                           |                           |                           |
| Safety EMC/Standard                                | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                        |                           |                           |                           |                           |

# Three Phase String Inverter(LV)

SUN-6/8K-G06P3-EU-BM2-LV-P1



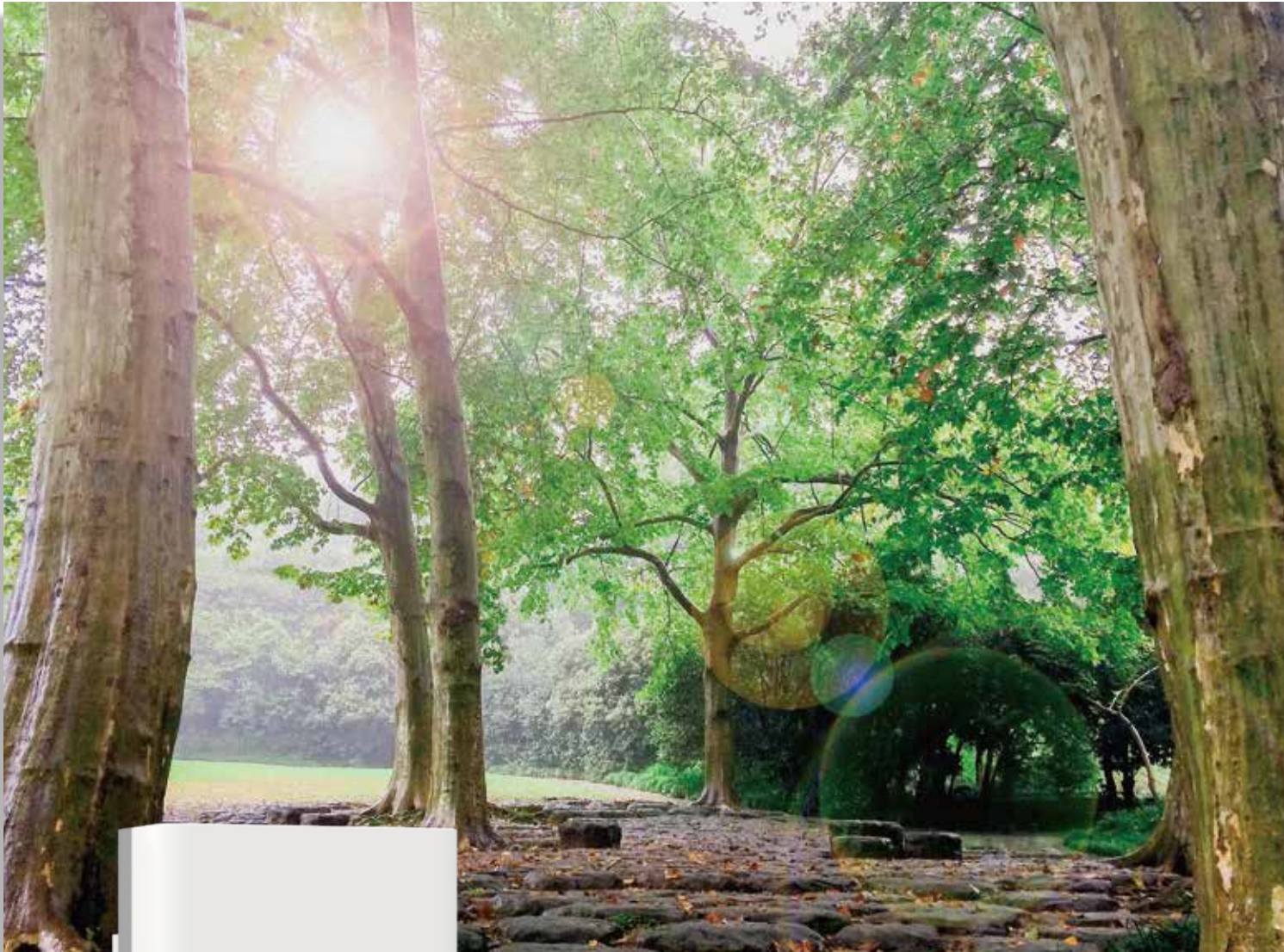
-  127V/220V, 133V/230V and 50/60Hz, Three phase system
-  2 MPP trackers, Max. efficiency up to 98.3%
-  Zero export application, VSG application
-  String intelligent monitoring (optional)
-  Wide output voltage range
-  Anti-PID function (Optional)

## Technical Data

| Model                                                  | SUN-6K-G06P3-EU-BM2-LV-P1                              |  | SUN-8K-G06P3-EU-BM2-LV-P1                       |  |
|--------------------------------------------------------|--------------------------------------------------------|--|-------------------------------------------------|--|
| PV String Input Data                                   |                                                        |  |                                                 |  |
| Max. PV Input Power (kW)                               | 9                                                      |  | 12                                              |  |
| Max. PV Input Voltage (V)                              | 800                                                    |  |                                                 |  |
| Start-up Voltage (V)                                   | 250                                                    |  |                                                 |  |
| MPPT Voltage Range (V)                                 | 200-700                                                |  |                                                 |  |
| Rated PV Input Voltage (V)                             | 500                                                    |  |                                                 |  |
| Max. Operating PV Input Current (A)                    | 20+20                                                  |  | 20+26                                           |  |
| Max. Input Short Circuit Current (A)                   | 30+30                                                  |  | 30+39                                           |  |
| No. of MPP Trackers/<br>No. of Strings per MPP Tracker | 2/1+1                                                  |  | 2/1+2                                           |  |
| AC Output Side                                         |                                                        |  |                                                 |  |
| Rated AC Output Active Power (kW)                      | 6                                                      |  | 8                                               |  |
| Max. AC Output Apparent Power (kVA)                    | 6                                                      |  | 8                                               |  |
| Rated AC Output Current (A)                            | 15.8/15.1                                              |  | 21/20.1                                         |  |
| Max. AC Output Current (A)                             | 15.8/15.1                                              |  | 21/20.1                                         |  |
| Rated Output Voltage/Range (V)                         | 127V/220V, 133V/230V 0.85UN-1.1UN                      |  |                                                 |  |
| Grid Connection Form                                   | 3L/N/PE                                                |  |                                                 |  |
| Rated Output Grid Frequency/Range(Hz)                  | 50/45-55, 60/55-65                                     |  |                                                 |  |
| Power Factor Adjustment Range                          | 0.8 leading to 0.8 lagging                             |  |                                                 |  |
| Total Current Harmonic Distortion THDi                 | <3%                                                    |  |                                                 |  |
| DC Injection Current                                   | <0.5In                                                 |  |                                                 |  |
| Efficiency                                             |                                                        |  |                                                 |  |
| Max. Efficiency                                        |                                                        |  | 98.3%                                           |  |
| Euro Efficiency                                        | 97.8%                                                  |  | 98.0%                                           |  |
| MPPT Efficiency                                        | >99%                                                   |  |                                                 |  |
| Equipment Protection                                   |                                                        |  |                                                 |  |
| DC Reverse Polarity Protection                         | Yes                                                    |  |                                                 |  |
| AC Output Overcurrent Protection                       | Yes                                                    |  |                                                 |  |
| AC Output Overvoltage Protection                       | Yes                                                    |  |                                                 |  |
| AC Output Short Circuit Protection                     | Yes                                                    |  |                                                 |  |
| Thermal Protection                                     | Yes                                                    |  |                                                 |  |
| Insulation Impedance Detection                         | Yes                                                    |  |                                                 |  |
| DC Component Monitoring                                | Yes                                                    |  |                                                 |  |
| Arc Fault Circuit Interrupter (AFCI)                   | Optional                                               |  |                                                 |  |
| Anti-islanding Protection                              | Yes                                                    |  |                                                 |  |
| Residual Current Detection                             | Yes                                                    |  |                                                 |  |
| Surge Protection Level                                 | TYPE II(DC), TYPE II(AC)                               |  |                                                 |  |
| DC Switch                                              | Yes                                                    |  |                                                 |  |
| Interface                                              |                                                        |  |                                                 |  |
| Communication Interface                                | RS485/RS232 /WiFi/LAN                                  |  |                                                 |  |
| LCD/LED Display                                        | LCD1602                                                |  |                                                 |  |
| General Data                                           |                                                        |  |                                                 |  |
| Operating Temperature Range (°C)                       | -25 to -60°C                                           |  |                                                 |  |
| Permissible Ambient Humidity                           | 0-100%                                                 |  |                                                 |  |
| Permissible Altitude (m)                               | 4000m                                                  |  |                                                 |  |
| Noise (dB)                                             | <45                                                    |  |                                                 |  |
| Ingress Protection(IP) Rating                          | IP 65                                                  |  |                                                 |  |
| Inverter Topology                                      | Non-Isolated                                           |  |                                                 |  |
| Over Voltage Category                                  | OVC II(DC), OVC III(AC)                                |  |                                                 |  |
| Cabinet Size (WxHxD mm)                                | 283×525×178 (Excluding Connectors and Brackets)        |  | 283×525×188 (Excluding Connectors and Brackets) |  |
| Weight (kg)                                            | 11.5                                                   |  | 12                                              |  |
| Warranty                                               | 5 Years                                                |  |                                                 |  |
| Type of Cooling                                        | Natural Cooling                                        |  |                                                 |  |
| Grid Regulation                                        | NBR 16149, NBR 16150, EN 50549, RD 140                 |  |                                                 |  |
| Safety EMC/Standard                                    | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2 |  |                                                 |  |

# Three Phase String Inverter(LV)

SUN-10/12/15K-G05-LV



-  127V/220V, 133V/230V and 50/60Hz, Three phase system
-  2 MPP trackers, Max. efficiency up to 98.5%
-  Zero export application, VSG application
-  String intelligent monitoring (optional)
-  Wide output voltage range
-  Anti-PID function (Optional)

## Technical Data

| Model                                                  | SUN-10K-G05-LV                                         |  | SUN-12K-G05-LV |  | SUN-15K-G05-LV |  |
|--------------------------------------------------------|--------------------------------------------------------|--|----------------|--|----------------|--|
| PV String Input Data                                   |                                                        |  |                |  |                |  |
| Max. PV Input Power (kW)                               | 13                                                     |  | 15.6           |  | 19.5           |  |
| Max. PV Input Voltage (V)                              |                                                        |  | 800            |  |                |  |
| Start-up Voltage (V)                                   |                                                        |  | 250            |  |                |  |
| MPPT Voltage Range (V)                                 |                                                        |  | 200-700        |  |                |  |
| Rated PV Input Voltage (V)                             |                                                        |  | 500            |  |                |  |
| Max. Operating PV Input Current (A)                    |                                                        |  | 26+26          |  |                |  |
| Max. Input Short Circuit Current (A)                   |                                                        |  | 39+39          |  |                |  |
| No. of MPP Trackers/<br>No. of Strings per MPP Tracker |                                                        |  | 2/2+2          |  |                |  |
| AC Output Side                                         |                                                        |  |                |  |                |  |
| Rated AC Output Active Power (kW)                      | 10                                                     |  | 12             |  | 15             |  |
| Max. AC Output Apparent Power (kVA)                    | 10                                                     |  | 12             |  | 15             |  |
| Rated AC Output Current (A)                            | 26.3/25.1                                              |  | 31.5/30.1      |  | 39.4/37.6      |  |
| Max. AC Output Current (A)                             | 26.3/25.1                                              |  | 31.5/30.1      |  | 39.4/37.6      |  |
| Rated Output Voltage/Range (V)                         | 127V/220V, 133V/230V 0.85UN-1.1UN                      |  |                |  |                |  |
| Grid Connection Form                                   | 3L/N/PE                                                |  |                |  |                |  |
| Rated Output Grid Frequency/Range(Hz)                  | 50/45-55, 60/55-65                                     |  |                |  |                |  |
| Power Factor Adjustment Range                          | 0.8 leading to 0.8 lagging                             |  |                |  |                |  |
| Total Current Harmonic Distortion THDi                 | <3%                                                    |  |                |  |                |  |
| DC Injection Current                                   | <0.5%In                                                |  |                |  |                |  |
| Efficiency                                             |                                                        |  |                |  |                |  |
| Max. Efficiency                                        | 98.5%                                                  |  |                |  |                |  |
| MPPT Efficiency                                        | >99%                                                   |  |                |  |                |  |
| Equipment Protection                                   |                                                        |  |                |  |                |  |
| DC Reverse Polarity Protection                         | Yes                                                    |  |                |  |                |  |
| AC Output Overcurrent Protection                       | Yes                                                    |  |                |  |                |  |
| AC Output Overvoltage Protection                       | Yes                                                    |  |                |  |                |  |
| AC Output Short Circuit Protection                     | Yes                                                    |  |                |  |                |  |
| Thermal Protection                                     | Yes                                                    |  |                |  |                |  |
| Insulation Impedance Detection                         | Yes                                                    |  |                |  |                |  |
| DC Component Monitoring                                | Yes                                                    |  |                |  |                |  |
| Arc Fault Circuit Interrupter (AFCI)                   | Optional                                               |  |                |  |                |  |
| Anti-islanding Protection                              | Yes                                                    |  |                |  |                |  |
| Residual Current Detection                             | Yes                                                    |  |                |  |                |  |
| Surge Protection Level                                 | TYPE II(DC), TYPE II(AC)                               |  |                |  |                |  |
| DC Switch                                              | Yes                                                    |  |                |  |                |  |
| Interface                                              |                                                        |  |                |  |                |  |
| Communication Interface                                | RS485/RS232                                            |  |                |  |                |  |
| Monitor Mode                                           | GPRS/WIFI/Bluetooth/4G/LAN(optional)                   |  |                |  |                |  |
| General Data                                           |                                                        |  |                |  |                |  |
| Operating Temperature Range (°C)                       | -25 to +60°C, >45°C Derating                           |  |                |  |                |  |
| Permissible Ambient Humidity                           | 0-100%                                                 |  |                |  |                |  |
| Permissible Altitude (m)                               | 4000m                                                  |  |                |  |                |  |
| Noise (dB)                                             | ≤50                                                    |  |                |  |                |  |
| Ingress Protection(IP) Rating                          | IP 65                                                  |  |                |  |                |  |
| Inverter Topology                                      | Non-Isolated                                           |  |                |  |                |  |
| Over Voltage Category                                  | OVC II(DC), OVC III(AC)                                |  |                |  |                |  |
| Cabinet Size (WxHxD mm)                                | 362×527×220 (Excluding Connectors and Brackets)        |  |                |  |                |  |
| Weight (kg)                                            | 20                                                     |  |                |  |                |  |
| Warranty                                               | 5 Years                                                |  |                |  |                |  |
| Type of Cooling                                        | Intelligent Air Cooling                                |  |                |  |                |  |
| Grid Regulation                                        | NBR 16149, NBR 16150, EN 50549, RD 140                 |  |                |  |                |  |
| Safety EMC/Standard                                    | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2 |  |                |  |                |  |

# Three Phase String Inverter(LV)

SUN-18/20/21K-G04-LV



- LV** 127V/220V, 133V/230V and 50/60Hz, Three phase system
- M** 2 MPP trackers, Max. efficiency up to 98.6%
- F** Zero export application, VSG application
- S** String intelligent monitoring (optional)
- W** Wide output voltage range
- PID** Anti-PID function (Optional)

## Technical Data

| Model                                                  | SUN-18K-G04-LV                                         |           | SUN-20K-G04-LV | SUN-21K-G04-LV |
|--------------------------------------------------------|--------------------------------------------------------|-----------|----------------|----------------|
| PV String Input Data                                   |                                                        |           |                |                |
| Max. PV Input Power (kW)                               | 23.4                                                   | 26        | 27.3           |                |
| Max. PV Input Voltage (V)                              | 800                                                    |           |                |                |
| Start-up Voltage (V)                                   | 250                                                    |           |                |                |
| MPPT Voltage Range (V)                                 | 200-700                                                |           |                |                |
| Rated PV Input Voltage (V)                             | 350                                                    |           |                |                |
| Max. Operating PV Input Current (A)                    | 40+40                                                  |           |                |                |
| Max. Input Short Circuit Current (A)                   | 60+60                                                  |           |                |                |
| No. of MPP Trackers/<br>No. of Strings per MPP Tracker | 2/3+3                                                  |           |                |                |
| AC Output Side                                         |                                                        |           |                |                |
| Rated AC Output Active Power (kW)                      | 18                                                     | 20        | 21             |                |
| Max. AC Output Apparent Power (kVA)                    | 18                                                     | 20        | 21             |                |
| Rated AC Output Current (A)                            | 47.3/45.2                                              | 52.5/50.2 | 55.2/52.7      |                |
| Max. AC Output Current (A)                             | 47.3/45.2                                              | 52.5/50.2 | 55.2/52.7      |                |
| Rated Output Voltage/Range (V)                         | 127V/220V, 133V/230V 0.85UN-1.1UN                      |           |                |                |
| Grid Connection Form                                   | 3L/N/PE                                                |           |                |                |
| Rated Output Grid Frequency/Range(Hz)                  | 50/45-55, 60/55-65                                     |           |                |                |
| Power Factor Adjustment Range                          | 0.8 leading to 0.8 lagging                             |           |                |                |
| Total Current Harmonic Distortion THDi                 | <3%                                                    |           |                |                |
| DC Injection Current                                   | <0.5%In                                                |           |                |                |
| Efficiency                                             |                                                        |           |                |                |
| Max. Efficiency                                        | 98.6%                                                  |           |                |                |
| MPPT Efficiency                                        | >99%                                                   |           |                |                |
| Equipment Protection                                   |                                                        |           |                |                |
| DC Reverse Polarity Protection                         | Yes                                                    |           |                |                |
| AC Output Overcurrent Protection                       | Yes                                                    |           |                |                |
| AC Output Overvoltage Protection                       | Yes                                                    |           |                |                |
| AC Output Short Circuit Protection                     | Yes                                                    |           |                |                |
| Thermal Protection                                     | Yes                                                    |           |                |                |
| Insulation Impedance Detection                         | Yes                                                    |           |                |                |
| DC Component Monitoring                                | Yes                                                    |           |                |                |
| Arc Fault Circuit Interrupter (AFCI)                   | Optional                                               |           |                |                |
| Anti-islanding Protection                              | Yes                                                    |           |                |                |
| Residual Current Detection                             | Yes                                                    |           |                |                |
| Surge Protection Level                                 | TYPE II(DC), TYPE II(AC)                               |           |                |                |
| DC Switch                                              | Yes                                                    |           |                |                |
| Interface                                              |                                                        |           |                |                |
| Communication Interface                                | RS485/RS232                                            |           |                |                |
| Monitor Mode                                           | GPRS/WIFI/Bluetooth/4G/LAN(optional)                   |           |                |                |
| General Data                                           |                                                        |           |                |                |
| Operating Temperature Range (°C)                       | -25 to +65°C, >45°C Derating                           |           |                |                |
| Permissible Ambient Humidity                           | 0-100%                                                 |           |                |                |
| Permissible Altitude (m)                               | 2000m                                                  |           |                |                |
| Noise (dB)                                             | ≤50                                                    |           |                |                |
| Ingress Protection(IP) Rating                          | IP 65                                                  |           |                |                |
| Inverter Topology                                      | Non-Isolated                                           |           |                |                |
| Over Voltage Category                                  | OVC II(DC), OVC III(AC)                                |           |                |                |
| Cabinet Size (WxHxD mm)                                | 362×577×215 (Excluding Connectors and Brackets)        |           |                |                |
| Weight (kg)                                            | 23                                                     |           |                |                |
| Warranty                                               | 5 Years                                                |           |                |                |
| Type of Cooling                                        | Intelligent Air Cooling                                |           |                |                |
| Grid Regulation                                        | NBR 16149, NBR 16150, EN 50549, RD 140                 |           |                |                |
| Safety EMC/Standard                                    | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2 |           |                |                |

# Three Phase String Inverter(LV)

SUN-23/25/30K-G04-LV



-  127V/220V, 133V/230V and 50/60Hz, Three phase system
-  Max. 4 MPP trackers, Max. efficiency up to 98.7%
-  Zero export application, VSG application
-  String intelligent monitoring (optional)
-  Wide output voltage range
-  Anti-PID function (Optional)

## Technical Data

| Model                                                  | SUN-23K-G04-LV                                         |             | SUN-25K-G04-LV | SUN-30K-G04-LV |
|--------------------------------------------------------|--------------------------------------------------------|-------------|----------------|----------------|
| PV String Input Data                                   |                                                        |             |                |                |
| Max. PV Input Power (kW)                               | 29.9                                                   | 32.5        | 39             |                |
| Max. PV Input Voltage (V)                              | 800                                                    |             |                |                |
| Start-up Voltage (V)                                   | 250                                                    |             |                |                |
| MPPT Voltage Range (V)                                 | 200-700                                                |             |                |                |
| Rated PV Input Voltage (V)                             | 400                                                    |             |                |                |
| Max. Operating PV Input Current (A)                    | 40+40+40                                               | 40+40+40+40 |                |                |
| Max. Input Short Circuit Current (A)                   | 60+60+60                                               | 60+60+60+60 |                |                |
| No. of MPP Trackers/<br>No. of Strings per MPP Tracker | 3/3+3+3                                                | 4/3+3+3+3   |                |                |
| AC Output Side                                         |                                                        |             |                |                |
| Rated AC Output Active Power (kW)                      | 23                                                     | 25          | 30             |                |
| Max. AC Output Apparent Power (kVA)                    | 23                                                     | 25          | 30             |                |
| Rated AC Output Current (A)                            | 60.4/57.7                                              | 65.7/62.7   | 78.8/75.2      |                |
| Max. AC Output Current (A)                             | 60.4/57.7                                              | 65.7/62.7   | 78.8/75.2      |                |
| Rated Output Voltage/Range (V)                         | 127V/220V, 133V/230V 0.85UN-1.1UN                      |             |                |                |
| Grid Connection Form                                   | 3L/N/PE                                                |             |                |                |
| Rated Output Grid Frequency/Range(Hz)                  | 50/45-55, 60/55-65                                     |             |                |                |
| Power Factor Adjustment Range                          | 0.8 leading to 0.8 lagging                             |             |                |                |
| Total Current Harmonic Distortion THDi                 | <3%                                                    |             |                |                |
| DC Injection Current                                   | <0.5%In                                                |             |                |                |
| Efficiency                                             |                                                        |             |                |                |
| Max. Efficiency                                        | 98.7%                                                  |             |                |                |
| MPPT Efficiency                                        | >99%                                                   |             |                |                |
| Equipment Protection                                   |                                                        |             |                |                |
| DC Reverse Polarity Protection                         | Yes                                                    |             |                |                |
| AC Output Overcurrent Protection                       | Yes                                                    |             |                |                |
| AC Output Overvoltage Protection                       | Yes                                                    |             |                |                |
| AC Output Short Circuit Protection                     | Yes                                                    |             |                |                |
| Thermal Protection                                     | Yes                                                    |             |                |                |
| Insulation Impedance Detection                         | Yes                                                    |             |                |                |
| DC Component Monitoring                                | Yes                                                    |             |                |                |
| Arc Fault Circuit Interrupter (AFCI)                   | Optional                                               |             |                |                |
| Anti-islanding Protection                              | Yes                                                    |             |                |                |
| Residual Current Detection                             | Yes                                                    |             |                |                |
| Surge Protection Level                                 | TYPE II(DC), TYPE II(AC)                               |             |                |                |
| DC Switch                                              | Yes                                                    |             |                |                |
| Interface                                              |                                                        |             |                |                |
| Communication Interface                                | RS485/RS232                                            |             |                |                |
| Monitor Mode                                           | GPRS/WIFI/Bluetooth/4G/LAN(optional)                   |             |                |                |
| General Data                                           |                                                        |             |                |                |
| Operating Temperature Range (°C)                       | -25 to +65°C, >45°C Derating                           |             |                |                |
| Permissible Ambient Humidity                           | 0-100%                                                 |             |                |                |
| Permissible Altitude (m)                               | 4000m                                                  |             |                |                |
| Noise (dB)                                             | ≤65                                                    |             |                |                |
| Ingress Protection(IP) Rating                          | IP 65                                                  |             |                |                |
| Inverter Topology                                      | Non-Isolated                                           |             |                |                |
| Over Voltage Category                                  | OVC II(DC), OVC III(AC)                                |             |                |                |
| Cabinet Size (WxHxD mm)                                | 434×570×243 (Excluding Connectors and Brackets)        |             |                |                |
| Weight (kg)                                            | 37.1                                                   |             |                |                |
| Warranty                                               | 5 Years                                                |             |                |                |
| Type of Cooling                                        | Intelligent Air Cooling                                |             |                |                |
| Grid Regulation                                        | NBR 16149, NBR 16150, EN 50549, RD 140                 |             |                |                |
| Safety EMC/Standard                                    | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2 |             |                |                |

# Three Phase String Inverter(LV)

SUN-33/35/40/45/50K-G04P3-EU-AM4-LV



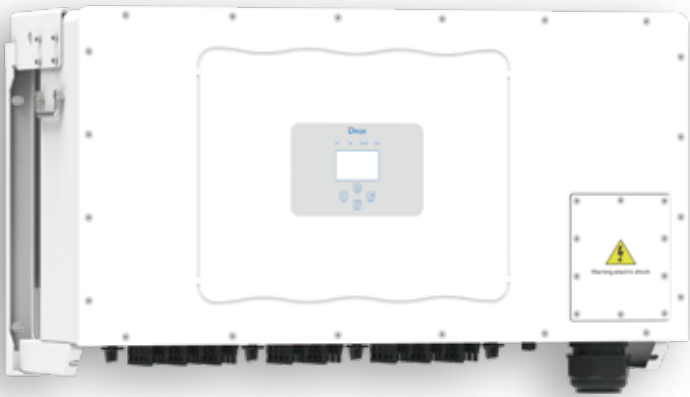
- LV** 127V/220V, 133V/230V and 50/60Hz, Three phase system
- 4** 4 MPP trackers, Max. efficiency up to 98.7%
- F** Zero export application, VSG application
- String intelligent monitoring (optional)**
- Wide output voltage range**
- Anti-PID function (Optional)**

## Technical Data

| Model                                                  | SUN-33K-G04P3<br>-EU-AM4-LV                            | SUN-35K-G04P3<br>-EU-AM4-LV | SUN-40K-G04P3<br>-EU-AM4-LV | SUN-45K-G04P3<br>-EU-AM4-LV | SUN-50K-G04P3<br>-EU-AM4-LV |
|--------------------------------------------------------|--------------------------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| PV String Input Data                                   |                                                        |                             |                             |                             |                             |
| Max. PV Input Power (kW)                               | 49.5                                                   | 52.5                        | 60                          | 67.5                        | 75                          |
| Max. PV Input Voltage (V)                              | 800                                                    |                             |                             |                             |                             |
| Start-up Voltage (V)                                   | 250                                                    |                             |                             |                             |                             |
| MPPT Voltage Range (V)                                 | 200-700                                                |                             |                             |                             |                             |
| Rated PV Input Voltage (V)                             | 500                                                    |                             |                             |                             |                             |
| Max. Operating PV Input Current (A)                    | 40+40+40+40                                            |                             |                             |                             |                             |
| Max. Input Short Circuit Current (A)                   | 60+60+60+60                                            |                             |                             |                             |                             |
| No. of MPP Trackers/<br>No. of Strings per MPP Tracker | 4/3+3+3+3                                              |                             | 4/4+4+4+4                   |                             |                             |
| AC Output Side                                         |                                                        |                             |                             |                             |                             |
| Rated AC Output Active Power (kW)                      | 33                                                     | 35                          | 40                          | 45                          | 50                          |
| Max. AC Output Apparent Power (kVA)                    | 33                                                     | 35                          | 40                          | 45                          | 50                          |
| Rated AC Output Current (A)                            | 86.7/82.8                                              | 91.9/87.8                   | 105/100.3                   | 118.2/112.8                 | 131.3/125.4                 |
| Max. AC Output Current (A)                             | 86.7/82.8                                              | 91.9/87.8                   | 105/100.3                   | 118.2/112.8                 | 131.3/125.4                 |
| Rated Output Voltage/Range (V)                         | 127V/220V, 133V/230V 0.85UN-1.1UN                      |                             |                             |                             |                             |
| Grid Connection Form                                   | 3L/N/PE                                                |                             |                             |                             |                             |
| Rated Output Grid Frequency/Range(Hz)                  | 50/45-55, 60/55-65                                     |                             |                             |                             |                             |
| Power Factor Adjustment Range                          | 0.8 leading to 0.8 lagging                             |                             |                             |                             |                             |
| Total Current Harmonic Distortion THDi                 | <3%                                                    |                             |                             |                             |                             |
| DC Injection Current                                   | <0.5%In                                                |                             |                             |                             |                             |
| Efficiency                                             |                                                        |                             |                             |                             |                             |
| Max. Efficiency                                        | 98.6%                                                  |                             | 98.7%                       |                             |                             |
| MPPT Efficiency                                        | >99%                                                   |                             | >99%                        |                             |                             |
| Equipment Protection                                   |                                                        |                             |                             |                             |                             |
| DC Reverse Polarity Protection                         | Yes                                                    |                             |                             |                             |                             |
| AC Output Overcurrent Protection                       | Yes                                                    |                             |                             |                             |                             |
| AC Output Overvoltage Protection                       | Yes                                                    |                             |                             |                             |                             |
| AC Output Short Circuit Protection                     | Yes                                                    |                             |                             |                             |                             |
| Thermal Protection                                     | Yes                                                    |                             |                             |                             |                             |
| Insulation Impedance Detection                         | Yes                                                    |                             |                             |                             |                             |
| DC Component Monitoring                                | Yes                                                    |                             |                             |                             |                             |
| Arc Fault Circuit Interrupter (AFCI)                   | Optional                                               |                             |                             |                             |                             |
| Anti-islanding Protection                              | Yes                                                    |                             |                             |                             |                             |
| Residual Current Detection                             | Yes                                                    |                             |                             |                             |                             |
| Surge Protection Level                                 | TYPE II(DC), TYPE II(AC)                               |                             |                             |                             |                             |
| DC Switch                                              | Yes                                                    |                             |                             |                             |                             |
| Interface                                              |                                                        |                             |                             |                             |                             |
| Communication Interface                                | RS485/RS232                                            |                             |                             |                             |                             |
| Monitor Mode                                           | GPRS/WIFI/Bluetooth/4G/LAN(optional)                   |                             |                             |                             |                             |
| General Data                                           |                                                        |                             |                             |                             |                             |
| Operating Temperature Range (°C)                       | -25 to +65°C, >45°C Derating                           |                             |                             |                             |                             |
| Permissible Ambient Humidity                           | 0-100%                                                 |                             |                             |                             |                             |
| Permissible Altitude (m)                               | 4000m                                                  |                             |                             |                             |                             |
| Noise (dB)                                             | ≤55                                                    |                             |                             |                             |                             |
| Ingress Protection(IP) Rating                          | IP 65                                                  |                             |                             |                             |                             |
| Inverter Topology                                      | Non-Isolated                                           |                             |                             |                             |                             |
| Over Voltage Category                                  | OVC II(DC), OVC III(AC)                                |                             |                             |                             |                             |
| Cabinet Size (WxHxD mm)                                | 698×613×236.5 (Excluding Connectors and Brackets)      |                             |                             |                             |                             |
| Weight (kg)                                            | 53.7                                                   |                             |                             |                             |                             |
| Warranty                                               | 5 Years                                                |                             |                             |                             |                             |
| Type of Cooling                                        | Intelligent Air Cooling                                |                             |                             |                             |                             |
| Grid Regulation                                        | NBR 16149, NBR 16150, EN 50549, RD 140                 |                             |                             |                             |                             |
| Safety EMC/Standard                                    | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2 |                             |                             |                             |                             |

# Three Phase String Inverter(LV)

SUN-60/70/75K-G01P3-EU-AM8-LV



- LV** 120V/208V, 127V/220V, 133V/230V and 50/60Hz, Three phase system
- 8M** 8 MPP trackers, Max. efficiency up to 98.7%
- F** Zero export application, VSG application
- String** String intelligent monitoring (optional)
- Wide** Wide output voltage range
- Anti-PID** Anti-PID function (Optional)

## Technical Data

| Model                                                  | SUN-60K-G01P3-EU-AM8-LV                                |  | SUN-70K-G01P3-EU-AM8-LV |  | SUN-75K-G01P3-EU-AM8-LV |              |
|--------------------------------------------------------|--------------------------------------------------------|--|-------------------------|--|-------------------------|--------------|
| PV String Input Data                                   |                                                        |  |                         |  |                         |              |
| Max. PV Input Power (kW)                               | 90                                                     |  | 105                     |  | 112.5                   |              |
| Max. PV Input Voltage (V)                              | 800                                                    |  |                         |  |                         |              |
| Start-up Voltage (V)                                   | 250                                                    |  |                         |  |                         |              |
| MPPT Voltage Range (V)                                 | 200-700                                                |  |                         |  |                         |              |
| Rated PV Input Voltage (V)                             | 500                                                    |  |                         |  |                         |              |
| Max. Operating PV Input Current (A)                    | 40+40+40+40+40+40+40+40                                |  |                         |  |                         |              |
| Max. Input Short Circuit Current (A)                   | 60+60+60+60+60+60+60+60                                |  |                         |  |                         |              |
| No. of MPP Trackers/<br>No. of Strings per MPP Tracker | 8/4+4+4+4+4+4+4+4                                      |  |                         |  |                         |              |
| AC Output Side                                         |                                                        |  |                         |  |                         |              |
| Rated AC Output Active Power (kW)                      | 60                                                     |  | 70                      |  | 75                      |              |
| Max. AC Output Apparent Power (kVA)                    | 60                                                     |  | 70                      |  | 75                      |              |
| Rated AC Output Current (A)                            | 157.5/150.4                                            |  | 183.8/175.5             |  | 196.9/188               |              |
| Max. AC Output Current (A)                             | 157.5/150.4                                            |  | 183.8/175.5             |  | 196.9/188               |              |
| Rated Output Voltage/Range (V)                         | 127V/220V, 133V/230V                                   |  |                         |  |                         | 0.85UN-1.1UN |
| Grid Connection Form                                   | 3L/N/PE                                                |  |                         |  |                         |              |
| Rated Output Grid Frequency/Range(Hz)                  | 50/45-55, 60/55-65                                     |  |                         |  |                         |              |
| Power Factor Adjustment Range                          | 0.8 leading to 0.8 lagging                             |  |                         |  |                         |              |
| Total Current Harmonic Distortion THDi                 | <3%                                                    |  |                         |  |                         |              |
| DC Injection Current                                   | <0.5%In                                                |  |                         |  |                         |              |
| Efficiency                                             |                                                        |  |                         |  |                         |              |
| Max. Efficiency                                        | 98.7%                                                  |  |                         |  |                         |              |
| MPPT Efficiency                                        | >99%                                                   |  |                         |  |                         |              |
| Equipment Protection                                   |                                                        |  |                         |  |                         |              |
| DC Reverse Polarity Protection                         | Yes                                                    |  |                         |  |                         |              |
| AC Output Overcurrent Protection                       | Yes                                                    |  |                         |  |                         |              |
| AC Output Overvoltage Protection                       | Yes                                                    |  |                         |  |                         |              |
| AC Output Short Circuit Protection                     | Yes                                                    |  |                         |  |                         |              |
| Thermal Protection                                     | Yes                                                    |  |                         |  |                         |              |
| Insulation Impedance Detection                         | Yes                                                    |  |                         |  |                         |              |
| DC Component Monitoring                                | Yes                                                    |  |                         |  |                         |              |
| Arc Fault Circuit Interrupter (AFCI)                   | Optional                                               |  |                         |  |                         |              |
| Anti-islanding Protection                              | Yes                                                    |  |                         |  |                         |              |
| Residual Current Detection                             | Yes                                                    |  |                         |  |                         |              |
| Surge Protection Level                                 | TYPE II(DC), TYPE II(AC)                               |  |                         |  |                         |              |
| DC Switch                                              | Yes                                                    |  |                         |  |                         |              |
| Interface                                              |                                                        |  |                         |  |                         |              |
| Communication Interface                                | RS485/RS232                                            |  |                         |  |                         |              |
| Monitor Mode                                           | GPRS/WIFI/Bluetooth/4G/LAN(optional)                   |  |                         |  |                         |              |
| General Data                                           |                                                        |  |                         |  |                         |              |
| Operating Temperature Range (°C)                       | -25 to +60°C, >45°C Derating                           |  |                         |  |                         |              |
| Permissible Ambient Humidity                           | 0-100%                                                 |  |                         |  |                         |              |
| Permissible Altitude (m)                               | 4000m                                                  |  |                         |  |                         |              |
| Noise (dB)                                             | ≤55                                                    |  |                         |  |                         |              |
| Ingress Protection(IP) Rating                          | IP 65                                                  |  |                         |  |                         |              |
| Inverter Topology                                      | Non-Isolated                                           |  |                         |  |                         |              |
| Over Voltage Category                                  | OVC II(DC), OVC III(AC)                                |  |                         |  |                         |              |
| Cabinet Size (WxHxD mm)                                | 1006×516×325.5 (Excluding Connectors and Brackets)     |  |                         |  |                         |              |
| Weight (kg)                                            | 103                                                    |  |                         |  |                         |              |
| Warranty                                               | 5 Years                                                |  |                         |  |                         |              |
| Type of Cooling                                        | Intelligent Air Cooling                                |  |                         |  |                         |              |
| Grid Regulation                                        | NBR 16149, NBR 16150, EN 50549, RD 140                 |  |                         |  |                         |              |
| Safety EMC/Standard                                    | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2 |  |                         |  |                         |              |

# Single Phase Off-Grid Inverter

SUN-3K-OG01LP1-24-EU-AM1

SUN-3K-OG01LP1-EU-AM1

SUN-3.6/5/6K-OG01LP1-EU-AM2



Colorful touch LCD, IP65 protection degree



Max. 16 pcs parallel for off-grid operation;  
Support multiple batteries parallel



Max. charging/discharging current of 135A



Support storing energy from diesel generator

## Technical Data

| Model                                           | SUN-3K-OG01LP1<br>-24-EU-AM1                                                                                                                                                                                                                                             | SUN-3K-OG01LP1<br>-EU-AM1 | SUN-3.6K-OG01LP1<br>-EU-AM2 | SUN-5K-OG01LP1<br>-EU-AM2 | SUN-6K-OG01LP1<br>-EU-AM2 |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------------------|---------------------------|---------------------------|
| Battery Input Data                              |                                                                                                                                                                                                                                                                          |                           |                             |                           |                           |
| Battery Type                                    | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                 |                           |                             |                           |                           |
| Battery Voltage Range (V)                       | 20-30                                                                                                                                                                                                                                                                    | 40-60                     |                             |                           |                           |
| Max. Charging Current (A)                       | 130                                                                                                                                                                                                                                                                      | 70                        | 90                          | 120                       | 135                       |
| Max. Discharging Current (A)                    | 130                                                                                                                                                                                                                                                                      | 70                        | 90                          | 120                       | 135                       |
| Charging Strategy for Li-ion Battery            | Self-adaption to BMS                                                                                                                                                                                                                                                     |                           |                             |                           |                           |
| Number of Battery Input                         | 1                                                                                                                                                                                                                                                                        |                           |                             |                           |                           |
| PV String Input Data                            |                                                                                                                                                                                                                                                                          |                           |                             |                           |                           |
| Max. PV Access Power (W)                        | 6000                                                                                                                                                                                                                                                                     |                           | 7200                        | 10000                     | 12000                     |
| Max. PV Input Power (W)                         | 4800                                                                                                                                                                                                                                                                     |                           | 5760                        | 8000                      | 9600                      |
| Max. PV Input Voltage (V)                       | 500                                                                                                                                                                                                                                                                      |                           |                             |                           |                           |
| Start-up Voltage (V)                            | 125                                                                                                                                                                                                                                                                      |                           |                             |                           |                           |
| MPPT Voltage Range (V)                          | 150-425                                                                                                                                                                                                                                                                  |                           |                             |                           |                           |
| Full Load MPPT Voltage Range (V)                | 300-425                                                                                                                                                                                                                                                                  |                           |                             |                           |                           |
| Rated PV Input Voltage (V)                      | 370                                                                                                                                                                                                                                                                      |                           |                             |                           |                           |
| Max. Operating PV Input Current (A)             | 18                                                                                                                                                                                                                                                                       | 18+18                     |                             |                           |                           |
| Max. Input Short-Circuit Current (A)            | 27                                                                                                                                                                                                                                                                       | 27+27                     |                             |                           |                           |
| No. of MPP Trackers/No. of Strings MPP Tracker  | 1/1                                                                                                                                                                                                                                                                      | 2/1+1                     |                             |                           |                           |
| Max. Inverter Backfeed Current To the Array (A) | 0                                                                                                                                                                                                                                                                        |                           |                             |                           |                           |
| AC Output Data                                  |                                                                                                                                                                                                                                                                          |                           |                             |                           |                           |
| Rated AC Output Power (VA/W)                    | 3000                                                                                                                                                                                                                                                                     |                           | 3600                        | 5000                      | 6000                      |
| Max. AC Output Power (VA/W)                     | 3000                                                                                                                                                                                                                                                                     |                           | 3600                        | 5000                      | 6000                      |
| Max. AC Output Current (A)                      | 13.1                                                                                                                                                                                                                                                                     |                           | 15.7                        | 21.8                      | 26.1                      |
| Peak Power (W)                                  | 2 times of rated power, 10s                                                                                                                                                                                                                                              |                           |                             |                           |                           |
| Rated Output Voltage (V)                        | 230                                                                                                                                                                                                                                                                      |                           |                             |                           |                           |
| Output Type                                     | L+N+PE                                                                                                                                                                                                                                                                   |                           |                             |                           |                           |
| Rated Output Frequency (Hz)                     | 50/60                                                                                                                                                                                                                                                                    |                           |                             |                           |                           |
| Output Voltage Waveform                         | Pure Sine Wave                                                                                                                                                                                                                                                           |                           |                             |                           |                           |
| Total Current Harmonic Distortion THDi          | <3%                                                                                                                                                                                                                                                                      |                           |                             |                           |                           |
| AC Input Data (Grid and Generator)              |                                                                                                                                                                                                                                                                          |                           |                             |                           |                           |
| Max. Input Power to Battery (W)                 | 3000                                                                                                                                                                                                                                                                     |                           | 3600                        | 5000                      | 6000                      |
| Rated Input Voltage/Range (V)                   | 230                                                                                                                                                                                                                                                                      |                           |                             |                           |                           |
| Rated Input Frequency (Hz)                      | 50/60                                                                                                                                                                                                                                                                    |                           |                             |                           |                           |
| Grid Input Current (A)                          | 35                                                                                                                                                                                                                                                                       |                           |                             |                           |                           |
| Generator Input Current (A)                     | 35                                                                                                                                                                                                                                                                       |                           |                             |                           |                           |
| Efficiency                                      |                                                                                                                                                                                                                                                                          |                           |                             |                           |                           |
| Max. Efficiency                                 | 97.6%                                                                                                                                                                                                                                                                    |                           |                             |                           |                           |
| Euro Efficiency                                 | 96.5%                                                                                                                                                                                                                                                                    |                           |                             |                           |                           |
| MPPT Efficiency                                 | >99%                                                                                                                                                                                                                                                                     |                           |                             |                           |                           |
| Equipment Protection                            |                                                                                                                                                                                                                                                                          |                           |                             |                           |                           |
| Integrated                                      | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc fault circuit interrupter (Optional), DC Switch, Insulation Impedance Detection |                           |                             |                           |                           |
| Surge Protection Level                          | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                 |                           |                             |                           |                           |
| Interface                                       |                                                                                                                                                                                                                                                                          |                           |                             |                           |                           |
| Communication Interface                         | WIFI,RS485,CAN,Bluetooth                                                                                                                                                                                                                                                 |                           |                             |                           |                           |
| LCD/LED Display                                 | LCD                                                                                                                                                                                                                                                                      |                           |                             |                           |                           |
| General Data                                    |                                                                                                                                                                                                                                                                          |                           |                             |                           |                           |
| Operating Temperature Range (°C)                | -40 to -60°C, >45°C Derating                                                                                                                                                                                                                                             |                           |                             |                           |                           |
| Permissible Ambient Humidity                    | 0-100%                                                                                                                                                                                                                                                                   |                           |                             |                           |                           |
| Permissible Altitude                            | 3000m                                                                                                                                                                                                                                                                    |                           |                             |                           |                           |
| Noise (dB)                                      | <55                                                                                                                                                                                                                                                                      |                           |                             |                           |                           |
| Ingress Protection(IP) Rating                   | IP 65                                                                                                                                                                                                                                                                    |                           |                             |                           |                           |
| Inverter Topology                               | Non-Isolated                                                                                                                                                                                                                                                             |                           |                             |                           |                           |
| Over Voltage Category                           | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                  |                           |                             |                           |                           |
| Cabinet Size (WxHxD mm)                         | 306×427.5×175.77 (Excluding Connectors and Brackets)                                                                                                                                                                                                                     |                           |                             |                           |                           |
| Weight (kg)                                     | 12.65                                                                                                                                                                                                                                                                    |                           |                             |                           |                           |
| Type of Cooling                                 | Intelligent Air Cooling                                                                                                                                                                                                                                                  |                           |                             |                           |                           |
| Warranty                                        | Standard 5 years, extended warranty                                                                                                                                                                                                                                      |                           |                             |                           |                           |
| Safety / EMC Standard                           | IEC62109-1/-2, EN61000-6-1,EN61000-6-2,EN61000-6-3,EN61000-6-4                                                                                                                                                                                                           |                           |                             |                           |                           |

# Single Phase Hybrid Inverter

SUN-3K-SG04LP1-24-EU  
SUN-3/3.6/5/6K-SG04LP1-EU



-  Colorful touch LCD, IP65 protection degree
-  AC couple to retrofit existing solar system
-  Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
-  Max. charging/discharging current of 140A
-  6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

## Technical Data

| Model                                              | SUN-3K<br>-SG04LP1-24-EU                                                                                                                                                                                                                                                                                                        | SUN-3K<br>-SG04LP1-EU | SUN-3.6K<br>-SG04LP1-EU | SUN-5K<br>-SG04LP1-EU | SUN-6K<br>-SG04LP1-EU   |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------|-----------------------|-------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                       |                         |                       |                         |
| Battery Type                                       | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                                                                        |                       |                         |                       |                         |
| Battery Voltage Range (V)                          | 20-30                                                                                                                                                                                                                                                                                                                           | 40-60                 | 40-60                   | 40-60                 | 40-60                   |
| Max. Charging Current (A)                          | 140                                                                                                                                                                                                                                                                                                                             | 70                    | 90                      | 120                   | 135                     |
| Max. Discharging Current (A)                       | 140                                                                                                                                                                                                                                                                                                                             | 70                    | 90                      | 120                   | 135                     |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                       |                         |                       |                         |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |                       |                         |                       |                         |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                       |                         |                       |                         |
| Max. PV Access Power (W)                           | 6000                                                                                                                                                                                                                                                                                                                            | 6000                  | 7200                    | 10000                 | 12000                   |
| Max. PV Input Power (W)                            | 4800                                                                                                                                                                                                                                                                                                                            | 4800                  | 5760                    | 8000                  | 9600                    |
| Max. PV Input Voltage (V)                          | 500                                                                                                                                                                                                                                                                                                                             |                       |                         |                       |                         |
| Start-up Voltage (V)                               | 125                                                                                                                                                                                                                                                                                                                             |                       |                         |                       |                         |
| MPPT Voltage Range (V)                             | 150-425                                                                                                                                                                                                                                                                                                                         |                       |                         |                       |                         |
| Rated PV Input Voltage (V)                         | 370                                                                                                                                                                                                                                                                                                                             |                       |                         |                       |                         |
| Max. Operating PV Input Current (A)                | 18                                                                                                                                                                                                                                                                                                                              |                       | 18+18                   |                       |                         |
| Max. Input Short-Circuit Current (A)               | 27                                                                                                                                                                                                                                                                                                                              |                       | 27+27                   |                       |                         |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 1/1                                                                                                                                                                                                                                                                                                                             |                       | 2/1+1                   |                       |                         |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                       |                         |                       |                         |
| Rated AC Input/Output Active Power (W)             | 3000                                                                                                                                                                                                                                                                                                                            |                       | 3600                    | 5000                  | 6000                    |
| Max. AC Input/Output Apparent Power (VA)           | 3300                                                                                                                                                                                                                                                                                                                            |                       | 3960                    | 5500                  | 6600                    |
| Rated AC Input/Output Current (A)                  | 13.6/13                                                                                                                                                                                                                                                                                                                         |                       | 16.4/15.7               | 22.7/21.7             | 27.3/26.1               |
| Max. AC Input/Output Current (A)                   | 15/14.3                                                                                                                                                                                                                                                                                                                         |                       | 18/17.2                 | 25/23.9               | 30/28.7                 |
| Max. Continuous AC Passthrough (grid to load) (A)  | 35                                                                                                                                                                                                                                                                                                                              |                       |                         |                       | 40                      |
| Peak Power (off-grid) (W)                          | 2 times of rated power, 10s                                                                                                                                                                                                                                                                                                     |                       |                         |                       |                         |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |                       |                         |                       |                         |
| Rated Input/Output Voltage/Range (V)               | 220/230 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                            |                       |                         |                       |                         |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |                       |                         |                       |                         |
| Grid Connection Form                               | L+N+PE                                                                                                                                                                                                                                                                                                                          |                       |                         |                       |                         |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                       |                         |                       |                         |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |                       |                         |                       |                         |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                       |                         |                       |                         |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                       |                         |                       |                         |
| Euro Efficiency                                    | 96.5%                                                                                                                                                                                                                                                                                                                           |                       |                         |                       |                         |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                       |                         |                       |                         |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                       |                         |                       |                         |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                       |                         |                       |                         |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                       |                         |                       |                         |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                       |                         |                       |                         |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                       |                         |                       |                         |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                       |                         |                       |                         |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                       |                         |                       |                         |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                       |                         |                       |                         |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                       |                         |                       |                         |
| Permissible Altitude                               | 2000m                                                                                                                                                                                                                                                                                                                           |                       |                         |                       |                         |
| Noise (dB)                                         | <30                                                                                                                                                                                                                                                                                                                             |                       |                         |                       |                         |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |                       |                         |                       |                         |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                       |                         |                       |                         |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                       |                         |                       |                         |
| Cabinet Size (WxHxD mm)                            | 330×433×229 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                                 |                       |                         |                       |                         |
| Weight (kg)                                        | 17                                                                                                                                                                                                                                                                                                                              |                       |                         |                       |                         |
| Type of Cooling                                    | Natural Cooling                                                                                                                                                                                                                                                                                                                 |                       |                         |                       | Intelligent Air Cooling |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                       |                         |                       |                         |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, G99, VDE-AR-N 4105                                                                                                                                                                                                              |                       |                         |                       |                         |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |                       |                         |                       |                         |

# Single Phase Hybrid Inverter

SUN-3K-SG04LP1-24-EU-SM1

SUN-3K-SG04LP1-EU-SM1

SUN-3.6/5/6K-SG04LP1-EU-SM2



Colorful touch LCD, IP65 protection degree



AC couple to retrofit existing solar system



Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel



Max. charging/discharging current of 140A



6 time periods for battery charging/discharging



Support storing energy from diesel generator

## Technical Data

| Model                                              | SUN-3K-SG04LP1<br>-24-EU-SM1                                                                                                                                                                                                                                                                                                    | SUN-3K-SG04LP1<br>-EU-SM1 | SUN-3.6K-SG04LP1<br>-EU-SM2 | SUN-5K-SG04LP1<br>-EU-SM2 | SUN-6K-SG04LP1<br>-EU-SM2 |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------------------|---------------------------|---------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                           |                             |                           |                           |
| Battery Type                                       | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                                                                        |                           |                             |                           |                           |
| Battery Voltage Range (V)                          | 20-30                                                                                                                                                                                                                                                                                                                           | 40-60                     | 40-60                       | 40-60                     | 40-60                     |
| Max. Charging Current (A)                          | 140                                                                                                                                                                                                                                                                                                                             | 70                        | 90                          | 120                       | 135                       |
| Max. Discharging Current (A)                       | 140                                                                                                                                                                                                                                                                                                                             | 70                        | 90                          | 120                       | 135                       |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                           |                             |                           |                           |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |                           |                             |                           |                           |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                           |                             |                           |                           |
| Max. PV Access Power (W)                           | 6000                                                                                                                                                                                                                                                                                                                            | 6000                      | 7200                        | 10000                     | 12000                     |
| Max. PV Input Power (W)                            | 4800                                                                                                                                                                                                                                                                                                                            | 4800                      | 5760                        | 8000                      | 9600                      |
| Max. PV Input Voltage (V)                          | 500                                                                                                                                                                                                                                                                                                                             |                           |                             |                           |                           |
| Start-up Voltage (V)                               | 125                                                                                                                                                                                                                                                                                                                             |                           |                             |                           |                           |
| MPPT Voltage Range (V)                             | 150-425                                                                                                                                                                                                                                                                                                                         |                           |                             |                           |                           |
| Rated PV Input Voltage (V)                         | 370                                                                                                                                                                                                                                                                                                                             |                           |                             |                           |                           |
| Max. Operating PV Input Current (A)                | 18                                                                                                                                                                                                                                                                                                                              |                           | 18+18                       |                           |                           |
| Max. Input Short-Circuit Current (A)               | 27                                                                                                                                                                                                                                                                                                                              |                           | 27+27                       |                           |                           |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 1/1                                                                                                                                                                                                                                                                                                                             |                           | 2/1+1                       |                           |                           |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                           |                             |                           |                           |
| Rated AC Input/Output Active Power (W)             | 3000                                                                                                                                                                                                                                                                                                                            |                           | 3600                        | 5000                      | 6000                      |
| Max. AC Input/Output Apparent Power (VA)           | 3300                                                                                                                                                                                                                                                                                                                            |                           | 3960                        | 5500                      | 6600                      |
| Rated AC Input/Output Current (A)                  | 13.7/13.1                                                                                                                                                                                                                                                                                                                       |                           | 16.4/15.7                   | 22.8/21.8                 | 27.3/26.1                 |
| Max. AC Input/Output Current (A)                   | 15/14.4                                                                                                                                                                                                                                                                                                                         |                           | 18/17.3                     | 25/24                     | 30/28.7                   |
| Max. Continuous AC Passthrough (grid to load) (A)  | 35                                                                                                                                                                                                                                                                                                                              |                           |                             |                           | 40                        |
| Peak Power (off-grid) (W)                          | 2 times of rated power, 10s                                                                                                                                                                                                                                                                                                     |                           |                             |                           |                           |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |                           |                             |                           |                           |
| Rated Input/Output Voltage/Range (V)               | 220/230 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                            |                           |                             |                           |                           |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |                           |                             |                           |                           |
| Grid Connection Form                               | L+N+PE                                                                                                                                                                                                                                                                                                                          |                           |                             |                           |                           |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                           |                             |                           |                           |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |                           |                             |                           |                           |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                           |                             |                           |                           |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                           |                             |                           |                           |
| Euro Efficiency                                    | 96.5%                                                                                                                                                                                                                                                                                                                           |                           |                             |                           |                           |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                           |                             |                           |                           |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                           |                             |                           |                           |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                           |                             |                           |                           |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                           |                             |                           |                           |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                           |                             |                           |                           |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                           |                             |                           |                           |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                           |                             |                           |                           |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                           |                             |                           |                           |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                           |                             |                           |                           |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                           |                             |                           |                           |
| Permissible Altitude                               | 2000m                                                                                                                                                                                                                                                                                                                           |                           |                             |                           |                           |
| Noise (dB)                                         | <30                                                                                                                                                                                                                                                                                                                             |                           |                             |                           |                           |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |                           |                             |                           |                           |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                           |                             |                           |                           |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                           |                             |                           |                           |
| Cabinet Size (WxHxD mm)                            | 376×470×241.5 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                               |                           |                             |                           |                           |
| Weight (kg)                                        | 17.6                                                                                                                                                                                                                                                                                                                            |                           |                             | 19                        |                           |
| Type of Cooling                                    | Natural Cooling                                                                                                                                                                                                                                                                                                                 |                           |                             |                           |                           |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                           |                             |                           |                           |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, G99, VDE-AR-N 4105                                                                                                                                                                                                              |                           |                             |                           |                           |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |                           |                             |                           |                           |

# Single Phase Hybrid Inverter

SUN-3.6/5/6/7/7.6/8/10K-SG05LP1-EU



-  Colorful touch LCD, IP65 protection degree
-  AC couple to retrofit existing solar system
-  Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
-  Max. charging/discharging current of 210A
-  6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

## Technical Data

| Model                                              | SUN-3.6K-SG05<br>LP1-EU                                                                                                                                                                                                                                                                                                         | SUN-5K-SG05<br>LP1-EU | SUN-6K-SG05<br>LP1-EU | SUN-7K-SG05<br>LP1-EU | SUN-7.6K-SG05<br>LP1-EU | SUN-8K-SG05<br>LP1-EU | SUN-10K-SG05<br>LP1-EU |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-------------------------|-----------------------|------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                       |                       |                       |                         |                       |                        |
| Battery Type                                       | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                                                                        |                       |                       |                       |                         |                       |                        |
| Battery Voltage Range (V)                          | 40-60                                                                                                                                                                                                                                                                                                                           |                       |                       |                       |                         |                       |                        |
| Max. Charging Current (A)                          | 90                                                                                                                                                                                                                                                                                                                              | 120                   | 135                   | 175                   | 190                     | 190                   | 210                    |
| Max. Discharging Current (A)                       | 90                                                                                                                                                                                                                                                                                                                              | 120                   | 135                   | 175                   | 190                     | 190                   | 210                    |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                       |                       |                       |                         |                       |                        |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |                       |                       |                       |                         |                       |                        |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                       |                       |                       |                         |                       |                        |
| Max. PV Access Power (W)                           | 7200                                                                                                                                                                                                                                                                                                                            | 10000                 | 12000                 | 14000                 | 15200                   | 16000                 | 20000                  |
| Max. PV Input Power (W)                            | 5760                                                                                                                                                                                                                                                                                                                            | 8000                  | 9600                  | 11200                 | 12160                   | 12800                 | 16000                  |
| Max. PV Input Voltage (V)                          | 500                                                                                                                                                                                                                                                                                                                             |                       |                       |                       |                         |                       |                        |
| Start-up Voltage (V)                               | 125                                                                                                                                                                                                                                                                                                                             |                       |                       |                       |                         |                       |                        |
| MPPT Voltage Range (V)                             | 150-425                                                                                                                                                                                                                                                                                                                         |                       |                       |                       |                         |                       |                        |
| Rated PV Input Voltage (V)                         | 370                                                                                                                                                                                                                                                                                                                             |                       |                       |                       |                         |                       |                        |
| Max. Operating PV Input Current (A)                | 13+13                                                                                                                                                                                                                                                                                                                           |                       |                       | 26+26                 |                         |                       |                        |
| Max. Input Short-Circuit Current (A)               | 17+17                                                                                                                                                                                                                                                                                                                           |                       |                       | 34+34                 |                         |                       |                        |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/1+1                                                                                                                                                                                                                                                                                                                           |                       |                       | 2/2+2                 |                         |                       |                        |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                       |                       |                       |                         |                       |                        |
| Rated AC Input/Output Active Power (W)             | 3600                                                                                                                                                                                                                                                                                                                            | 5000                  | 6000                  | 7000                  | 7600                    | 8000                  | 10000                  |
| Max. AC Input/Output Apparent Power (VA)           | 3960                                                                                                                                                                                                                                                                                                                            | 5500                  | 6600                  | 7700                  | 8360                    | 8800                  | 11000                  |
| Rated AC Input/Output Current (A)                  | 16.4/15.7                                                                                                                                                                                                                                                                                                                       | 22.7/21.7             | 27.3/26.1             | 31.9/30.5             | 34.5/33                 | 36.4/34.8             | 45.5/43.5              |
| Max. AC Input/Output Current (A)                   | 18/17.2                                                                                                                                                                                                                                                                                                                         | 25/23.9               | 30/28.7               | 35/33.5               | 38/36.3                 | 40/38.3               | 50/47.9                |
| Max. Continuous AC Passthrough (grid to load) (A)  | 35                                                                                                                                                                                                                                                                                                                              |                       | 40                    | 50                    |                         |                       |                        |
| Peak Power (off-grid) (W)                          | 2 times of rated power, 10s                                                                                                                                                                                                                                                                                                     |                       |                       |                       |                         |                       |                        |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |                       |                       |                       |                         |                       |                        |
| Rated Input/Output Voltage/Range (V)               | 220/230 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                            |                       |                       |                       |                         |                       |                        |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |                       |                       |                       |                         |                       |                        |
| Grid Connection Form                               | L+N+PE                                                                                                                                                                                                                                                                                                                          |                       |                       |                       |                         |                       |                        |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                       |                       |                       |                         |                       |                        |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |                       |                       |                       |                         |                       |                        |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                       |                       |                       |                         |                       |                        |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                       |                       |                       |                         |                       |                        |
| Euro Efficiency                                    | 96.5%                                                                                                                                                                                                                                                                                                                           |                       |                       |                       |                         |                       |                        |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                       |                       |                       |                         |                       |                        |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                       |                       |                       |                         |                       |                        |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                       |                       |                       |                         |                       |                        |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                       |                       |                       |                         |                       |                        |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                       |                       |                       |                         |                       |                        |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                       |                       |                       |                         |                       |                        |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                       |                       |                       |                         |                       |                        |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                       |                       |                       |                         |                       |                        |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                       |                       |                       |                         |                       |                        |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                       |                       |                       |                         |                       |                        |
| Permissible Altitude                               | 2000m                                                                                                                                                                                                                                                                                                                           |                       |                       |                       |                         |                       |                        |
| Noise (dB)                                         | <30                                                                                                                                                                                                                                                                                                                             |                       |                       |                       |                         |                       |                        |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |                       |                       |                       |                         |                       |                        |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                       |                       |                       |                         |                       |                        |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                       |                       |                       |                         |                       |                        |
| Cabinet Size (WxHxD mm)                            | 330×580×232 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                                 |                       |                       |                       |                         |                       |                        |
| Weight (kg)                                        | 24.9                                                                                                                                                                                                                                                                                                                            |                       |                       |                       |                         |                       |                        |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |                       |                       |                       |                         |                       |                        |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                       |                       |                       |                         |                       |                        |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, G99, VDE-AR-N 4105                                                                                                                                                                                                              |                       |                       |                       |                         |                       |                        |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |                       |                       |                       |                         |                       |                        |

# Single Phase Hybrid Inverter

## SUN-3.6/5/6/7/7.6/8/10K-SG05LP1-EU-AM2-P



-  Colorful touch LCD, IP65 protection degree
-  AC couple to retrofit existing solar system
-  Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
-  Max. charging/discharging current of 210A
-  6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

### Technical Data

| Model                                              | SUN-3.6K-SG05<br>LP1-EU-AM2-P                                                                                                                                                                                                                                                                                                   | SUN-5K-SG05<br>LP1-EU-AM2-P | SUN-6K-SG05<br>LP1-EU-AM2-P | SUN-7K-SG05<br>LP1-EU-AM2-P | SUN-7.6K-SG05<br>LP1-EU-AM2-P | SUN-8K-SG05<br>LP1-EU-AM2-P | SUN-10K-SG05<br>LP1-EU-AM2-P |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------------|-----------------------------|------------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                             |                               |                             |                              |
| Battery Type                                       | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                                                                        |                             |                             |                             |                               |                             |                              |
| Battery Voltage Range (V)                          | 40-60                                                                                                                                                                                                                                                                                                                           |                             |                             |                             |                               |                             |                              |
| Max. Charging Current (A)                          | 90                                                                                                                                                                                                                                                                                                                              | 120                         | 135                         | 175                         | 190                           | 190                         | 210                          |
| Max. Discharging Current (A)                       | 90                                                                                                                                                                                                                                                                                                                              | 120                         | 135                         | 175                         | 190                           | 190                         | 210                          |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                             |                             |                             |                               |                             |                              |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |                             |                             |                             |                               |                             |                              |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                             |                               |                             |                              |
| Max. PV Access Power (W)                           | 7200                                                                                                                                                                                                                                                                                                                            | 10000                       | 12000                       | 14000                       | 15200                         | 16000                       | 20000                        |
| Max. PV Input Power (W)                            | 5760                                                                                                                                                                                                                                                                                                                            | 8000                        | 9600                        | 11200                       | 12160                         | 12800                       | 16000                        |
| Max. PV Input Voltage (V)                          | 500                                                                                                                                                                                                                                                                                                                             |                             |                             |                             |                               |                             |                              |
| Start-up Voltage (V)                               | 125                                                                                                                                                                                                                                                                                                                             |                             |                             |                             |                               |                             |                              |
| MPPT Voltage Range (V)                             | 150-425                                                                                                                                                                                                                                                                                                                         |                             |                             |                             |                               |                             |                              |
| Rated PV Input Voltage (V)                         | 370                                                                                                                                                                                                                                                                                                                             |                             |                             |                             |                               |                             |                              |
| Max. Operating PV Input Current (A)                | 18+18                                                                                                                                                                                                                                                                                                                           |                             |                             | 32+32                       |                               |                             |                              |
| Max. Input Short-Circuit Current (A)               | 27+27                                                                                                                                                                                                                                                                                                                           |                             |                             | 48+48                       |                               |                             |                              |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/1+1                                                                                                                                                                                                                                                                                                                           |                             |                             | 2/2+2                       |                               |                             |                              |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                             |                               |                             |                              |
| Rated AC Input/Output Active Power (W)             | 3600                                                                                                                                                                                                                                                                                                                            | 5000                        | 6000                        | 7000                        | 7600                          | 8000                        | 10000                        |
| Max. AC Input/Output Apparent Power (VA)           | 3960                                                                                                                                                                                                                                                                                                                            | 5500                        | 6600                        | 7700                        | 8360                          | 8800                        | 11000                        |
| Rated AC Input/Output Current (A)                  | 16.4/15.7                                                                                                                                                                                                                                                                                                                       | 22.7/21.7                   | 27.3/26.1                   | 31.9/30.5                   | 34.5/33                       | 36.4/34.8                   | 45.5/43.5                    |
| Max. AC Input/Output Current (A)                   | 18/17.2                                                                                                                                                                                                                                                                                                                         | 25/23.9                     | 30/28.7                     | 35/33.5                     | 38/36.3                       | 40/38.3                     | 50/47.9                      |
| Max. Continuous AC Passthrough (grid to load) (A)  | 35                                                                                                                                                                                                                                                                                                                              |                             | 40                          | 50                          |                               |                             |                              |
| Peak Power (off-grid) (W)                          | 2 times of rated power, 10s                                                                                                                                                                                                                                                                                                     |                             |                             |                             |                               |                             |                              |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |                             |                             |                             |                               |                             |                              |
| Rated Input/Output Voltage/Range (V)               | 220/230 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                            |                             |                             |                             |                               |                             |                              |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |                             |                             |                             |                               |                             |                              |
| Grid Connection Form                               | L+N+PE                                                                                                                                                                                                                                                                                                                          |                             |                             |                             |                               |                             |                              |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                             |                             |                             |                               |                             |                              |
| DC Injection Current                               | <0.5 In                                                                                                                                                                                                                                                                                                                         |                             |                             |                             |                               |                             |                              |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                             |                               |                             |                              |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                             |                             |                             |                               |                             |                              |
| Euro Efficiency                                    | 96.5%                                                                                                                                                                                                                                                                                                                           |                             |                             |                             |                               |                             |                              |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                             |                             |                             |                               |                             |                              |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                             |                               |                             |                              |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                             |                             |                             |                               |                             |                              |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                             |                             |                             |                               |                             |                              |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                             |                               |                             |                              |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                             |                             |                             |                               |                             |                              |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                             |                             |                             |                               |                             |                              |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                             |                               |                             |                              |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                             |                             |                             |                               |                             |                              |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                             |                             |                             |                               |                             |                              |
| Permissible Altitude                               | 2000m                                                                                                                                                                                                                                                                                                                           |                             |                             |                             |                               |                             |                              |
| Noise (dB)                                         | <30                                                                                                                                                                                                                                                                                                                             |                             |                             |                             |                               |                             |                              |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |                             |                             |                             |                               |                             |                              |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                             |                             |                             |                               |                             |                              |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                             |                             |                             |                               |                             |                              |
| Cabinet Size (WxHxD mm)                            | 330×580×232 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                                 |                             |                             |                             |                               |                             |                              |
| Weight (kg)                                        | 24.9                                                                                                                                                                                                                                                                                                                            |                             |                             |                             |                               |                             |                              |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |                             |                             |                             |                               |                             |                              |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                             |                             |                             |                               |                             |                              |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, G99, VDE-AR-N 4105                                                                                                                                                                                                              |                             |                             |                             |                               |                             |                              |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |                             |                             |                             |                               |                             |                              |

# Single Phase Hybrid Inverter

## SUN-7/7.6/8/10K-SG05LP1-EU-SM2



-  Colorful touch LCD, IP65 protection degree
-  AC couple to retrofit existing solar system
-  Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
-  Max. charging/discharging current of 210A
-  6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

### Technical Data

| Model                                              | SUN-7K-SG05LP1<br>-EU-SM2                                                                                                                                                                                                                                                                                                       | SUN-7.6K-SG05LP1<br>-EU-SM2 | SUN-8K-SG05LP1<br>-EU-SM2 | SUN-10K-SG05LP1<br>-EU-SM2 |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------|----------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                             |                           |                            |
| Battery Type                                       | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                                                                        |                             |                           |                            |
| Battery Voltage Range (V)                          | 40-60                                                                                                                                                                                                                                                                                                                           |                             |                           |                            |
| Max. Charging Current (A)                          | 175                                                                                                                                                                                                                                                                                                                             | 190                         | 190                       | 210                        |
| Max. Discharging Current (A)                       | 175                                                                                                                                                                                                                                                                                                                             | 190                         | 190                       | 210                        |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                             |                           |                            |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |                             |                           |                            |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                             |                           |                            |
| Max. PV Access Power (W)                           | 14000                                                                                                                                                                                                                                                                                                                           | 15200                       | 16000                     | 20000                      |
| Max. PV Input Power (W)                            | 11200                                                                                                                                                                                                                                                                                                                           | 12160                       | 12800                     | 16000                      |
| Max. PV Input Voltage (V)                          | 500                                                                                                                                                                                                                                                                                                                             |                             |                           |                            |
| Start-up Voltage (V)                               | 125                                                                                                                                                                                                                                                                                                                             |                             |                           |                            |
| MPPT Voltage Range (V)                             | 150-425                                                                                                                                                                                                                                                                                                                         |                             |                           |                            |
| Rated PV Input Voltage (V)                         | 370                                                                                                                                                                                                                                                                                                                             |                             |                           |                            |
| Max. Operating PV Input Current (A)                | 26+26                                                                                                                                                                                                                                                                                                                           |                             |                           |                            |
| Max. Input Short-Circuit Current (A)               | 34+34                                                                                                                                                                                                                                                                                                                           |                             |                           |                            |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/2+2                                                                                                                                                                                                                                                                                                                           |                             |                           |                            |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                             |                           |                            |
| Rated AC Input/Output Active Power (W)             | 7000                                                                                                                                                                                                                                                                                                                            | 7600                        | 8000                      | 10000                      |
| Max. AC Input/Output Apparent Power (VA)           | 7700                                                                                                                                                                                                                                                                                                                            | 8360                        | 8800                      | 11000                      |
| Rated AC Input/Output Current (A)                  | 31.9/30.5                                                                                                                                                                                                                                                                                                                       | 34.6/33.1                   | 36.4/34.8                 | 45.5/43.5                  |
| Max. AC Input/Output Current (A)                   | 35/33.5                                                                                                                                                                                                                                                                                                                         | 38/36.4                     | 40/38.3                   | 50/47.9                    |
| Max. Continuous AC Passthrough (grid to load) (A)  | 50                                                                                                                                                                                                                                                                                                                              |                             |                           |                            |
| Peak Power (off-grid) (W)                          | 2 times of rated power, 10s                                                                                                                                                                                                                                                                                                     |                             |                           |                            |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |                             |                           |                            |
| Rated Input/Output Voltage/Range (V)               | 220/230 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                            |                             |                           |                            |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |                             |                           |                            |
| Grid Connection Form                               | L+N+PE                                                                                                                                                                                                                                                                                                                          |                             |                           |                            |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                             |                           |                            |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |                             |                           |                            |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                             |                           |                            |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                             |                           |                            |
| Euro Efficiency                                    | 96.5%                                                                                                                                                                                                                                                                                                                           |                             |                           |                            |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                             |                           |                            |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                             |                           |                            |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                             |                           |                            |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                             |                           |                            |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                             |                           |                            |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                             |                           |                            |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                             |                           |                            |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                             |                           |                            |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                             |                           |                            |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                             |                           |                            |
| Permissible Altitude                               | 2000m                                                                                                                                                                                                                                                                                                                           |                             |                           |                            |
| Noise (dB)                                         | <30                                                                                                                                                                                                                                                                                                                             |                             |                           |                            |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |                             |                           |                            |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                             |                           |                            |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                             |                           |                            |
| Cabinet Size (WxHxD mm)                            | 366×589.5×237 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                               |                             |                           |                            |
| Weight (kg)                                        | 26.8                                                                                                                                                                                                                                                                                                                            |                             |                           |                            |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |                             |                           |                            |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                             |                           |                            |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105                                                                                                                                                                                                                   |                             |                           |                            |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |                             |                           |                            |

# Single Phase Hybrid Inverter

## SUN-3.6/5/6/7/7.6/8/10K-SG05LP1-EU-SM2-P



- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 210A
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

### Technical Data

| Model                                              | SUN-3.6K-SG05<br>LP1-EU-SM2-P                                                                                                                                                                                                                                                                                                   | SUN-5K-SG05<br>LP1-EU-SM2-P | SUN-6K-SG05<br>LP1-EU-SM2-P | SUN-7K-SG05<br>LP1-EU-SM2-P | SUN-7.6K-SG05<br>LP1-EU-SM2-P | SUN-8K-SG05<br>LP1-EU-SM2-P | SUN-10K-SG05<br>LP1-EU-SM2-P |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------------|-----------------------------|------------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                             |                               |                             |                              |
| Battery Type                                       | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                                                                        |                             |                             |                             |                               |                             |                              |
| Battery Voltage Range (V)                          | 40-60                                                                                                                                                                                                                                                                                                                           |                             |                             |                             |                               |                             |                              |
| Max. Charging Current (A)                          | 90                                                                                                                                                                                                                                                                                                                              | 120                         | 135                         | 175                         | 190                           | 190                         | 210                          |
| Max. Discharging Current (A)                       | 90                                                                                                                                                                                                                                                                                                                              | 120                         | 135                         | 175                         | 190                           | 190                         | 210                          |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                             |                             |                             |                               |                             |                              |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |                             |                             |                             |                               |                             |                              |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                             |                               |                             |                              |
| Max. PV Access Power (W)                           | 7200                                                                                                                                                                                                                                                                                                                            | 10000                       | 12000                       | 14000                       | 15200                         | 16000                       | 20000                        |
| Max. PV Input Power (W)                            | 5760                                                                                                                                                                                                                                                                                                                            | 8000                        | 9600                        | 11200                       | 12160                         | 12800                       | 16000                        |
| Max. PV Input Voltage (V)                          | 500                                                                                                                                                                                                                                                                                                                             |                             |                             |                             |                               |                             |                              |
| Start-up Voltage (V)                               | 125                                                                                                                                                                                                                                                                                                                             |                             |                             |                             |                               |                             |                              |
| MPPT Voltage Range (V)                             | 150-425                                                                                                                                                                                                                                                                                                                         |                             |                             |                             |                               |                             |                              |
| Rated PV Input Voltage (V)                         | 370                                                                                                                                                                                                                                                                                                                             |                             |                             |                             |                               |                             |                              |
| Max. Operating PV Input Current (A)                | 18+18                                                                                                                                                                                                                                                                                                                           |                             |                             | 32+32                       |                               |                             |                              |
| Max. Input Short-Circuit Current (A)               | 27+27                                                                                                                                                                                                                                                                                                                           |                             |                             | 48+48                       |                               |                             |                              |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/1+1                                                                                                                                                                                                                                                                                                                           |                             |                             | 2/2+2                       |                               |                             |                              |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                             |                               |                             |                              |
| Rated AC Input/Output Active Power (W)             | 3600                                                                                                                                                                                                                                                                                                                            | 5000                        | 6000                        | 7000                        | 7600                          | 8000                        | 10000                        |
| Max. AC Input/Output Apparent Power (VA)           | 3960                                                                                                                                                                                                                                                                                                                            | 5500                        | 6600                        | 7700                        | 8360                          | 8800                        | 11000                        |
| Rated AC Input/Output Current (A)                  | 16.4/15.7                                                                                                                                                                                                                                                                                                                       | 22.8/21.8                   | 27.3/26.1                   | 31.9/30.5                   | 34.6/33.1                     | 36.4/34.8                   | 45.5/43.5                    |
| Max. AC Input/Output Current (A)                   | 18/17.3                                                                                                                                                                                                                                                                                                                         | 25/24                       | 30/28.7                     | 35/33.5                     | 38/36.4                       | 40/38.3                     | 50/47.9                      |
| Max. Continuous AC Passthrough (grid to load) (A)  | 35                                                                                                                                                                                                                                                                                                                              |                             | 40                          | 50                          |                               |                             |                              |
| Peak Power (off-grid) (W)                          | 2 times of rated power, 10s                                                                                                                                                                                                                                                                                                     |                             |                             |                             |                               |                             |                              |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |                             |                             |                             |                               |                             |                              |
| Rated Input/Output Voltage/Range (V)               | 220/230 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                            |                             |                             |                             |                               |                             |                              |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |                             |                             |                             |                               |                             |                              |
| Grid Connection Form                               | L+N+PE                                                                                                                                                                                                                                                                                                                          |                             |                             |                             |                               |                             |                              |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                             |                             |                             |                               |                             |                              |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |                             |                             |                             |                               |                             |                              |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                             |                               |                             |                              |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                             |                             |                             |                               |                             |                              |
| Euro Efficiency                                    | 96.5%                                                                                                                                                                                                                                                                                                                           |                             |                             |                             |                               |                             |                              |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                             |                             |                             |                               |                             |                              |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                             |                               |                             |                              |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                             |                             |                             |                               |                             |                              |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                             |                             |                             |                               |                             |                              |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                             |                               |                             |                              |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                             |                             |                             |                               |                             |                              |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                             |                             |                             |                               |                             |                              |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                             |                               |                             |                              |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                             |                             |                             |                               |                             |                              |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                             |                             |                             |                               |                             |                              |
| Permissible Altitude                               | 2000m                                                                                                                                                                                                                                                                                                                           |                             |                             |                             |                               |                             |                              |
| Noise (dB)                                         | <30                                                                                                                                                                                                                                                                                                                             |                             |                             |                             |                               |                             |                              |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |                             |                             |                             |                               |                             |                              |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                             |                             |                             |                               |                             |                              |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                             |                             |                             |                               |                             |                              |
| Cabinet Size (WxHxD mm)                            | 366×589.5×237 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                               |                             |                             |                             |                               |                             |                              |
| Weight (kg)                                        | 26.8                                                                                                                                                                                                                                                                                                                            |                             |                             |                             |                               |                             |                              |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |                             |                             |                             |                               |                             |                              |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                             |                             |                             |                               |                             |                              |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, G99, VDE-AR-N 4105                                                                                                                                                                                                              |                             |                             |                             |                               |                             |                              |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |                             |                             |                             |                               |                             |                              |

# Split Phase Hybrid Inverter

SUN-5/6/7.6/8K-SG01LP1-US



-  Colorful touch LCD, IP65 protection degree
-  AC couple to retrofit existing solar system
-  Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
-  Max. charging/discharging current of 190A
-  6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

## Technical Data

| Model                                              | SUN-5K<br>-SG01LP1-US                                                                                                                                                                                                                                                                                                           | SUN-6K<br>-SG01LP1-US | SUN-7.6K<br>-SG01LP1-US | SUN-8K<br>-SG01LP1-US |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------|-----------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                       |                         |                       |
| Battery Type                                       | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                                                                        |                       |                         |                       |
| Battery Voltage Range (V)                          | 40-60                                                                                                                                                                                                                                                                                                                           |                       |                         |                       |
| Max. Charging Current (A)                          | 120                                                                                                                                                                                                                                                                                                                             | 135                   | 190                     | 190                   |
| Max. Discharging Current (A)                       | 120                                                                                                                                                                                                                                                                                                                             | 135                   | 190                     | 190                   |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                       |                         |                       |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |                       |                         |                       |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                       |                         |                       |
| Max. PV Input Power (W)                            | 6500                                                                                                                                                                                                                                                                                                                            | 7800                  | 9880                    | 10400                 |
| Max. PV Input Voltage (V)                          | 500                                                                                                                                                                                                                                                                                                                             |                       |                         |                       |
| Start-up Voltage (V)                               | 125                                                                                                                                                                                                                                                                                                                             |                       |                         |                       |
| MPPT Voltage Range (V)                             | 150-425                                                                                                                                                                                                                                                                                                                         |                       |                         |                       |
| Rated PV Input Voltage (V)                         | 370                                                                                                                                                                                                                                                                                                                             |                       |                         |                       |
| Max. Operating PV Input Current (A)                | 13+13                                                                                                                                                                                                                                                                                                                           | 26+13                 | 26+26                   |                       |
| Max. Input Short-Circuit Current (A)               | 22+22                                                                                                                                                                                                                                                                                                                           | 44+22                 | 44+44                   |                       |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/1+1                                                                                                                                                                                                                                                                                                                           | 2/2+1                 | 2/2+2                   |                       |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                       |                         |                       |
| Rated AC Input/Output Active Power (W)             | 5000                                                                                                                                                                                                                                                                                                                            | 6000                  | 7600                    | 8000                  |
| Max. AC Input/Output Apparent Power (VA)           | 5500                                                                                                                                                                                                                                                                                                                            | 6600                  | 8360                    | 8800                  |
| Rated AC Input/Output Current (A)                  | 20.8                                                                                                                                                                                                                                                                                                                            | 25                    | 31.7                    | 33.3                  |
| Max. AC Input/Output Current (A)                   | 22.9                                                                                                                                                                                                                                                                                                                            | 27.5                  | 34.8                    | 36.7                  |
| Max. Continuous AC Passthrough (grid to load) (A)  | 40                                                                                                                                                                                                                                                                                                                              |                       | 50                      |                       |
| Peak Power (off-grid) (W)                          | 2 times of rated power, 10s                                                                                                                                                                                                                                                                                                     |                       |                         |                       |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8lagging                                                                                                                                                                                                                                                                                                       |                       |                         |                       |
| Rated Input/Output Voltage/Range (V)               | 120/240; 208 0.88Un<U<1.1Un                                                                                                                                                                                                                                                                                                     |                       |                         |                       |
| Rated Input/Output Grid Frequency/Range(Hz)        | 60/55-65                                                                                                                                                                                                                                                                                                                        |                       |                         |                       |
| Grid Connection Form                               | 2L+N+PE                                                                                                                                                                                                                                                                                                                         |                       |                         |                       |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                       |                         |                       |
| DC Injection Current                               | <0.5 In                                                                                                                                                                                                                                                                                                                         |                       |                         |                       |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                       |                         |                       |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                       |                         |                       |
| Euro Efficiency                                    | 96.5%                                                                                                                                                                                                                                                                                                                           |                       |                         |                       |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                       |                         |                       |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                       |                         |                       |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                       |                         |                       |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                       |                         |                       |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                       |                         |                       |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                       |                         |                       |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                       |                         |                       |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                       |                         |                       |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                       |                         |                       |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                       |                         |                       |
| Permissible Altitude                               | 2000m                                                                                                                                                                                                                                                                                                                           |                       |                         |                       |
| Noise (dB)                                         | <30                                                                                                                                                                                                                                                                                                                             |                       |                         |                       |
| Ingress Protection(IP) Rating                      | TYPE3R                                                                                                                                                                                                                                                                                                                          |                       |                         |                       |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                       |                         |                       |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                       |                         |                       |
| Cabinet Size (WxHxD mm)                            | 420×670×233 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                                 |                       |                         |                       |
| Weight (kg)                                        | 30                                                                                                                                                                                                                                                                                                                              |                       |                         |                       |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |                       |                         |                       |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                       |                         |                       |
| Grid Regulation                                    | EN 50549, UNE 217002, NRS 097, IEEE 1547.1, SRD V2.0                                                                                                                                                                                                                                                                            |                       |                         |                       |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2, UL 1741                                                                                                                                                                                                                                                                 |                       |                         |                       |

# Split Phase Hybrid Inverter

SUN-5/6/7.6/8K-SG02LP2-US-AM2

SUN-10/12K-SG02LP2-US-AM3



Colorful touch LCD, IP65 protection degree



AC couple to retrofit existing solar system



Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel



Max. charging/discharging current of 190A



6 time periods for battery charging/discharging



Support storing energy from diesel generator

## Technical Data

| Model                                              | SUN-5K-SG02<br>LP2-US-AM2                                                                                                                                                                                                                                                                                                       | SUN-6K-SG02<br>LP2-US-AM2 | SUN-7.6K-SG02<br>LP2-US-AM2 | SUN-8K-SG02<br>LP2-US-AM2 | SUN-10K-SG02<br>LP2-US-AM3 | SUN-12K-SG02<br>LP2-US-AM3 |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------------------|---------------------------|----------------------------|----------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                           |                             |                           |                            |                            |
| Battery Type                                       | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                                                                        |                           |                             |                           |                            |                            |
| Battery Voltage Range (V)                          | 40-60                                                                                                                                                                                                                                                                                                                           |                           |                             |                           |                            |                            |
| Max. Charging Current (A)                          | 120                                                                                                                                                                                                                                                                                                                             | 135                       | 190                         | 190                       | 220                        | 250                        |
| Max. Discharging Current (A)                       | 120                                                                                                                                                                                                                                                                                                                             | 135                       | 190                         | 190                       | 220                        | 250                        |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                           |                             |                           |                            |                            |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |                           |                             |                           |                            |                            |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                           |                             |                           |                            |                            |
| Max. PV Input Power (W)                            | 7500                                                                                                                                                                                                                                                                                                                            | 9000                      | 11400                       | 12000                     | 15000                      | 18000                      |
| Max. PV Input Voltage (V)                          | 500                                                                                                                                                                                                                                                                                                                             |                           |                             |                           |                            |                            |
| Start-up Voltage (V)                               | 125                                                                                                                                                                                                                                                                                                                             |                           |                             |                           |                            |                            |
| MPPT Voltage Range (V)                             | 150-425                                                                                                                                                                                                                                                                                                                         |                           |                             |                           |                            |                            |
| Rated PV Input Voltage (V)                         | 370                                                                                                                                                                                                                                                                                                                             |                           |                             |                           |                            |                            |
| Max. Operating PV Input Current (A)                | 20+20                                                                                                                                                                                                                                                                                                                           |                           | 26+26                       |                           | 26+26+26                   |                            |
| Max. Input Short-Circuit Current (A)               | 44+44                                                                                                                                                                                                                                                                                                                           |                           | 44+44                       |                           | 44+44+44                   |                            |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/2+2                                                                                                                                                                                                                                                                                                                           |                           |                             |                           | 3/2+2+2                    |                            |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                           |                             |                           |                            |                            |
| Rated AC Input/Output Active Power (W)             | 5000                                                                                                                                                                                                                                                                                                                            | 6000                      | 7600                        | 8000                      | 10000                      | 12000                      |
| Max. AC Input/Output Apparent Power (VA)           | 5000                                                                                                                                                                                                                                                                                                                            | 6000                      | 7600                        | 8000                      | 10000                      | 12000                      |
| Rated AC Input/Output Current (A)                  | 20.9                                                                                                                                                                                                                                                                                                                            | 25                        | 31.7                        | 33.4                      | 41.7                       | 50                         |
| Max. AC Input/Output Current (A)                   | 20.9                                                                                                                                                                                                                                                                                                                            | 25                        | 31.7                        | 33.4                      | 41.7                       | 50                         |
| Max. Continuous AC Passthrough (grid to load) (A)  | 35                                                                                                                                                                                                                                                                                                                              | 40                        | 50                          |                           | 60                         |                            |
| Peak Power (off-grid) (W)                          | 2 times of rated power, 10s                                                                                                                                                                                                                                                                                                     |                           |                             |                           |                            |                            |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8lagging                                                                                                                                                                                                                                                                                                       |                           |                             |                           |                            |                            |
| Rated Input/Output Voltage/Range (V)               | 120/240; 208 0.88Un<U<1.1Un                                                                                                                                                                                                                                                                                                     |                           |                             |                           |                            |                            |
| Rated Input/Output Grid Frequency/Range(Hz)        | 60/55-65                                                                                                                                                                                                                                                                                                                        |                           |                             |                           |                            |                            |
| Grid Connection Form                               | 2L+N+PE                                                                                                                                                                                                                                                                                                                         |                           |                             |                           |                            |                            |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                           |                             |                           |                            |                            |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |                           |                             |                           |                            |                            |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                           |                             |                           |                            |                            |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                           |                             |                           |                            |                            |
| Euro Efficiency                                    | 96.5%                                                                                                                                                                                                                                                                                                                           |                           |                             |                           |                            |                            |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                           |                             |                           |                            |                            |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                           |                             |                           |                            |                            |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                           |                             |                           |                            |                            |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                           |                             |                           |                            |                            |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                           |                             |                           |                            |                            |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                           |                             |                           |                            |                            |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                           |                             |                           |                            |                            |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                           |                             |                           |                            |                            |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                           |                             |                           |                            |                            |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                           |                             |                           |                            |                            |
| Permissible Altitude                               | 2000m                                                                                                                                                                                                                                                                                                                           |                           |                             |                           |                            |                            |
| Noise (dB)                                         | <45                                                                                                                                                                                                                                                                                                                             |                           |                             |                           |                            |                            |
| Ingress Protection(IP) Rating                      | TYPE 3R                                                                                                                                                                                                                                                                                                                         |                           |                             |                           |                            |                            |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                           |                             |                           |                            |                            |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                           |                             |                           |                            |                            |
| Cabinet Size (WxHxD mm)                            | 420×670×233 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                                 |                           |                             |                           |                            |                            |
| Weight (kg)                                        | 35.6                                                                                                                                                                                                                                                                                                                            |                           |                             |                           |                            |                            |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |                           |                             |                           |                            |                            |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                           |                             |                           |                            |                            |
| Grid Regulation                                    | IEEE 1547.1, SRD V2.0                                                                                                                                                                                                                                                                                                           |                           |                             |                           |                            |                            |
| Safety / EMC Standard                              | FCC, UL 1741                                                                                                                                                                                                                                                                                                                    |                           |                             |                           |                            |                            |

# Single Phase Hybrid Inverter

SUN-7.6/8K-SG02LP1-EU-AM2

SUN-10/12K-SG02LP1-EU-AM3



 Colorful touch LCD, IP65 protection degree

 AC couple to retrofit existing solar system

 Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel

 Max. charging/discharging current of 250A

 6 time periods for battery charging/discharging

 Support storing energy from diesel generator

## Technical Data

| Model                                              | SUN-7.6K-SG02<br>LP1-EU-AM2                                                                                                                                                                                                                                                                                                     | SUN-8K-SG02<br>LP1-EU-AM2 | SUN-10K-SG02<br>LP1-EU-AM3 | SUN-12K-SG02<br>LP1-EU-AM3 |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------|----------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                           |                            |                            |
| Battery Type                                       | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                                                                        |                           |                            |                            |
| Battery Voltage Range (V)                          | 40-60                                                                                                                                                                                                                                                                                                                           |                           |                            |                            |
| Max. Charging Current (A)                          | 190                                                                                                                                                                                                                                                                                                                             | 190                       | 220                        | 250                        |
| Max. Discharging Current (A)                       | 190                                                                                                                                                                                                                                                                                                                             | 190                       | 220                        | 250                        |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                           |                            |                            |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |                           |                            |                            |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                           |                            |                            |
| Max. PV Access Power (W)                           | 15200                                                                                                                                                                                                                                                                                                                           | 16000                     | 20000                      | 24000                      |
| Max. PV Input Power (W)                            | 12160                                                                                                                                                                                                                                                                                                                           | 12800                     | 16000                      | 19200                      |
| Max. PV Input Voltage (V)                          | 500                                                                                                                                                                                                                                                                                                                             |                           |                            |                            |
| Start-up Voltage (V)                               | 125                                                                                                                                                                                                                                                                                                                             |                           |                            |                            |
| MPPT Voltage Range (V)                             | 150-425                                                                                                                                                                                                                                                                                                                         |                           |                            |                            |
| Rated PV Input Voltage (V)                         | 370                                                                                                                                                                                                                                                                                                                             |                           |                            |                            |
| Max. Operating PV Input Current (A)                | 26+26                                                                                                                                                                                                                                                                                                                           |                           | 26+26+26                   |                            |
| Max. Input Short-Circuit Current (A)               | 44+44                                                                                                                                                                                                                                                                                                                           |                           | 44+44+44                   |                            |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/2+2                                                                                                                                                                                                                                                                                                                           |                           | 3/2+2+2                    |                            |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                           |                            |                            |
| Rated AC Input/Output Active Power (W)             | 7600                                                                                                                                                                                                                                                                                                                            | 8000                      | 10000                      | 12000                      |
| Max. AC Input/Output Apparent Power (VA)           | 8360                                                                                                                                                                                                                                                                                                                            | 8800                      | 11000                      | 13200                      |
| Rated AC Input/Output Current (A)                  | 34.6/33.1                                                                                                                                                                                                                                                                                                                       | 36.4/34.8                 | 45.5/43.5                  | 54.6/52.2                  |
| Max. AC Input/Output Current (A)                   | 38/36.4                                                                                                                                                                                                                                                                                                                         | 40/38.3                   | 50/47.9                    | 60/57.4                    |
| Max. Continuous AC Passthrough (grid to load) (A)  | 50                                                                                                                                                                                                                                                                                                                              |                           | 60                         |                            |
| Peak Power (off-grid) (W)                          | 2 times of rated power, 10s                                                                                                                                                                                                                                                                                                     |                           |                            |                            |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |                           |                            |                            |
| Rated Input/Output Voltage/Range (V)               | 220/230 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                            |                           |                            |                            |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |                           |                            |                            |
| Grid Connection Form                               | L+N+PE                                                                                                                                                                                                                                                                                                                          |                           |                            |                            |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                           |                            |                            |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |                           |                            |                            |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                           |                            |                            |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                           |                            |                            |
| Euro Efficiency                                    | 96.5%                                                                                                                                                                                                                                                                                                                           |                           |                            |                            |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                           |                            |                            |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                           |                            |                            |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                           |                            |                            |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                           |                            |                            |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                           |                            |                            |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                           |                            |                            |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                           |                            |                            |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                           |                            |                            |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                           |                            |                            |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                           |                            |                            |
| Permissible Altitude                               | 2000m                                                                                                                                                                                                                                                                                                                           |                           |                            |                            |
| Noise (dB)                                         | <45                                                                                                                                                                                                                                                                                                                             |                           |                            |                            |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |                           |                            |                            |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                           |                            |                            |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                           |                            |                            |
| Cabinet Size (WxHxD mm)                            | 420×670×233 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                                 |                           |                            |                            |
| Weight (kg)                                        | 35.6                                                                                                                                                                                                                                                                                                                            |                           |                            |                            |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |                           |                            |                            |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                           |                            |                            |
| Grid Regulation                                    | VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150                                                                                                                                                                                                                 |                           |                            |                            |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |                           |                            |                            |

# Single Phase Hybrid Inverter

SUN-7.6/8K-SG02LP1-EU-AM2-P

SUN-10/12K-SG02LP1-EU-AM3-P



 Colorful touch LCD, IP65 protection degree

 AC couple to retrofit existing solar system

 Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel

 Max. charging/discharging current of 250A

 6 time periods for battery charging/discharging

 Support storing energy from diesel generator

## Technical Data

| Model                                              | SUN-7.6K-SG02<br>LP1-EU-AM2-P                                                                                                                                                                                                                                                                                                   | SUN-8K-SG02<br>LP1-EU-AM2-P | SUN-10K-SG02<br>LP1-EU-AM3-P | SUN-12K-SG02<br>LP1-EU-AM3-P |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------|------------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                             |                              |                              |
| Battery Type                                       | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                                                                        |                             |                              |                              |
| Battery Voltage Range (V)                          | 40-60                                                                                                                                                                                                                                                                                                                           |                             |                              |                              |
| Max. Charging Current (A)                          | 190                                                                                                                                                                                                                                                                                                                             | 190                         | 220                          | 250                          |
| Max. Discharging Current (A)                       | 190                                                                                                                                                                                                                                                                                                                             | 190                         | 220                          | 250                          |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                             |                              |                              |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |                             |                              |                              |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                             |                              |                              |
| Max. PV Access Power (W)                           | 15200                                                                                                                                                                                                                                                                                                                           | 16000                       | 20000                        | 24000                        |
| Max. PV Input Power (W)                            | 12160                                                                                                                                                                                                                                                                                                                           | 12800                       | 16000                        | 19200                        |
| Max. PV Input Voltage (V)                          | 500                                                                                                                                                                                                                                                                                                                             |                             |                              |                              |
| Start-up Voltage (V)                               | 125                                                                                                                                                                                                                                                                                                                             |                             |                              |                              |
| MPPT Voltage Range (V)                             | 150-425                                                                                                                                                                                                                                                                                                                         |                             |                              |                              |
| Rated PV Input Voltage (V)                         | 370                                                                                                                                                                                                                                                                                                                             |                             |                              |                              |
| Max. Operating PV Input Current (A)                | 32+32                                                                                                                                                                                                                                                                                                                           |                             | 32+32+32                     |                              |
| Max. Input Short-Circuit Current (A)               | 60+60                                                                                                                                                                                                                                                                                                                           |                             | 60+60+60                     |                              |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/2+2                                                                                                                                                                                                                                                                                                                           |                             | 3/2+2+2                      |                              |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                             |                              |                              |
| Rated AC Input/Output Active Power (W)             | 7600                                                                                                                                                                                                                                                                                                                            | 8000                        | 10000                        | 12000                        |
| Max. AC Input/Output Apparent Power (VA)           | 8360                                                                                                                                                                                                                                                                                                                            | 8800                        | 11000                        | 13200                        |
| Rated AC Input/Output Current (A)                  | 34.6/33.1                                                                                                                                                                                                                                                                                                                       | 36.4/34.8                   | 45.5/43.5                    | 54.6/52.2                    |
| Max. AC Input/Output Current (A)                   | 38/36.4                                                                                                                                                                                                                                                                                                                         | 40/38.3                     | 50/47.9                      | 60/57.4                      |
| Max. Continuous AC Passthrough (grid to load) (A)  | 50                                                                                                                                                                                                                                                                                                                              |                             | 60                           |                              |
| Peak Power (off-grid) (W)                          | 2 times of rated power, 10s                                                                                                                                                                                                                                                                                                     |                             |                              |                              |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |                             |                              |                              |
| Rated Input/Output Voltage/Range (V)               | 220/230 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                            |                             |                              |                              |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |                             |                              |                              |
| Grid Connection Form                               | L+N+PE                                                                                                                                                                                                                                                                                                                          |                             |                              |                              |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                             |                              |                              |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |                             |                              |                              |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                             |                              |                              |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                             |                              |                              |
| Euro Efficiency                                    | 96.5%                                                                                                                                                                                                                                                                                                                           |                             |                              |                              |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                             |                              |                              |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                             |                              |                              |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                             |                              |                              |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                             |                              |                              |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                             |                              |                              |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                             |                              |                              |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                             |                              |                              |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                             |                              |                              |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                             |                              |                              |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                             |                              |                              |
| Permissible Altitude                               | 2000m                                                                                                                                                                                                                                                                                                                           |                             |                              |                              |
| Noise (dB)                                         | <45                                                                                                                                                                                                                                                                                                                             |                             |                              |                              |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |                             |                              |                              |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                             |                              |                              |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                             |                              |                              |
| Cabinet Size (WxHxD mm)                            | 420×670×233 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                                 |                             |                              |                              |
| Weight (kg)                                        | 35.6                                                                                                                                                                                                                                                                                                                            |                             |                              |                              |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |                             |                              |                              |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                             |                              |                              |
| Grid Regulation                                    | VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150                                                                                                                                                                                                                 |                             |                              |                              |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |                             |                              |                              |

# Single Phase Hybrid Inverter

SUN-12/14/16K-SG01LP1-EU



Colorful touch LCD, IP65 protection degree



AC couple to retrofit existing solar system



Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel



Max. charging/discharging current of 290A



6 time periods for battery charging/discharging



Support storing energy from diesel generator

## Technical Data

| Model                                              | SUN-12K-SG01LP1-EU                                                                                                                                                                                                                                                                                                              |  | SUN-14K-SG01LP1-EU |  | SUN-16K-SG01LP1-EU |  |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------|--|--------------------|--|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |  |                    |  |                    |  |
| Battery Type                                       | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                                                                        |  |                    |  |                    |  |
| Battery Voltage Range (V)                          |                                                                                                                                                                                                                                                                                                                                 |  | 40-60              |  |                    |  |
| Max. Charging Current (A)                          | 220                                                                                                                                                                                                                                                                                                                             |  | 250                |  | 290                |  |
| Max. Discharging Current (A)                       | 220                                                                                                                                                                                                                                                                                                                             |  | 250                |  | 290                |  |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |  |                    |  |                    |  |
| Number of Battery Input                            | 2                                                                                                                                                                                                                                                                                                                               |  |                    |  |                    |  |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |  |                    |  |                    |  |
| Max. PV Access Power (W)                           | 24000                                                                                                                                                                                                                                                                                                                           |  | 28000              |  | 32000              |  |
| Max. PV Input Power (W)                            | 19200                                                                                                                                                                                                                                                                                                                           |  | 22400              |  | 25600              |  |
| Max. PV Input Voltage (V)                          | 500                                                                                                                                                                                                                                                                                                                             |  |                    |  |                    |  |
| Start-up Voltage (V)                               | 125                                                                                                                                                                                                                                                                                                                             |  |                    |  |                    |  |
| MPPT Voltage Range (V)                             | 150-425                                                                                                                                                                                                                                                                                                                         |  |                    |  |                    |  |
| Rated PV Input Voltage (V)                         | 370                                                                                                                                                                                                                                                                                                                             |  |                    |  |                    |  |
| Max. Operating PV Input Current (A)                | 26+26+26                                                                                                                                                                                                                                                                                                                        |  |                    |  |                    |  |
| Max. Input Short-Circuit Current (A)               | 44+44+44                                                                                                                                                                                                                                                                                                                        |  |                    |  |                    |  |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 3/2+2+2                                                                                                                                                                                                                                                                                                                         |  |                    |  |                    |  |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |  |                    |  |                    |  |
| Rated AC Input/Output Active Power (W)             | 12000                                                                                                                                                                                                                                                                                                                           |  | 14000              |  | 16000              |  |
| Max. AC Input/Output Apparent Power (VA)           | 13200                                                                                                                                                                                                                                                                                                                           |  | 15400              |  | 17600              |  |
| Rated AC Input/Output Current (A)                  | 54.5/52.2                                                                                                                                                                                                                                                                                                                       |  | 63.6/60.9          |  | 72.7/69.6          |  |
| Max. AC Input/Output Current (A)                   | 60/57.4                                                                                                                                                                                                                                                                                                                         |  | 70/67              |  | 80/76.5            |  |
| Max. Continuous AC Passthrough (grid to load) (A)  | 100                                                                                                                                                                                                                                                                                                                             |  |                    |  |                    |  |
| Peak Power (off-grid) (W)                          | 2 times of rated power, 10s                                                                                                                                                                                                                                                                                                     |  |                    |  |                    |  |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |  |                    |  |                    |  |
| Rated Input/Output Voltage/Range (V)               | 220/230 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                            |  |                    |  |                    |  |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |  |                    |  |                    |  |
| Grid Connection Form                               | L+N+PE                                                                                                                                                                                                                                                                                                                          |  |                    |  |                    |  |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |  |                    |  |                    |  |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |  |                    |  |                    |  |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |  |                    |  |                    |  |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |  |                    |  |                    |  |
| Euro Efficiency                                    | 96.5%                                                                                                                                                                                                                                                                                                                           |  |                    |  |                    |  |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |  |                    |  |                    |  |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |  |                    |  |                    |  |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |  |                    |  |                    |  |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |  |                    |  |                    |  |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |  |                    |  |                    |  |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |  |                    |  |                    |  |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |  |                    |  |                    |  |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |  |                    |  |                    |  |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |  |                    |  |                    |  |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |  |                    |  |                    |  |
| Permissible Altitude                               | 2000m                                                                                                                                                                                                                                                                                                                           |  |                    |  |                    |  |
| Noise (dB)                                         | <50                                                                                                                                                                                                                                                                                                                             |  |                    |  |                    |  |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |  |                    |  |                    |  |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |  |                    |  |                    |  |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |  |                    |  |                    |  |
| Cabinet Size (WxHxD mm)                            | 464×763×282 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                                 |  |                    |  |                    |  |
| Weight (kg)                                        | 52                                                                                                                                                                                                                                                                                                                              |  |                    |  |                    |  |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |  |                    |  |                    |  |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |  |                    |  |                    |  |
| Grid Regulation                                    | IEC 61727, IEC 62116, AS 4777.2, NRS 097                                                                                                                                                                                                                                                                                        |  |                    |  |                    |  |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |  |                    |  |                    |  |

# Single Phase Hybrid Inverter

## SUN-12/14/16/18K-SG01LP1-EU-AM3-P



-  Colorful touch LCD, IP65 protection degree
-  AC couple to retrofit existing solar system
-  Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
-  Max. charging/discharging current of 350A
-  6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

### Technical Data

| Model                                              | SUN-12K-SG01LP1<br>-EU-AM3-P                                                                                                                                                                                                                                                                                                    | SUN-14K-SG01LP1<br>-EU-AM3-P | SUN-16K-SG01LP1<br>-EU-AM3-P | SUN-18K-SG01LP1<br>-EU-AM3-P |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------|------------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                              |                              |                              |
| Battery Type                                       | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                                                                        |                              |                              |                              |
| Battery Voltage Range (V)                          | 40-60                                                                                                                                                                                                                                                                                                                           |                              |                              |                              |
| Max. Charging Current (A)                          | 220                                                                                                                                                                                                                                                                                                                             | 250                          | 290                          | 350                          |
| Max. Discharging Current (A)                       | 220                                                                                                                                                                                                                                                                                                                             | 250                          | 290                          | 350                          |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                              |                              |                              |
| Number of Battery Input                            | 2                                                                                                                                                                                                                                                                                                                               |                              |                              |                              |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                              |                              |                              |
| Max. PV Access Power (W)                           | 24000                                                                                                                                                                                                                                                                                                                           | 28000                        | 32000                        | 36000                        |
| Max. PV Input Power (W)                            | 19200                                                                                                                                                                                                                                                                                                                           | 22400                        | 25600                        | 28800                        |
| Max. PV Input Voltage (V)                          | 500                                                                                                                                                                                                                                                                                                                             |                              |                              |                              |
| Start-up Voltage (V)                               | 125                                                                                                                                                                                                                                                                                                                             |                              |                              |                              |
| MPPT Voltage Range (V)                             | 150-425                                                                                                                                                                                                                                                                                                                         |                              |                              |                              |
| Rated PV Input Voltage (V)                         | 370                                                                                                                                                                                                                                                                                                                             |                              |                              |                              |
| Max. Operating PV Input Current (A)                | 36+36+36                                                                                                                                                                                                                                                                                                                        |                              |                              |                              |
| Max. Input Short-Circuit Current (A)               | 54+54+54                                                                                                                                                                                                                                                                                                                        |                              |                              |                              |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 3/2+2+2                                                                                                                                                                                                                                                                                                                         |                              |                              |                              |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                              |                              |                              |
| Rated AC Input/Output Active Power (W)             | 12000                                                                                                                                                                                                                                                                                                                           | 14000                        | 16000                        | 18000                        |
| Max. AC Input/Output Apparent Power (VA)           | 13200                                                                                                                                                                                                                                                                                                                           | 15400                        | 17600                        | 19800                        |
| Rated AC Input/Output Current (A)                  | 54.6/52.2                                                                                                                                                                                                                                                                                                                       | 63.7/60.9                    | 72.8/69.6                    | 81.9/78.3                    |
| Max. AC Input/Output Current (A)                   | 60/57.4                                                                                                                                                                                                                                                                                                                         | 70/67                        | 80/76.6                      | 90/86.1                      |
| Max. Continuous AC Passthrough (grid to load) (A)  | 100                                                                                                                                                                                                                                                                                                                             |                              |                              |                              |
| Peak Power (off-grid) (W)                          | 2 times of rated power, 10s                                                                                                                                                                                                                                                                                                     |                              |                              |                              |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |                              |                              |                              |
| Rated Input/Output Voltage/Range (V)               | 220/230 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                            |                              |                              |                              |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |                              |                              |                              |
| Grid Connection Form                               | L+N+PE                                                                                                                                                                                                                                                                                                                          |                              |                              |                              |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                              |                              |                              |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |                              |                              |                              |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                              |                              |                              |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                              |                              |                              |
| Euro Efficiency                                    | 96.5%                                                                                                                                                                                                                                                                                                                           |                              |                              |                              |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                              |                              |                              |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                              |                              |                              |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                              |                              |                              |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                              |                              |                              |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                              |                              |                              |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                              |                              |                              |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                              |                              |                              |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                              |                              |                              |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                              |                              |                              |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                              |                              |                              |
| Permissible Altitude                               | 3000m                                                                                                                                                                                                                                                                                                                           |                              |                              |                              |
| Noise (dB)                                         | <55                                                                                                                                                                                                                                                                                                                             |                              |                              |                              |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |                              |                              |                              |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                              |                              |                              |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                              |                              |                              |
| Cabinet Size (WxHxD mm)                            | 464×763×282 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                                 |                              |                              | 464×863×282                  |
| Weight (kg)                                        | 54.1                                                                                                                                                                                                                                                                                                                            |                              |                              | 59.8                         |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |                              |                              |                              |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                              |                              |                              |
| Grid Regulation                                    | IEC 61727, IEC 62116, AS 4777.2, NRS 097                                                                                                                                                                                                                                                                                        |                              |                              |                              |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |                              |                              |                              |

# Three Phase Hybrid Inverter

## SUN-5/6/8/10/12K-SG04LP3-EU



- 100** 100% unbalanced output, max. output up to 50% rated power for each phase
- AC couple** AC couple to retrofit existing solar system
- 10** Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 240** Max. charging/discharging current of 240A
- 48** 48V low voltage battery, transformer isolation design
- 6** 6 time periods for battery charging/discharging
- Support** Support storing energy from diesel generator

### Technical Data

| Model                                              | SUN-5K<br>-SG04LP3-EU                                                                                                                                                                                                                                                                                                           | SUN-6K<br>-SG04LP3-EU | SUN-8K<br>-SG04LP3-EU | SUN-10K<br>-SG04LP3-EU | SUN-12K<br>-SG04LP3-EU |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|------------------------|------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                       |                       |                        |                        |
| Battery Type                                       | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                                                                        |                       |                       |                        |                        |
| Battery Voltage Range (V)                          | 40-60                                                                                                                                                                                                                                                                                                                           |                       |                       |                        |                        |
| Max. Charging Current (A)                          | 120                                                                                                                                                                                                                                                                                                                             | 150                   | 190                   | 210                    | 240                    |
| Max. Discharging Current (A)                       | 120                                                                                                                                                                                                                                                                                                                             | 150                   | 190                   | 210                    | 240                    |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                       |                       |                        |                        |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |                       |                       |                        |                        |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                       |                       |                        |                        |
| Max. PV Access Power (W)                           | 10000                                                                                                                                                                                                                                                                                                                           | 12000                 | 16000                 | 20000                  | 24000                  |
| Max. PV Input Power (W)                            | 7500                                                                                                                                                                                                                                                                                                                            | 9000                  | 12000                 | 15000                  | 18000                  |
| Max. PV Input Voltage (V)                          | 800                                                                                                                                                                                                                                                                                                                             |                       |                       |                        |                        |
| Start-up Voltage (V)                               | 160                                                                                                                                                                                                                                                                                                                             |                       |                       |                        |                        |
| MPPT Voltage Range (V)                             | 200-650                                                                                                                                                                                                                                                                                                                         |                       |                       |                        |                        |
| Rated PV Input Voltage (V)                         | 550                                                                                                                                                                                                                                                                                                                             |                       |                       |                        |                        |
| Max. Operating PV Input Current (A)                | 13+13                                                                                                                                                                                                                                                                                                                           |                       |                       | 26+13                  |                        |
| Max. Input Short-Circuit Current (A)               | 17+17                                                                                                                                                                                                                                                                                                                           |                       |                       | 34+17                  |                        |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/1+1                                                                                                                                                                                                                                                                                                                           |                       |                       | 2/2+1                  |                        |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                       |                       |                        |                        |
| Rated AC Input/Output Active Power (W)             | 5000                                                                                                                                                                                                                                                                                                                            | 6000                  | 8000                  | 10000                  | 12000                  |
| Max. AC Input/Output Apparent Power (VA)           | 5500                                                                                                                                                                                                                                                                                                                            | 6600                  | 8800                  | 11000                  | 13200                  |
| Rated AC Input/Output Current (A)                  | 7.6/7.2                                                                                                                                                                                                                                                                                                                         | 9.1/8.7               | 12.1/11.6             | 15.2/14.5              | 18.2/17.4              |
| Max. AC Input/Output Current (A)                   | 8.4/8                                                                                                                                                                                                                                                                                                                           | 10/9.6                | 13.4/12.8             | 16.7/15.9              | 20/19.1                |
| Max. Continuous AC Passthrough (grid to load) (A)  | 45                                                                                                                                                                                                                                                                                                                              |                       |                       |                        |                        |
| Peak Power (off-grid) (W)                          | 2 times of rated power, 10s                                                                                                                                                                                                                                                                                                     |                       |                       |                        |                        |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |                       |                       |                        |                        |
| Rated Input/Output Voltage/Range (V)               | 220/380V, 230/400V 0.85Un~1.1Un                                                                                                                                                                                                                                                                                                 |                       |                       |                        |                        |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |                       |                       |                        |                        |
| Grid Connection Form                               | 3L+N+PE                                                                                                                                                                                                                                                                                                                         |                       |                       |                        |                        |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                       |                       |                        |                        |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |                       |                       |                        |                        |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                       |                       |                        |                        |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                       |                       |                        |                        |
| Euro Efficiency                                    | 97.0%                                                                                                                                                                                                                                                                                                                           |                       |                       |                        |                        |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                       |                       |                        |                        |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                       |                       |                        |                        |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                       |                       |                        |                        |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                       |                       |                        |                        |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                       |                       |                        |                        |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                       |                       |                        |                        |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                       |                       |                        |                        |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                       |                       |                        |                        |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                       |                       |                        |                        |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                       |                       |                        |                        |
| Permissible Altitude                               | 2000m                                                                                                                                                                                                                                                                                                                           |                       |                       |                        |                        |
| Noise (dB)                                         | ≤55                                                                                                                                                                                                                                                                                                                             |                       |                       |                        |                        |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |                       |                       |                        |                        |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                       |                       |                        |                        |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                       |                       |                        |                        |
| Cabinet Size (WxHxD mm)                            | 422×658×254 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                                 |                       |                       |                        |                        |
| Weight (kg)                                        | 38                                                                                                                                                                                                                                                                                                                              |                       |                       |                        |                        |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |                       |                       |                        |                        |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                       |                       |                        |                        |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, G99, VDE-AR-N 4105                                                                                                                                                                                                              |                       |                       |                        |                        |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |                       |                       |                        |                        |

# Three Phase Hybrid Inverter

## SUN-5/6/8/10/12K-SG04LP3-EU-AM2-P



- 100** 100% unbalanced output, max. output up to 50% rated power for each phase
- AC couple** AC couple to retrofit existing solar system
- 10** Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 240** Max. charging/discharging current of 240A
- 48** 48V low voltage battery, transformer isolation design
- 6** 6 time periods for battery charging/discharging
- Support** Support storing energy from diesel generator

### Technical Data

| Model                                              | SUN-5K-SG04LP3<br>-EU-AM2-P                                                                                                                                                                                                                                                                                                     | SUN-6K-SG04LP3<br>-EU-AM2-P | SUN-8K-SG04LP3<br>-EU-AM2-P | SUN-10K-SG04LP3<br>-EU-AM2-P | SUN-12K-SG04LP3<br>-EU-AM2-P |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------|------------------------------|------------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                              |                              |
| Battery Type                                       | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                                                                        |                             |                             |                              |                              |
| Battery Voltage Range (V)                          | 40-60                                                                                                                                                                                                                                                                                                                           |                             |                             |                              |                              |
| Max. Charging Current (A)                          | 120                                                                                                                                                                                                                                                                                                                             | 150                         | 190                         | 210                          | 240                          |
| Max. Discharging Current (A)                       | 120                                                                                                                                                                                                                                                                                                                             | 150                         | 190                         | 210                          | 240                          |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                             |                             |                              |                              |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |                             |                             |                              |                              |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                              |                              |
| Max. PV Access Power (W)                           | 10000                                                                                                                                                                                                                                                                                                                           | 12000                       | 16000                       | 20000                        | 24000                        |
| Max. PV Input Power (W)                            | 8000                                                                                                                                                                                                                                                                                                                            | 9600                        | 12800                       | 16000                        | 19200                        |
| Max. PV Input Voltage (V)                          | 800                                                                                                                                                                                                                                                                                                                             |                             |                             |                              |                              |
| Start-up Voltage (V)                               | 160                                                                                                                                                                                                                                                                                                                             |                             |                             |                              |                              |
| MPPT Voltage Range (V)                             | 200-650                                                                                                                                                                                                                                                                                                                         |                             |                             |                              |                              |
| Rated PV Input Voltage (V)                         | 550                                                                                                                                                                                                                                                                                                                             |                             |                             |                              |                              |
| Max. Operating PV Input Current (A)                | 20+20                                                                                                                                                                                                                                                                                                                           |                             |                             | 36+20                        |                              |
| Max. Input Short-Circuit Current (A)               | 30+30                                                                                                                                                                                                                                                                                                                           |                             |                             | 54+30                        |                              |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/1+1                                                                                                                                                                                                                                                                                                                           |                             |                             | 2/2+2                        |                              |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                              |                              |
| Rated AC Input/Output Active Power (W)             | 5000                                                                                                                                                                                                                                                                                                                            | 6000                        | 8000                        | 10000                        | 12000                        |
| Max. AC Input/Output Apparent Power (VA)           | 5500                                                                                                                                                                                                                                                                                                                            | 6600                        | 8800                        | 11000                        | 13200                        |
| Rated AC Input/Output Current (A)                  | 7.6/7.2                                                                                                                                                                                                                                                                                                                         | 9.1/8.7                     | 12.1/11.6                   | 15.2/14.5                    | 18.2/17.4                    |
| Max. AC Input/Output Current (A)                   | 8.4/8                                                                                                                                                                                                                                                                                                                           | 10/9.6                      | 13.4/12.8                   | 16.7/15.9                    | 20/19.1                      |
| Max. Continuous AC Passthrough (grid to load) (A)  | 45                                                                                                                                                                                                                                                                                                                              |                             |                             |                              |                              |
| Peak Power (off-grid) (W)                          | 2 times of rated power, 10s                                                                                                                                                                                                                                                                                                     |                             |                             |                              |                              |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |                             |                             |                              |                              |
| Rated Input/Output Voltage/Range (V)               | 220/380V, 230/400V 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                 |                             |                             |                              |                              |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |                             |                             |                              |                              |
| Grid Connection Form                               | 3L+N+PE                                                                                                                                                                                                                                                                                                                         |                             |                             |                              |                              |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                             |                             |                              |                              |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |                             |                             |                              |                              |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                              |                              |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                             |                             |                              |                              |
| Euro Efficiency                                    | 97.0%                                                                                                                                                                                                                                                                                                                           |                             |                             |                              |                              |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                             |                             |                              |                              |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                              |                              |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                             |                             |                              |                              |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                             |                             |                              |                              |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                              |                              |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                             |                             |                              |                              |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                             |                             |                              |                              |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                             |                             |                              |                              |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                             |                             |                              |                              |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                             |                             |                              |                              |
| Permissible Altitude                               | 3000m                                                                                                                                                                                                                                                                                                                           |                             |                             |                              |                              |
| Noise (dB)                                         | ≤55                                                                                                                                                                                                                                                                                                                             |                             |                             |                              |                              |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |                             |                             |                              |                              |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                             |                             |                              |                              |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                             |                             |                              |                              |
| Cabinet Size (WxHxD mm)                            | 422×658×254 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                                 |                             |                             |                              |                              |
| Weight (kg)                                        | 39.8                                                                                                                                                                                                                                                                                                                            |                             |                             |                              |                              |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |                             |                             |                              |                              |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                             |                             |                              |                              |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, G99, VDE-AR-N 4105                                                                                                                                                                                                              |                             |                             |                              |                              |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |                             |                             |                              |                              |

# Three Phase Hybrid Inverter

## SUN-3/4/5/6/8/10/12K-SG05LP3-EU-SM2



- 100

100% unbalanced output, max. output up to 50% rated power for each phase
- AC couple to retrofit existing solar system
- 10

Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 240

Max. charging/discharging current of 240A
- 48

48V low voltage battery, transformer isolation design
- 6

6 time periods for battery charging/discharging
- Support storing energy from diesel generator

### Technical Data

| Model                                              | SUN-3K-SG05<br>LP3-EU-SM2                                                                                                                                                                                                                                                                                                       | SUN-4K-SG05<br>LP3-EU-SM2 | SUN-5K-SG05<br>LP3-EU-SM2 | SUN-6K-SG05<br>LP3-EU-SM2 | SUN-8K-SG05<br>LP3-EU-SM2 | SUN-10K-SG05<br>LP3-EU-SM2 | SUN-12K-SG05<br>LP3-EU-SM2 |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|----------------------------|----------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                           |                           |                           |                           |                            |                            |
| Battery Type                                       | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                                                                        |                           |                           |                           |                           |                            |                            |
| Battery Voltage Range (V)                          | 40-60                                                                                                                                                                                                                                                                                                                           |                           |                           |                           |                           |                            |                            |
| Max. Charging Current (A)                          | 70                                                                                                                                                                                                                                                                                                                              | 95                        | 120                       | 135                       | 190                       | 210                        | 240                        |
| Max. Discharging Current (A)                       | 70                                                                                                                                                                                                                                                                                                                              | 95                        | 120                       | 135                       | 190                       | 210                        | 240                        |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                           |                           |                           |                           |                            |                            |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |                           |                           |                           |                           |                            |                            |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                           |                           |                           |                           |                            |                            |
| Max. PV Access Power (W)                           | 6000                                                                                                                                                                                                                                                                                                                            | 8000                      | 10000                     | 12000                     | 16000                     | 20000                      | 24000                      |
| Max. PV Input Power (W)                            | 4500                                                                                                                                                                                                                                                                                                                            | 6000                      | 7500                      | 9000                      | 12000                     | 15000                      | 18000                      |
| Max. PV Input Voltage (V)                          | 800                                                                                                                                                                                                                                                                                                                             |                           |                           |                           |                           |                            |                            |
| Start-up Voltage (V)                               | 160                                                                                                                                                                                                                                                                                                                             |                           |                           |                           |                           |                            |                            |
| MPPT Voltage Range (V)                             | 200-650                                                                                                                                                                                                                                                                                                                         |                           |                           |                           |                           |                            |                            |
| Rated PV Input Voltage (V)                         | 550                                                                                                                                                                                                                                                                                                                             |                           |                           |                           |                           |                            |                            |
| Max. Operating PV Input Current (A)                | 20+20                                                                                                                                                                                                                                                                                                                           |                           |                           |                           |                           | 26+26                      |                            |
| Max. Input Short-Circuit Current (A)               | 30+30                                                                                                                                                                                                                                                                                                                           |                           |                           |                           |                           | 39+39                      |                            |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/1+1                                                                                                                                                                                                                                                                                                                           |                           |                           |                           |                           | 2/2+2                      |                            |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                           |                           |                           |                           |                            |                            |
| Rated AC Input/Output Active Power (W)             | 3000                                                                                                                                                                                                                                                                                                                            | 4000                      | 5000                      | 6000                      | 8000                      | 10000                      | 12000                      |
| Max. AC Input/Output Apparent Power (VA)           | 3300                                                                                                                                                                                                                                                                                                                            | 4400                      | 5500                      | 6600                      | 8800                      | 11000                      | 13200                      |
| Rated AC Input/Output Current (A)                  | 4.6/4.4                                                                                                                                                                                                                                                                                                                         | 6.1/5.8                   | 7.6/7.3                   | 9.1/8.7                   | 12.2/11.6                 | 15.2/14.5                  | 18.2/17.4                  |
| Max. AC Input/Output Current (A)                   | 5/4.8                                                                                                                                                                                                                                                                                                                           | 6.7/6.4                   | 8.4/8                     | 10/9.6                    | 13.4/12.8                 | 16.7/16                    | 20/19.2                    |
| Max. Continuous AC Passthrough (grid to load) (A)  | 45                                                                                                                                                                                                                                                                                                                              |                           |                           |                           |                           |                            |                            |
| Peak Power (off-grid) (W)                          | 2 times of rated power, 10s                                                                                                                                                                                                                                                                                                     |                           |                           |                           |                           |                            |                            |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |                           |                           |                           |                           |                            |                            |
| Rated Input/Output Voltage/Range (V)               | 220/380V, 230/400V 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                 |                           |                           |                           |                           |                            |                            |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |                           |                           |                           |                           |                            |                            |
| Grid Connection Form                               | 3L+N+PE                                                                                                                                                                                                                                                                                                                         |                           |                           |                           |                           |                            |                            |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                           |                           |                           |                           |                            |                            |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |                           |                           |                           |                           |                            |                            |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                           |                           |                           |                           |                            |                            |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                           |                           |                           |                           |                            |                            |
| Euro Efficiency                                    | 97.0%                                                                                                                                                                                                                                                                                                                           |                           |                           |                           |                           |                            |                            |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                           |                           |                           |                           |                            |                            |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                           |                           |                           |                           |                            |                            |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                           |                           |                           |                           |                            |                            |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                           |                           |                           |                           |                            |                            |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                           |                           |                           |                           |                            |                            |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                           |                           |                           |                           |                            |                            |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                           |                           |                           |                           |                            |                            |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                           |                           |                           |                           |                            |                            |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                           |                           |                           |                           |                            |                            |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                           |                           |                           |                           |                            |                            |
| Permissible Altitude                               | 3000m                                                                                                                                                                                                                                                                                                                           |                           |                           |                           |                           |                            |                            |
| Noise (dB)                                         | ≤55                                                                                                                                                                                                                                                                                                                             |                           |                           |                           |                           |                            |                            |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |                           |                           |                           |                           |                            |                            |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                           |                           |                           |                           |                            |                            |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                           |                           |                           |                           |                            |                            |
| Cabinet Size (WxHxD mm)                            | 386×660×250 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                                 |                           |                           |                           |                           |                            |                            |
| Weight (kg)                                        | 35.2                                                                                                                                                                                                                                                                                                                            |                           |                           |                           |                           |                            |                            |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |                           |                           |                           |                           |                            |                            |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                           |                           |                           |                           |                            |                            |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, G99, VDE-AR-N 4105                                                                                                                                                                                                              |                           |                           |                           |                           |                            |                            |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |                           |                           |                           |                           |                            |                            |

# Three Phase Hybrid Inverter

## SUN-14/15/16/18/20K-SG05LP3-EU-SM2



- 100

100% unbalanced output, max. output up to 50% rated power for each phase
- AC couple to retrofit existing solar system
- 10

Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 350

Max. charging/discharging current of 350A
- 48

48V low voltage battery, transformer isolation design
- 6

6 time periods for battery charging/discharging
- Support storing energy from diesel generator

### Technical Data

| Model                                              | SUN-14K-SG05LP3<br>-EU-SM2                                                                                                                                                                                                                                                                                                      | SUN-15K-SG05LP3<br>-EU-SM2 | SUN-16K-SG05LP3<br>-EU-SM2 | SUN-18K-SG05LP3<br>-EU-SM2 | SUN-20K-SG05LP3<br>-EU-SM2 |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Battery Type                                       | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                                                                        |                            |                            |                            |                            |
| Battery Voltage Range (V)                          | 40-60                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |                            |
| Max. Charging Current (A)                          | 260                                                                                                                                                                                                                                                                                                                             | 280                        | 300                        | 330                        | 350                        |
| Max. Discharging Current (A)                       | 260                                                                                                                                                                                                                                                                                                                             | 280                        | 300                        | 330                        | 350                        |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                            |                            |                            |                            |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |                            |                            |                            |                            |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Max. PV Access Power (W)                           | 28000                                                                                                                                                                                                                                                                                                                           | 30000                      | 32000                      | 36000                      | 40000                      |
| Max. PV Input Power (W)                            | 22400                                                                                                                                                                                                                                                                                                                           | 24000                      | 25600                      | 28800                      | 32000                      |
| Max. PV Input Voltage (V)                          | 800                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |                            |
| Start-up Voltage (V)                               | 160                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |                            |
| MPPT Voltage Range (V)                             | 160-650                                                                                                                                                                                                                                                                                                                         |                            |                            |                            |                            |
| Rated PV Input Voltage (V)                         | 550                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |                            |
| Max. Operating PV Input Current (A)                | 36+36                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |                            |
| Max. Input Short-Circuit Current (A)               | 54+54                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |                            |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/2+2                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |                            |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Rated AC Input/Output Active Power (W)             | 14000                                                                                                                                                                                                                                                                                                                           | 15000                      | 16000                      | 18000                      | 20000                      |
| Max. AC Input/Output Apparent Power (VA)           | 15400                                                                                                                                                                                                                                                                                                                           | 16500                      | 17600                      | 19800                      | 22000                      |
| Rated AC Input/Output Current (A)                  | 21.3/20.3                                                                                                                                                                                                                                                                                                                       | 22.8/21.8                  | 24.3/23.2                  | 27.3/26.1                  | 30.4/29                    |
| Max. AC Input/Output Current (A)                   | 23.4/22.4                                                                                                                                                                                                                                                                                                                       | 25/24                      | 26.7/25.6                  | 30/28.7                    | 33.4/31.9                  |
| Max. Continuous AC Passthrough (grid to load) (A)  | 70                                                                                                                                                                                                                                                                                                                              |                            |                            |                            |                            |
| Peak Power (off-grid) (W)                          | 2 times of rated power, 10s                                                                                                                                                                                                                                                                                                     |                            |                            |                            |                            |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |                            |                            |                            |                            |
| Rated Input/Output Voltage/Range (V)               | 220/380V, 230/400V 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |                            |                            |                            |                            |
| Grid Connection Form                               | 3L+N+PE                                                                                                                                                                                                                                                                                                                         |                            |                            |                            |                            |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                            |                            |                            |                            |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |                            |                            |                            |                            |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |                            |
| Euro Efficiency                                    | 97.0%                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |                            |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                            |                            |                            |                            |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                            |                            |                            |                            |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                            |                            |                            |                            |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                            |                            |                            |                            |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                            |                            |                            |                            |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                            |                            |                            |                            |
| Permissible Altitude                               | 3000m                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |                            |
| Noise (dB)                                         | <60                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |                            |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |                            |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                            |                            |                            |                            |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                            |                            |                            |                            |
| Cabinet Size (WxHxD mm)                            | 456×750×268.5 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                               |                            |                            |                            |                            |
| Weight (kg)                                        | 51.9                                                                                                                                                                                                                                                                                                                            |                            |                            |                            |                            |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |                            |                            |                            |                            |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                            |                            |                            |                            |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105                                                                                                                                                                                                                   |                            |                            |                            |                            |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |                            |                            |                            |                            |

# Three Phase Hybrid Inverter

## SUN-5/6/8/10/12/15/20/25K-SG01HP3-EU-AM2



- 100** 100% unbalanced output
- AC couple** to retrofit existing solar system
- 10** Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 50** Max. charging/discharging current of 50A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
- Support** storing energy from diesel generator

### Technical Data

| Model                                              | SUN-5K-SG01<br>HP3-EU-AM2                                                                                                                                                                                                                                                                                                       | SUN-6K-SG01<br>HP3-EU-AM2 | SUN-8K-SG01<br>HP3-EU-AM2 | SUN-10K-SG01<br>HP3-EU-AM2 | SUN-12K-SG01<br>HP3-EU-AM2 | SUN-15K-SG01<br>HP3-EU-AM2 | SUN-20K-SG01<br>HP3-EU-AM2 | SUN-25K-SG01<br>HP3-EU-AM2 |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                           |                           |                            |                            |                            |                            |                            |
| Battery Type                                       | Lithium-ion                                                                                                                                                                                                                                                                                                                     |                           |                           |                            |                            |                            |                            |                            |
| Battery Voltage Range (V)                          | 160-700                                                                                                                                                                                                                                                                                                                         |                           |                           |                            |                            |                            |                            |                            |
| Max. Charging Current (A)                          | 30                                                                                                                                                                                                                                                                                                                              | 30                        | 37                        |                            |                            |                            | 50                         |                            |
| Max. Discharging Current (A)                       | 30                                                                                                                                                                                                                                                                                                                              | 30                        | 37                        |                            |                            |                            | 50                         |                            |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                           |                           |                            |                            |                            |                            |                            |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |                           |                           |                            |                            |                            |                            |                            |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                           |                           |                            |                            |                            |                            |                            |
| Max. PV Access Power (W)                           | 10000                                                                                                                                                                                                                                                                                                                           | 12000                     | 16000                     | 20000                      | 24000                      | 30000                      | 40000                      | 50000                      |
| Max. PV Input Power (W)                            | 8000                                                                                                                                                                                                                                                                                                                            | 9600                      | 12800                     | 16000                      | 19200                      | 24000                      | 32000                      | 40000                      |
| Max. PV Input Voltage (V)                          | 1000                                                                                                                                                                                                                                                                                                                            |                           |                           |                            |                            |                            |                            |                            |
| Start-up Voltage (V)                               | 180                                                                                                                                                                                                                                                                                                                             |                           |                           |                            |                            |                            |                            |                            |
| MPPT Voltage Range (V)                             | 150-850                                                                                                                                                                                                                                                                                                                         |                           |                           |                            |                            |                            |                            |                            |
| Rated PV Input Voltage (V)                         | 600                                                                                                                                                                                                                                                                                                                             |                           |                           |                            |                            |                            |                            | 700                        |
| Max. Operating PV Input Current (A)                | 20+20                                                                                                                                                                                                                                                                                                                           |                           |                           |                            | 26+20                      |                            | 26+26                      |                            |
| Max. Input Short-Circuit Current (A)               | 30+30                                                                                                                                                                                                                                                                                                                           |                           |                           |                            | 39+30                      |                            | 39+39                      |                            |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/1+1                                                                                                                                                                                                                                                                                                                           |                           |                           |                            | 2/2+1                      |                            | 2/2+2                      |                            |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                           |                           |                            |                            |                            |                            |                            |
| Rated AC Input/Output Active Power (W)             | 5000                                                                                                                                                                                                                                                                                                                            | 6000                      | 8000                      | 10000                      | 12000                      | 15000                      | 20000                      | 25000                      |
| Max. AC Input/Output Apparent Power (VA)           | 5500                                                                                                                                                                                                                                                                                                                            | 6600                      | 8800                      | 11000                      | 13200                      | 16500                      | 22000                      | 27500                      |
| Rated AC Input/Output Current (A)                  | 7.6/7.3                                                                                                                                                                                                                                                                                                                         | 9.1/8.7                   | 12.2/11.6                 | 15.2/14.5                  | 18.2/17.4                  | 22.8/21.8                  | 30.4/29                    | 37.9/36.3                  |
| Max. AC Input/Output Current (A)                   | 8.4/8                                                                                                                                                                                                                                                                                                                           | 10/9.6                    | 13.4/12.8                 | 16.7/16                    | 20/19.2                    | 25/24                      | 33.4/31.9                  | 41.7/39.9                  |
| Max. Continuous AC Passthrough (grid to load) (A)  | 40                                                                                                                                                                                                                                                                                                                              |                           |                           |                            | 80                         |                            |                            |                            |
| Peak Power (off-grid) (W)                          | 1.5 times of rated power, 10s                                                                                                                                                                                                                                                                                                   |                           |                           |                            |                            |                            |                            |                            |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |                           |                           |                            |                            |                            |                            |                            |
| Rated Input/Output Voltage/Range (V)               | 220/380V, 230/400V 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                 |                           |                           |                            |                            |                            |                            |                            |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |                           |                           |                            |                            |                            |                            |                            |
| Grid Connection Form                               | 3L+N+PE                                                                                                                                                                                                                                                                                                                         |                           |                           |                            |                            |                            |                            |                            |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                           |                           |                            |                            |                            |                            |                            |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |                           |                           |                            |                            |                            |                            |                            |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                           |                           |                            |                            |                            |                            |                            |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                           |                           |                            |                            |                            |                            |                            |
| Euro Efficiency                                    | 97.0%                                                                                                                                                                                                                                                                                                                           |                           |                           |                            |                            |                            |                            |                            |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                           |                           |                            |                            |                            |                            |                            |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                           |                           |                            |                            |                            |                            |                            |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                           |                           |                            |                            |                            |                            |                            |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                           |                           |                            |                            |                            |                            |                            |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                           |                           |                            |                            |                            |                            |                            |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                           |                           |                            |                            |                            |                            |                            |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                           |                           |                            |                            |                            |                            |                            |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                           |                           |                            |                            |                            |                            |                            |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                           |                           |                            |                            |                            |                            |                            |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                           |                           |                            |                            |                            |                            |                            |
| Permissible Altitude                               | 2000m                                                                                                                                                                                                                                                                                                                           |                           |                           |                            |                            |                            |                            |                            |
| Noise (dB)                                         | ≤55                                                                                                                                                                                                                                                                                                                             |                           |                           |                            |                            |                            |                            |                            |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |                           |                           |                            |                            |                            |                            |                            |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                           |                           |                            |                            |                            |                            |                            |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                           |                           |                            |                            |                            |                            |                            |
| Cabinet Size (WxHxD mm)                            | 408×638×237 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                                 |                           |                           |                            |                            |                            |                            |                            |
| Weight (kg)                                        | 30.5                                                                                                                                                                                                                                                                                                                            |                           |                           |                            |                            |                            |                            |                            |
| Type of Cooling                                    | Natural Cooling                                                                                                                                                                                                                                                                                                                 |                           | Intelligent Air Cooling   |                            |                            |                            |                            |                            |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                           |                           |                            |                            |                            |                            |                            |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, G99, VDE-AR-N 4105                                                                                                                                                                                                              |                           |                           |                            |                            |                            |                            |                            |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |                           |                           |                            |                            |                            |                            |                            |

# Split Phase Hybrid Inverter

SUN-8/10/12/15K-SG01HP2-US-AM2



- 100** 100% unbalanced output
- AC couple** AC couple to retrofit existing solar system
- 10** Max. 10pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 50** Max. charging/discharging current of 50A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
- Support** Support storing energy from diesel generator

## Technical Data

| Model                                              | SUN-8K-SG01HP2<br>-US-AM2                                                                                                                                                                                                                                                                                                       | SUN-10K-SG01HP2<br>-US-AM2 | SUN-12K-SG01HP2<br>-US-AM2 | SUN-15K-SG01HP2<br>-US-AM2 |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |
| Battery Type                                       | Lithium-ion                                                                                                                                                                                                                                                                                                                     |                            |                            |                            |
| Battery Voltage Range (V)                          | 160-500                                                                                                                                                                                                                                                                                                                         |                            |                            |                            |
| Max. Charging Current (A)                          | 50                                                                                                                                                                                                                                                                                                                              |                            |                            |                            |
| Max. Discharging Current (A)                       | 50                                                                                                                                                                                                                                                                                                                              |                            |                            |                            |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                            |                            |                            |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |                            |                            |                            |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |
| Max. PV Access Power (W)                           | 16000                                                                                                                                                                                                                                                                                                                           | 20000                      | 24000                      | 30000                      |
| Max. PV Input Power (W)                            | 12000                                                                                                                                                                                                                                                                                                                           | 15000                      | 18000                      | 22500                      |
| Max. PV Input Voltage (V)                          | 550                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |
| Start-up Voltage (V)                               | 180                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |
| MPPT Voltage Range (V)                             | 150-500                                                                                                                                                                                                                                                                                                                         |                            |                            |                            |
| Rated PV Input Voltage (V)                         | 380                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |
| Max. Operating PV Input Current (A)                | 26+26                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |
| Max. Input Short-Circuit Current (A)               | 39+39                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/2+2                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |
| Rated AC Input/Output Active Power (W)             | 8000                                                                                                                                                                                                                                                                                                                            | 10000                      | 12000                      | 15000                      |
| Max. AC Input/Output Apparent Power (VA)           | 8000                                                                                                                                                                                                                                                                                                                            | 10000                      | 12000                      | 15000                      |
| Rated AC Input/Output Current (A)                  | 33.4                                                                                                                                                                                                                                                                                                                            | 41.7                       | 50                         | 62.5                       |
| Max. AC Input/Output Current (A)                   | 33.4                                                                                                                                                                                                                                                                                                                            | 41.7                       | 50                         | 62.5                       |
| Max. Continuous AC Passthrough (grid to load) (A)  | 150                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |
| Peak Power (off-grid) (W)                          | 1.5 times of rated power, 10s                                                                                                                                                                                                                                                                                                   |                            |                            |                            |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |                            |                            |                            |
| Rated Input/Output Voltage/Range (V)               | 120/240, 208 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                       |                            |                            |                            |
| Rated Input/Output Grid Frequency/Range(Hz)        | 60/55-65                                                                                                                                                                                                                                                                                                                        |                            |                            |                            |
| Grid Connection Form                               | 2L+N+PE                                                                                                                                                                                                                                                                                                                         |                            |                            |                            |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                            |                            |                            |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |                            |                            |                            |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |
| Euro Efficiency                                    | 97.0%                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                            |                            |                            |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                            |                            |                            |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                            |                            |                            |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                            |                            |                            |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                            |                            |                            |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                            |                            |                            |
| Permissible Altitude                               | 2000m                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |
| Noise (dB)                                         | ≤55                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |
| Ingress Protection(IP) Rating                      | TYPE3R                                                                                                                                                                                                                                                                                                                          |                            |                            |                            |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                            |                            |                            |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                            |                            |                            |
| Cabinet Size (WxHxD mm)                            | 436×680×277.5 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                               |                            |                            |                            |
| Weight (kg)                                        | 34.8                                                                                                                                                                                                                                                                                                                            |                            |                            |                            |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |                            |                            |                            |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                            |                            |                            |
| Grid Regulation                                    | IEEE 1547.1, SRD V2.0                                                                                                                                                                                                                                                                                                           |                            |                            |                            |
| Safety / EMC Standard                              | FCC, UL 1741                                                                                                                                                                                                                                                                                                                    |                            |                            |                            |

# Three Phase Hybrid Inverter

## SUN-8/10/12/15K-SG01HP3-US-AM2



- 100** 100% unbalanced output
- AC** AC couple to retrofit existing solar system
- 10** Max. 10pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 50** Max. charging/discharging current of 50A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
- SG** Support storing energy from diesel generator

### Technical Data

| Model                                              | SUN-8K-SG01HP3<br>-US-AM2                                                                                                                                                                                                                                                                                                       | SUN-10K-SG01HP3<br>-US-AM2 | SUN-12K-SG01HP3<br>-US-AM2 | SUN-15K-SG01HP3<br>-US-AM2 |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |
| Battery Type                                       | Lithium-ion                                                                                                                                                                                                                                                                                                                     |                            |                            |                            |
| Battery Voltage Range (V)                          | 160-500                                                                                                                                                                                                                                                                                                                         |                            |                            |                            |
| Max. Charging Current (A)                          | 50                                                                                                                                                                                                                                                                                                                              |                            |                            |                            |
| Max. Discharging Current (A)                       | 50                                                                                                                                                                                                                                                                                                                              |                            |                            |                            |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                            |                            |                            |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |                            |                            |                            |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |
| Max. PV Access Power(W)                            | 16000                                                                                                                                                                                                                                                                                                                           | 20000                      | 24000                      | 30000                      |
| Max. PV Input Power (W)                            | 12000                                                                                                                                                                                                                                                                                                                           | 15000                      | 18000                      | 22500                      |
| Max. PV Input Voltage (V)                          | 550                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |
| Start-up Voltage (V)                               | 180                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |
| MPPT Voltage Range (V)                             | 150-500                                                                                                                                                                                                                                                                                                                         |                            |                            |                            |
| Rated PV Input Voltage (V)                         | 380                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |
| Max. Operating PV Input Current (A)                | 26+26                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |
| Max. Input Short-Circuit Current (A)               | 39+39                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/2+2                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |
| Rated AC Input/Output Active Power (W)             | 8000                                                                                                                                                                                                                                                                                                                            | 10000                      | 12000                      | 15000                      |
| Max. AC Input/Output Apparent Power (VA)           | 8000                                                                                                                                                                                                                                                                                                                            | 10000                      | 12000                      | 15000                      |
| Rated AC Input/Output Current (A)                  | 22.3                                                                                                                                                                                                                                                                                                                            | 27.8                       | 33.4                       | 41.7                       |
| Max. AC Input/Output Current (A)                   | 22.3                                                                                                                                                                                                                                                                                                                            | 27.8                       | 33.4                       | 41.7                       |
| Max. Continuous AC Passthrough (grid to load) (A)  | 80                                                                                                                                                                                                                                                                                                                              |                            |                            |                            |
| Peak Power (off-grid) (W)                          | 1.5 times of rated power, 10s                                                                                                                                                                                                                                                                                                   |                            |                            |                            |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |                            |                            |                            |
| Rated Input/Output Voltage/Range (V)               | 120/208 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                            |                            |                            |                            |
| Rated Input/Output Grid Frequency/Range(Hz)        | 60/55-65                                                                                                                                                                                                                                                                                                                        |                            |                            |                            |
| Grid Connection Form                               | 3L+N+PE                                                                                                                                                                                                                                                                                                                         |                            |                            |                            |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                            |                            |                            |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |                            |                            |                            |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |
| Max. Efficiency                                    | 97.6%                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |
| Euro Efficiency                                    | 97.0%                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                            |                            |                            |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                            |                            |                            |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                            |                            |                            |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                            |                            |                            |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                            |                            |                            |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                            |                            |                            |
| Permissible Altitude                               | 2000m                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |
| Noise (dB)                                         | ≤55                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |
| Ingress Protection(IP) Rating                      | TYPE3R                                                                                                                                                                                                                                                                                                                          |                            |                            |                            |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                            |                            |                            |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                            |                            |                            |
| Cabinet Size (WxHxD mm)                            | 408×678×247 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                                 |                            |                            |                            |
| Weight (kg)                                        | 31.5                                                                                                                                                                                                                                                                                                                            |                            |                            |                            |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |                            |                            |                            |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                            |                            |                            |
| Grid Regulation                                    | IEEE 1547.1, SRD V2.0                                                                                                                                                                                                                                                                                                           |                            |                            |                            |
| Safety / EMC Standard                              | FCC, UL 1741                                                                                                                                                                                                                                                                                                                    |                            |                            |                            |

# Three Phase Hybrid Inverter

## SUN-25/29.9/30K-SG02HP3-EU-AM3



- 100** 100% unbalanced output
- AC couple** AC couple to retrofit existing solar system
- 10** Max. 10pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 75** Max. charging/discharging current of 75A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
- Support** Support storing energy from diesel generator

### Technical Data

| Model                                              | SUN-25K-SG02HP3<br>-EU-AM3                                                                                                                                                                                                                                                                                                      |           | SUN-29.9K-SG02HP3<br>-EU-AM3 | SUN-30K-SG02HP3<br>-EU-AM3 |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------|----------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |           |                              |                            |
| Battery Type                                       | Lithium-ion                                                                                                                                                                                                                                                                                                                     |           |                              |                            |
| Battery Voltage Range (V)                          | 160-700                                                                                                                                                                                                                                                                                                                         |           |                              |                            |
| Max. Charging Current (A)                          | 75                                                                                                                                                                                                                                                                                                                              |           |                              |                            |
| Max. Discharging Current (A)                       | 75                                                                                                                                                                                                                                                                                                                              |           |                              |                            |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |           |                              |                            |
| Number of Battery Input                            | 1                                                                                                                                                                                                                                                                                                                               |           |                              |                            |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |           |                              |                            |
| Max. PV Access Power (W)                           | 50000                                                                                                                                                                                                                                                                                                                           | 59800     | 60000                        |                            |
| Max. DC Input Power (W)                            | 40000                                                                                                                                                                                                                                                                                                                           | 47840     | 48000                        |                            |
| Max. DC Input Voltage (V)                          | 1000                                                                                                                                                                                                                                                                                                                            |           |                              |                            |
| Start-up Voltage (V)                               | 180                                                                                                                                                                                                                                                                                                                             |           |                              |                            |
| MPPT Voltage Range (V)                             | 150-850                                                                                                                                                                                                                                                                                                                         |           |                              |                            |
| Rated DC Input Voltage (V)                         | 600                                                                                                                                                                                                                                                                                                                             |           |                              |                            |
| Max. Operating PV Input Current (A)                | 36+36+36                                                                                                                                                                                                                                                                                                                        |           |                              |                            |
| Max. Input Short-Circuit Current (A)               | 54+54+54                                                                                                                                                                                                                                                                                                                        |           |                              |                            |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 3/2+2+2                                                                                                                                                                                                                                                                                                                         |           |                              |                            |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |           |                              |                            |
| Rated AC Input/Output Active Power (W)             | 25000                                                                                                                                                                                                                                                                                                                           | 29900     | 30000                        |                            |
| Max. AC Input/Output Apparent Power (VA)           | 27500                                                                                                                                                                                                                                                                                                                           | 29900     | 33000                        |                            |
| Rated AC Input/Output Current (A)                  | 37.9/36.3                                                                                                                                                                                                                                                                                                                       | 45.4/43.4 | 45.5/43.5                    |                            |
| Max. AC Input/Output Current (A)                   | 41.7/39.9                                                                                                                                                                                                                                                                                                                       | 45.4/43.4 | 50/47.9                      |                            |
| Max. Continuous AC Passthrough (grid to load) (A)  | 80                                                                                                                                                                                                                                                                                                                              |           |                              |                            |
| Peak Power (off-grid) (W)                          | 1.5 times of rated power, 10s                                                                                                                                                                                                                                                                                                   |           |                              |                            |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |           |                              |                            |
| Rated Input/Output Voltage/Range (V)               | 220/380V, 230/400V 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                 |           |                              |                            |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |           |                              |                            |
| Grid Connection Form                               | 3L+N+PE                                                                                                                                                                                                                                                                                                                         |           |                              |                            |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |           |                              |                            |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |           |                              |                            |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |           |                              |                            |
| Max. Efficiency                                    | 98.50%                                                                                                                                                                                                                                                                                                                          |           |                              |                            |
| Euro Efficiency                                    | 98.0%                                                                                                                                                                                                                                                                                                                           |           |                              |                            |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |           |                              |                            |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |           |                              |                            |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |           |                              |                            |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |           |                              |                            |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |           |                              |                            |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |           |                              |                            |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |           |                              |                            |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |           |                              |                            |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |           |                              |                            |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |           |                              |                            |
| Permissible Altitude                               | 3000m                                                                                                                                                                                                                                                                                                                           |           |                              |                            |
| Noise (dB)                                         | ≤55                                                                                                                                                                                                                                                                                                                             |           |                              |                            |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |           |                              |                            |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |           |                              |                            |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |           |                              |                            |
| Cabinet Size (WxHxD mm)                            | 448x688x 270(Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                                 |           |                              |                            |
| Weight (kg)                                        | 46                                                                                                                                                                                                                                                                                                                              |           |                              |                            |
| Type of Cooling                                    | Intelligent air cooling                                                                                                                                                                                                                                                                                                         |           |                              |                            |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |           |                              |                            |
| Grid Regulation                                    | IEC 61727,IEC 62116,CEI 0-21,EN 50549 , NRS 097,RD 140,UNE 217002, OVE-Richtlinie R25,G99,VDE-AR-N 4105                                                                                                                                                                                                                         |           |                              |                            |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |           |                              |                            |

# Three Phase Hybrid Inverter

SUN-29.9/30/35K-SG01HP3-EU-BM3

SUN-40/50K-SG01HP3-EU-BM4



- 100

100% unbalanced output
- AC couple to retrofit existing solar system
- 10

Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 100

Max. charging/discharging current of 100A
- H

High voltage battery, higher efficiency
- 6

6 time periods for battery charging/discharging
- Support storing energy from diesel generator

## Technical Data

| Model                                              | SUN-29.9K-SG01HP3<br>-EU-BM3                                                                                                                                                                                                                                                                                                    | SUN-30K-SG01HP3<br>-EU-BM3 | SUN-35K-SG01HP3<br>-EU-BM3 | SUN-40K-SG01HP3<br>-EU-BM4 | SUN-50K-SG01HP3<br>-EU-BM4 |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Battery Type                                       | Lithium-ion                                                                                                                                                                                                                                                                                                                     |                            |                            |                            |                            |
| Battery Voltage Range (V)                          | 160-800                                                                                                                                                                                                                                                                                                                         |                            |                            |                            |                            |
| Max. Charging Current (A)                          | 50+50                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |                            |
| Max. Discharging Current (A)                       | 50+50                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |                            |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |                            |                            |                            |                            |
| Number of Battery Input                            | 2                                                                                                                                                                                                                                                                                                                               |                            |                            |                            |                            |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Max. PV Access Power (W)                           | 59800                                                                                                                                                                                                                                                                                                                           | 60000                      | 70000                      | 80000                      | 100000                     |
| Max. PV Input Power (W)                            | 47840                                                                                                                                                                                                                                                                                                                           | 48000                      | 56000                      | 64000                      | 80000                      |
| Max. PV Input Voltage (V)                          | 1000                                                                                                                                                                                                                                                                                                                            |                            |                            |                            |                            |
| Start-up Voltage (V)                               | 180                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |                            |
| MPPT Voltage Range (V)                             | 150-850                                                                                                                                                                                                                                                                                                                         |                            |                            |                            |                            |
| Rated PV Input Voltage (V)                         | 600                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |                            |
| Max. Operating PV Input Current (A)                | 36+36+36                                                                                                                                                                                                                                                                                                                        |                            |                            | 36+36+36+36                |                            |
| Max. Input Short-Circuit Current (A)               | 55+55+55                                                                                                                                                                                                                                                                                                                        |                            |                            | 55+55+55+55                |                            |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 3/2+2+2                                                                                                                                                                                                                                                                                                                         |                            |                            | 4/2+2+2+2                  |                            |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Rated AC Input/Output Active Power (W)             | 29900                                                                                                                                                                                                                                                                                                                           | 30000                      | 35000                      | 40000                      | 50000                      |
| Max. AC Input/Output Apparent Power (VA)           | 29900                                                                                                                                                                                                                                                                                                                           | 33000                      | 38500                      | 44000                      | 55000                      |
| Rated AC Input/Output Current (A)                  | 45.4/43.4                                                                                                                                                                                                                                                                                                                       | 45.5/43.5                  | 53.1/50.8                  | 60.7/58                    | 75.8/72.5                  |
| Max. AC Input/Output Current (A)                   | 45.4/43.4                                                                                                                                                                                                                                                                                                                       | 50/47.9                    | 58.4/55.8                  | 66.7/63.8                  | 83.4/79.8                  |
| Max. Continuous AC Passthrough (grid to load) (A)  | 200                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |                            |
| Peak Power (off-grid) (W)                          | 1.5 times of rated power, 10s                                                                                                                                                                                                                                                                                                   |                            |                            |                            |                            |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |                            |                            |                            |                            |
| Rated Input/Output Voltage/Range (V)               | 220/380V, 230/400V 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |                            |                            |                            |                            |
| Grid Connection Form                               | 3L+N+PE                                                                                                                                                                                                                                                                                                                         |                            |                            |                            |                            |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |                            |                            |                            |                            |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |                            |                            |                            |                            |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Max. Efficiency                                    | 97.60%                                                                                                                                                                                                                                                                                                                          |                            |                            |                            |                            |
| Euro Efficiency                                    | 97.0%                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |                            |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |                            |                            |                            |                            |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |                            |                            |                            |                            |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |                            |                            |                            |                            |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |                            |                            |                            |                            |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |                            |                            |                            |                            |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |                            |                            |                            |                            |
| Permissible Altitude                               | 2000m                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |                            |
| Noise (dB)                                         | ≤65                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |                            |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |                            |                            |                            |                            |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |                            |                            |                            |                            |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |                            |                            |                            |                            |
| Cabinet Size (WxHxD mm)                            | 527×894×294 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                                 |                            |                            |                            |                            |
| Weight (kg)                                        | 80                                                                                                                                                                                                                                                                                                                              |                            |                            |                            |                            |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |                            |                            |                            |                            |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |                            |                            |                            |                            |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105                                                                                                                                                                                                                   |                            |                            |                            |                            |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |                            |                            |                            |                            |

# Three Phase Hybrid Inverter

## SUN-60/70/75/80K-SG02HP3-EU-EM6



- 100** 100% unbalanced output
- AC couple** AC couple to retrofit existing solar system
- 10** Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 160** Max. charging/discharging current of 160A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
- Support** Support storing energy from diesel generator

### Technical Data

| Model                                              | SUN-60K-SG02HP3<br>-EU-EM6                                                                                                                                                                                                                                                                                                      |  | SUN-70K-SG02HP3<br>-EU-EM6 |  | SUN-75K-SG02HP3<br>-EU-EM6 |  | SUN-80K-SG02HP3<br>-EU-EM6 |  |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------|--|----------------------------|--|----------------------------|--|
| Battery Input Data                                 |                                                                                                                                                                                                                                                                                                                                 |  |                            |  |                            |  |                            |  |
| Battery Type                                       | Lithium-ion                                                                                                                                                                                                                                                                                                                     |  |                            |  |                            |  |                            |  |
| Battery Voltage Range (V)                          | 160-1000                                                                                                                                                                                                                                                                                                                        |  |                            |  |                            |  |                            |  |
| Max. Charging Current (A)                          | 80+80                                                                                                                                                                                                                                                                                                                           |  |                            |  |                            |  |                            |  |
| Max. Discharging Current (A)                       | 80+80                                                                                                                                                                                                                                                                                                                           |  |                            |  |                            |  |                            |  |
| Charging Strategy for Li-ion Battery               | Self-adaption to BMS                                                                                                                                                                                                                                                                                                            |  |                            |  |                            |  |                            |  |
| Number of Battery Input                            | 2                                                                                                                                                                                                                                                                                                                               |  |                            |  |                            |  |                            |  |
| PV String Input Data                               |                                                                                                                                                                                                                                                                                                                                 |  |                            |  |                            |  |                            |  |
| Max. PV Access Power (W)                           | 120000                                                                                                                                                                                                                                                                                                                          |  | 140000                     |  | 150000                     |  | 160000                     |  |
| Max. PV Input Power (W)                            | 96000                                                                                                                                                                                                                                                                                                                           |  | 112000                     |  | 120000                     |  | 128000                     |  |
| Max. PV Input Voltage (V)                          | 1000                                                                                                                                                                                                                                                                                                                            |  |                            |  |                            |  |                            |  |
| Start-up Voltage (V)                               | 180                                                                                                                                                                                                                                                                                                                             |  |                            |  |                            |  |                            |  |
| MPPT Voltage Range (V)                             | 150-850                                                                                                                                                                                                                                                                                                                         |  |                            |  |                            |  |                            |  |
| Rated PV Input Voltage (V)                         | 650                                                                                                                                                                                                                                                                                                                             |  |                            |  |                            |  |                            |  |
| Max. Operating PV Input Current (A)                | 36+36+36+36+36+36                                                                                                                                                                                                                                                                                                               |  |                            |  |                            |  |                            |  |
| Max. Input Short-Circuit Current (A)               | 54+54+54+54+54+54                                                                                                                                                                                                                                                                                                               |  |                            |  |                            |  |                            |  |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 6/2+2+2+2+2+2                                                                                                                                                                                                                                                                                                                   |  |                            |  |                            |  |                            |  |
| AC Input/Output Data                               |                                                                                                                                                                                                                                                                                                                                 |  |                            |  |                            |  |                            |  |
| Rated AC Input/Output Active Power (W)             | 60000                                                                                                                                                                                                                                                                                                                           |  | 70000                      |  | 75000                      |  | 80000                      |  |
| Max. AC Input/Output Apparent Power (VA)           | 66000                                                                                                                                                                                                                                                                                                                           |  | 77000                      |  | 82500                      |  | 88000                      |  |
| Rated AC Input/Output Current (A)                  | 91/87                                                                                                                                                                                                                                                                                                                           |  | 106.1/101.5                |  | 113.7/108.7                |  | 121.3/115.9                |  |
| Max. AC Input/Output Current (A)                   | 100/95.7                                                                                                                                                                                                                                                                                                                        |  | 116.7/111.6                |  | 125/119.6                  |  | 133.4/127.6                |  |
| Max. Continuous AC Passthrough (grid to load) (A)  | 200                                                                                                                                                                                                                                                                                                                             |  |                            |  |                            |  |                            |  |
| Peak Power (off-grid) (W)                          | 1.5 times of rated power, 10s                                                                                                                                                                                                                                                                                                   |  |                            |  |                            |  |                            |  |
| Power Factor Adjustment Range                      | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                                      |  |                            |  |                            |  |                            |  |
| Rated Input/Output Voltage/Range (V)               | 220/380V, 230/400V 0.85Un-1.1Un                                                                                                                                                                                                                                                                                                 |  |                            |  |                            |  |                            |  |
| Rated Input/Output Grid Frequency/Range(Hz)        | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                              |  |                            |  |                            |  |                            |  |
| Grid Connection Form                               | 3L+N+PE                                                                                                                                                                                                                                                                                                                         |  |                            |  |                            |  |                            |  |
| Total Current Harmonic Distortion THDi             | <3% (of nominal power)                                                                                                                                                                                                                                                                                                          |  |                            |  |                            |  |                            |  |
| DC Injection Current                               | <0.5% In                                                                                                                                                                                                                                                                                                                        |  |                            |  |                            |  |                            |  |
| Efficiency                                         |                                                                                                                                                                                                                                                                                                                                 |  |                            |  |                            |  |                            |  |
| Max. Efficiency                                    | 98.70%                                                                                                                                                                                                                                                                                                                          |  |                            |  |                            |  |                            |  |
| Euro Efficiency                                    | 98.10%                                                                                                                                                                                                                                                                                                                          |  |                            |  |                            |  |                            |  |
| MPPT Efficiency                                    | >99%                                                                                                                                                                                                                                                                                                                            |  |                            |  |                            |  |                            |  |
| Equipment Protection                               |                                                                                                                                                                                                                                                                                                                                 |  |                            |  |                            |  |                            |  |
| Integrated                                         | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection |  |                            |  |                            |  |                            |  |
| Surge Protection Level                             | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                                        |  |                            |  |                            |  |                            |  |
| Interface                                          |                                                                                                                                                                                                                                                                                                                                 |  |                            |  |                            |  |                            |  |
| Communication Interface                            | RS485/RS232/CAN                                                                                                                                                                                                                                                                                                                 |  |                            |  |                            |  |                            |  |
| Monitor Mode                                       | GPRS/WIFI/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                            |  |                            |  |                            |  |                            |  |
| General Data                                       |                                                                                                                                                                                                                                                                                                                                 |  |                            |  |                            |  |                            |  |
| Operating Temperature Range (°C)                   | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                    |  |                            |  |                            |  |                            |  |
| Permissible Ambient Humidity                       | 0-100%                                                                                                                                                                                                                                                                                                                          |  |                            |  |                            |  |                            |  |
| Permissible Altitude                               | 3000m                                                                                                                                                                                                                                                                                                                           |  |                            |  |                            |  |                            |  |
| Noise (dB)                                         | ≤65                                                                                                                                                                                                                                                                                                                             |  |                            |  |                            |  |                            |  |
| Ingress Protection(IP) Rating                      | IP 65                                                                                                                                                                                                                                                                                                                           |  |                            |  |                            |  |                            |  |
| Inverter Topology                                  | Non-Isolated                                                                                                                                                                                                                                                                                                                    |  |                            |  |                            |  |                            |  |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                                         |  |                            |  |                            |  |                            |  |
| Cabinet Size (WxHxD mm)                            | 606×927×314 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                                                 |  |                            |  |                            |  |                            |  |
| Weight (kg)                                        | 105                                                                                                                                                                                                                                                                                                                             |  |                            |  |                            |  |                            |  |
| Type of Cooling                                    | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                         |  |                            |  |                            |  |                            |  |
| Warranty                                           | 5 Years/10 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                                              |  |                            |  |                            |  |                            |  |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105                                                                                                                                                                                                                   |  |                            |  |                            |  |                            |  |
| Safety / EMC Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                                          |  |                            |  |                            |  |                            |  |

# Microinverter

## SUN-M30/40/50G4-EU-Q0-I



- ✓ 1 MPP tracker, module level monitoring
- ✓ IP67 protection degree
- ✓ Wi-Fi communication
- ✓ Rapid shutdown function
- ✓ Easy installation, suitable for quick-plug balcony PV system
- ✓ <100ms AC fast discharge, compliant with new required standard DIN VDE 0126-95 (<200ms) to protect human safety
- ✓ Complete NS protection with self-check function
- ✓ External relay advantage with low temperature, long life, easier maintenance
- ✓ 25 years design lifetime and 15 years warranty

### Technical Data

| Model                                              | SUN-M30G4-EU-Q0-I                                                                         |  | SUN-M40G4-EU-Q0-I |  | SUN-M50G4-EU-Q0-I |  |
|----------------------------------------------------|-------------------------------------------------------------------------------------------|--|-------------------|--|-------------------|--|
| PV String Input Data                               |                                                                                           |  |                   |  |                   |  |
| Max. PV Input Power (W)                            | 210-420(1 Piece)                                                                          |  | 210-560(1 Piece)  |  | 210-700(1 Piece)  |  |
| Max. PV Input Voltage (V)                          | 60                                                                                        |  |                   |  |                   |  |
| Start-up Voltage (V)                               | 20                                                                                        |  |                   |  |                   |  |
| MPPT Voltage Range (V)                             | 25-55                                                                                     |  |                   |  |                   |  |
| Rated PV Input Voltage (V)                         | 42.5                                                                                      |  |                   |  |                   |  |
| Max. Operating PV Input Current (A)                | 15                                                                                        |  |                   |  |                   |  |
| Max. Input Short Circuit Current (A)               | 22.5                                                                                      |  |                   |  |                   |  |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 1/1                                                                                       |  |                   |  |                   |  |
| AC Output Side                                     |                                                                                           |  |                   |  |                   |  |
| Rated AC Output Active Power (W)                   | 300                                                                                       |  | 400               |  | 500               |  |
| Max. AC Output Apparent Power (VA)                 | 300                                                                                       |  | 400               |  | 500               |  |
| Rated AC Output Current (A)                        | 1.4/1.4                                                                                   |  | 1.9/1.8           |  | 2.3/2.2           |  |
| Max. AC Output Current (A)                         | 1.4/1.4                                                                                   |  | 1.9/1.8           |  | 2.3/2.2           |  |
| Rated Output Voltage/Range (V)                     | 220/230 0.85Un-1.1Un                                                                      |  |                   |  |                   |  |
| Grid Connection Form                               | L/N/PE                                                                                    |  |                   |  |                   |  |
| Rated Output Grid Frequency/Range(Hz)              | 50/45-55, 60/55-65                                                                        |  |                   |  |                   |  |
| Max. Unit per Branch                               | 17                                                                                        |  | 13                |  | 10                |  |
| Power Factor Adjustment Range                      | 0.9 leading-0.9 lagging                                                                   |  |                   |  |                   |  |
| Total Current Harmonic Distortion THDi             | <3%                                                                                       |  |                   |  |                   |  |
| DC Injection Current                               | <0.5%In                                                                                   |  |                   |  |                   |  |
| Efficiency                                         |                                                                                           |  |                   |  |                   |  |
| Max. Efficiency                                    | 96.5%                                                                                     |  |                   |  |                   |  |
| Euro Efficiency                                    | 96.0%                                                                                     |  |                   |  |                   |  |
| MPPT Efficiency                                    | >99%                                                                                      |  |                   |  |                   |  |
| Equipment Protection                               |                                                                                           |  |                   |  |                   |  |
| DC Reverse Polarity Protection                     | Yes                                                                                       |  |                   |  |                   |  |
| AC Output Overcurrent Protection                   | Yes                                                                                       |  |                   |  |                   |  |
| AC Output Overvoltage Protection                   | Yes                                                                                       |  |                   |  |                   |  |
| AC Output Short Circuit Protection                 | Yes                                                                                       |  |                   |  |                   |  |
| Thermal Protection                                 | Yes                                                                                       |  |                   |  |                   |  |
| Insulation Impedance Detection                     | Yes                                                                                       |  |                   |  |                   |  |
| Anti-islanding Protection                          | Yes                                                                                       |  |                   |  |                   |  |
| Surge Protection Level                             | TYPE II(AC)                                                                               |  |                   |  |                   |  |
| General Data                                       |                                                                                           |  |                   |  |                   |  |
| Operating Temperature Range (°C)                   | -40 to +65°C, >45°C Derating                                                              |  |                   |  |                   |  |
| Permissible Ambient Humidity                       | 0-100%                                                                                    |  |                   |  |                   |  |
| Permissible Altitude (m)                           | 2000m                                                                                     |  |                   |  |                   |  |
| Noise (dB)                                         | ≤25                                                                                       |  |                   |  |                   |  |
| Ingress Protection(IP) Rating                      | IP 67                                                                                     |  |                   |  |                   |  |
| Inverter Topology                                  | Isolated                                                                                  |  |                   |  |                   |  |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                   |  |                   |  |                   |  |
| Communication                                      | Wi-Fi                                                                                     |  |                   |  |                   |  |
| Cabinet Size (WxHxD mm)                            | 173×158.5×31.5 (Excluding connectors and brackets)                                        |  |                   |  |                   |  |
| Weight (kg)                                        | 1.85                                                                                      |  |                   |  |                   |  |
| Warranty                                           | 10 Years                                                                                  |  |                   |  |                   |  |
| Type of Cooling                                    | Natural Cooling                                                                           |  |                   |  |                   |  |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, VDE-AR-N 4105 |  |                   |  |                   |  |
| Safety EMC/Standard                                | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                    |  |                   |  |                   |  |

# Microinverter

## SUN-M60/80/100G4-EU-Q0



- ✓ 2 MPP trackers, module level monitoring
- ✓ IP67 protection degree
- ✓ Wi-Fi communication
- ✓ Rapid shutdown function
- ✓ Easy installation, suitable for quick-plug balcony PV system
- ✓ <100ms AC fast discharge, compliant with new required standard DIN VDE 0126-95 (<200ms) to protect human safety
- ✓ Complete NS protection with self-check function
- ✓ External relay advantage with low temperature, long life, easier maintenance
- ✓ 25 years design lifetime and 15 years warranty

### Technical Data

| Model                                              | SUN-M60G4-EU-Q0                                                                                |                   | SUN-M80G4-EU-Q0   | SUN-M100G4-EU-Q0 |
|----------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------|-------------------|------------------|
| PV String Input Data                               |                                                                                                |                   |                   |                  |
| Max. PV Input Power (W)                            | 210-420(2 Pieces)                                                                              | 210-560(2 Pieces) | 210-700(2 Pieces) |                  |
| Max. PV Input Voltage (V)                          | 60                                                                                             |                   |                   |                  |
| Start-up Voltage (V)                               | 20                                                                                             |                   |                   |                  |
| MPPT Voltage Range (V)                             | 25-55                                                                                          |                   |                   |                  |
| Rated PV Input Voltage (V)                         | 42.5                                                                                           |                   |                   |                  |
| Max. Operating PV Input Current (A)                | 13+13                                                                                          |                   |                   |                  |
| Max. Input Short Circuit Current (A)               | 19.5+19.5                                                                                      |                   |                   |                  |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 2/1                                                                                            |                   |                   |                  |
| AC Output Side                                     |                                                                                                |                   |                   |                  |
| Rated AC Output Active Power (W)                   | 600                                                                                            | 800               | 1000              |                  |
| Max. AC Output Apparent Power (VA)                 | 600                                                                                            | 800               | 1000              |                  |
| Rated AC Output Current (A)                        | 2.8/2.7                                                                                        | 3.7/3.5           | 4.6/4.4           |                  |
| Max. AC Output Current (A)                         | 2.8/2.7                                                                                        | 3.7/3.5           | 4.6/4.4           |                  |
| Rated Output Voltage/Range (V)                     | 220/230 0.85Un-1.1Un                                                                           |                   |                   |                  |
| Grid Connection Form                               | L/N/PE                                                                                         |                   |                   |                  |
| Rated Output Grid Frequency/Range(Hz)              | 50/45-55, 60/55-65                                                                             |                   |                   |                  |
| Max. Unit per Branch                               | 8                                                                                              | 6                 | 5                 |                  |
| Power Factor Adjustment Range                      | 0.9 leading-0.9 lagging                                                                        |                   |                   |                  |
| Total Current Harmonic Distortion THDi             | <3%                                                                                            |                   |                   |                  |
| DC Injection Current                               | <0.5%In                                                                                        |                   |                   |                  |
| Efficiency                                         |                                                                                                |                   |                   |                  |
| Max. Efficiency                                    | 96.5%                                                                                          |                   |                   |                  |
| Euro Efficiency                                    | 96.0%                                                                                          |                   |                   |                  |
| MPPT Efficiency                                    | >99%                                                                                           |                   |                   |                  |
| Equipment Protection                               |                                                                                                |                   |                   |                  |
| DC Reverse Polarity Protection                     | Yes                                                                                            |                   |                   |                  |
| AC Output Overcurrent Protection                   | Yes                                                                                            |                   |                   |                  |
| AC Output Overvoltage Protection                   | Yes                                                                                            |                   |                   |                  |
| AC Output Short Circuit Protection                 | Yes                                                                                            |                   |                   |                  |
| Thermal Protection                                 | Yes                                                                                            |                   |                   |                  |
| Insulation Impedance Detection                     | Yes                                                                                            |                   |                   |                  |
| Anti-islanding Protection                          | Yes                                                                                            |                   |                   |                  |
| Surge Protection Level                             | TYPE II(AC)                                                                                    |                   |                   |                  |
| General Data                                       |                                                                                                |                   |                   |                  |
| Operating Temperature Range (°C)                   | -40 to +65°C, >45°C Derating                                                                   |                   |                   |                  |
| Permissible Ambient Humidity                       | 0-100%                                                                                         |                   |                   |                  |
| Permissible Altitude (m)                           | 2000m                                                                                          |                   |                   |                  |
| Noise (dB)                                         | ≤25                                                                                            |                   |                   |                  |
| Ingress Protection(IP) Rating                      | IP 67                                                                                          |                   |                   |                  |
| Inverter Topology                                  | Isolated                                                                                       |                   |                   |                  |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                        |                   |                   |                  |
| Communication                                      | Wi-Fi                                                                                          |                   |                   |                  |
| Cabinet Size (WxHxD mm)                            | 280.5×190×40 (Excluding Connectors and Brackets)                                               |                   |                   |                  |
| Weight (kg)                                        | 3                                                                                              |                   |                   |                  |
| Warranty                                           | 10 Years                                                                                       |                   |                   |                  |
| Type of Cooling                                    | Natural Cooling                                                                                |                   |                   |                  |
| Grid Regulation                                    | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, G99, VDE-AR-N 4105 |                   |                   |                  |
| Safety EMC/Standard                                | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                         |                   |                   |                  |

# Microinverter

## SUN-M130/160/180/200/220G4-EU-Q0



- 18

Max. DC input current of 18A, adapt to 770W PV module
- IP67 protection degree, 10 years warranty
- 4 MPP trackers, module level monitoring
- Wi-Fi communication
- Rapid shutdown function

### Technical Data

| Model                                                          | SUN-M130G4<br>-EU-Q0                                                                           | SUN-M160G4<br>-EU-Q0  | SUN-M180G4<br>-EU-Q0  | SUN-M200G4<br>-EU-Q0  | SUN-M220G4<br>-EU-Q0  |
|----------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| PV String Input Data                                           |                                                                                                |                       |                       |                       |                       |
| Max. PV Input Power (W)                                        | 210-460<br>(4 Pieces)                                                                          | 210-560<br>(4 Pieces) | 210-630<br>(4 Pieces) | 210-700<br>(4 Pieces) | 210-770<br>(4 Pieces) |
| Max. PV Input Voltage (V)                                      | 60                                                                                             |                       |                       |                       |                       |
| Start-up Voltage (V)                                           | 20                                                                                             |                       |                       |                       |                       |
| MPPT Voltage Range (V)                                         | 25-55                                                                                          |                       |                       |                       |                       |
| Rated PV Input Voltage (V)                                     | 42.5                                                                                           |                       |                       |                       |                       |
| Max. Operating PV Input Current (A)                            | 15+15+15+15                                                                                    |                       |                       |                       | 18+18+18+18           |
| Max. Input Short Circuit Current (A)                           | 22.5+22.5+22.5+22.5                                                                            |                       |                       |                       | 27+27+27+27           |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker             | 4/1                                                                                            |                       |                       |                       |                       |
| AC Output Side                                                 |                                                                                                |                       |                       |                       |                       |
| Rated AC Output Active Power (W)                               | 1300                                                                                           | 1600                  | 1800                  | 2000                  | 2200                  |
| Max. AC Output Apparent Power (VA)                             | 1300                                                                                           | 1600                  | 1800                  | 2000                  | 2200                  |
| Rated AC Output Current (A)                                    | 6/5.7                                                                                          | 7.3/7                 | 8.2/7.9               | 9.1/8.7               | 10/9.6                |
| Max. AC Output Current (A)                                     | 6/5.7                                                                                          | 7.3/7                 | 8.2/7.9               | 9.1/8.7               | 10/9.6                |
| Rated Output Voltage/Range (V)                                 | 220/230 0.85Un-1.1Un                                                                           |                       |                       |                       |                       |
| Grid Connection Form                                           | L/N/PE                                                                                         |                       |                       |                       |                       |
| Rated Output Grid Frequency/Range(Hz)                          | 50/45-55, 60/55-65                                                                             |                       |                       |                       |                       |
| Max. Unit per Branch                                           | 5                                                                                              | 4                     | 3                     | 3                     | 3                     |
| Power Factor Adjustment Range                                  | 0.9 leading-0.9 lagging                                                                        |                       |                       |                       |                       |
| Total Current Harmonic Distortion THDi                         | <3%                                                                                            |                       |                       |                       |                       |
| DC Injection Current                                           | <0.5%In                                                                                        |                       |                       |                       |                       |
| Efficiency                                                     |                                                                                                |                       |                       |                       |                       |
| Max. Efficiency                                                | 96.5%                                                                                          |                       |                       |                       |                       |
| Euro Efficiency                                                | 96.0%                                                                                          |                       |                       |                       |                       |
| MPPT Efficiency                                                | >99%                                                                                           |                       |                       |                       |                       |
| Equipment Protection                                           |                                                                                                |                       |                       |                       |                       |
| DC Reverse Polarity Protection                                 | Yes                                                                                            |                       |                       |                       |                       |
| AC Output Overcurrent Protection                               | Yes                                                                                            |                       |                       |                       |                       |
| AC Output Overvoltage Protection                               | Yes                                                                                            |                       |                       |                       |                       |
| AC Output Short Circuit Protection                             | Yes                                                                                            |                       |                       |                       |                       |
| Thermal Protection                                             | Yes                                                                                            |                       |                       |                       |                       |
| Insulation Impedance Detection                                 | Yes                                                                                            |                       |                       |                       |                       |
| Anti-islanding Protection                                      | Yes                                                                                            |                       |                       |                       |                       |
| Surge Protection Level                                         | TYPE II(AC)                                                                                    |                       |                       |                       |                       |
| General Data                                                   |                                                                                                |                       |                       |                       |                       |
| Operating Temperature Range (°C)                               | -40 to +65°C, >45°C Derating                                                                   |                       |                       |                       |                       |
| Permissible Ambient Humidity                                   | 0-100%                                                                                         |                       |                       |                       |                       |
| Permissible Altitude (m)                                       | 2000m                                                                                          |                       |                       |                       |                       |
| Noise (dB)                                                     | ≤25                                                                                            |                       |                       |                       |                       |
| Ingress Protection(IP) Rating                                  | IP 67                                                                                          |                       |                       |                       |                       |
| Inverter Topology                                              | Isolated                                                                                       |                       |                       |                       |                       |
| Over Voltage Category                                          | OVC II(DC), OVC III(AC)                                                                        |                       |                       |                       |                       |
| Communication                                                  | Wi-Fi                                                                                          |                       |                       |                       |                       |
| Cabinet Size (WxHxD mm)<br>(Excluding Connectors and Brackets) | 311×250.5×36.5                                                                                 |                       |                       |                       | 358×255.5×36.5        |
| Weight (kg)                                                    | 5.1                                                                                            |                       |                       |                       | 5.2                   |
| Warranty                                                       | 10 Years                                                                                       |                       |                       |                       |                       |
| Type of Cooling                                                | Natural Cooling                                                                                |                       |                       |                       |                       |
| Grid Regulation                                                | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, G99, VDE-AR-N 4105 |                       |                       |                       |                       |
| Safety EMC/Standard                                            | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                         |                       |                       |                       |                       |

# Microinverter

## SUN-M130/160/180/200/220G4-EU-Q0-I



- 

Wireless wifi communication, no wiring required
- 

Bidirectional measurement can record electricity consumption data while also preventing backflow
- 

IP67 protection degree, 10 years warranty
- 18

Max. DC input current of 18A, adapt to 770W PV module
- 

4 MPP trackers, module level monitoring
- 

Rapid shutdown function

### Technical Data

| Model                                              | SUN-M130G4<br>-EU-Q0-I                                                                                  | SUN-M160G4<br>-EU-Q0-I | SUN-M180G4<br>-EU-Q0-I | SUN-M200G4<br>-EU-Q0-I | SUN-M220G4<br>-EU-Q0-I |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------|------------------------|------------------------|------------------------|------------------------|
| PV String Input Data                               |                                                                                                         |                        |                        |                        |                        |
| Max. PV Input Power (W)                            | 210-460<br>(4 Pieces)                                                                                   | 210-560<br>(4 Pieces)  | 210-630<br>(4 Pieces)  | 210-700<br>(4 Pieces)  | 210-770<br>(4 Pieces)  |
| Max. PV Input Voltage (V)                          | 60                                                                                                      |                        |                        |                        |                        |
| Start-up Voltage (V)                               | 20                                                                                                      |                        |                        |                        |                        |
| MPPT Voltage Range (V)                             | 25-55                                                                                                   |                        |                        |                        |                        |
| Rated PV Input Voltage (V)                         | 42.5                                                                                                    |                        |                        |                        |                        |
| Max. Operating PV Input Current (A)                | 18+18+18+18                                                                                             |                        |                        |                        |                        |
| Max. Input Short Circuit Current (A)               | 27+27+27+27                                                                                             |                        |                        |                        |                        |
| No. of MPP Trackers/<br>No. of Strings MPP Tracker | 4/1                                                                                                     |                        |                        |                        |                        |
| AC Output Side                                     |                                                                                                         |                        |                        |                        |                        |
| Rated AC Output Active Power (W)                   | 1300                                                                                                    | 1600                   | 1800                   | 2000                   | 2200                   |
| Max. AC Output Apparent Power (VA)                 | 1300                                                                                                    | 1600                   | 1800                   | 2000                   | 2200                   |
| Rated AC Output Current (A)                        | 6/5.7                                                                                                   | 7.3/7                  | 8.2/7.9                | 9.1/8.7                | 10/9.6                 |
| Max. AC Output Current (A)                         | 6/5.7                                                                                                   | 7.3/7                  | 8.2/7.9                | 9.1/8.7                | 10/9.6                 |
| Rated Output Voltage/Range (V)                     | 220/230 0.85Un-1.1Un                                                                                    |                        |                        |                        |                        |
| Grid Connection Form                               | L/N/PE                                                                                                  |                        |                        |                        |                        |
| Rated Output Grid Frequency/Range(Hz)              | 50/45-55, 60/55-65                                                                                      |                        |                        |                        |                        |
| Max. Unit per Branch                               | 5                                                                                                       | 4                      | 3                      | 3                      | 3                      |
| Power Factor Adjustment Range                      | 0.9 leading-0.9 lagging                                                                                 |                        |                        |                        |                        |
| Total Current Harmonic Distortion THDi             | <3%                                                                                                     |                        |                        |                        |                        |
| DC Injection Current                               | <0.5%In                                                                                                 |                        |                        |                        |                        |
| Efficiency                                         |                                                                                                         |                        |                        |                        |                        |
| Max. Efficiency                                    | 96.5%                                                                                                   |                        |                        |                        |                        |
| Euro Efficiency                                    | 96.0%                                                                                                   |                        |                        |                        |                        |
| MPPT Efficiency                                    | >99%                                                                                                    |                        |                        |                        |                        |
| Equipment Protection                               |                                                                                                         |                        |                        |                        |                        |
| DC Reverse Polarity Protection                     | Yes                                                                                                     |                        |                        |                        |                        |
| AC Output Overcurrent Protection                   | Yes                                                                                                     |                        |                        |                        |                        |
| AC Output Overvoltage Protection                   | Yes                                                                                                     |                        |                        |                        |                        |
| AC Output Short Circuit Protection                 | Yes                                                                                                     |                        |                        |                        |                        |
| Thermal Protection                                 | Yes                                                                                                     |                        |                        |                        |                        |
| Insulation Impedance Detection                     | Yes                                                                                                     |                        |                        |                        |                        |
| Anti-islanding Protection                          | Yes                                                                                                     |                        |                        |                        |                        |
| Surge Protection Level                             | TYPE II(AC)                                                                                             |                        |                        |                        |                        |
| Interface                                          |                                                                                                         |                        |                        |                        |                        |
| Communication Interface                            | Wi-Fi                                                                                                   |                        |                        |                        |                        |
| General Data                                       |                                                                                                         |                        |                        |                        |                        |
| Operating Temperature Range (°C)                   | -40 to +65°C                                                                                            |                        |                        |                        |                        |
| Permissible Ambient Humidity                       | 0-100%                                                                                                  |                        |                        |                        |                        |
| Permissible Altitude (m)                           | 2000m                                                                                                   |                        |                        |                        |                        |
| Noise (dB)                                         | ≤25                                                                                                     |                        |                        |                        |                        |
| Ingress Protection(IP) Rating                      | IP 67                                                                                                   |                        |                        |                        |                        |
| Inverter Topology                                  | Isolated                                                                                                |                        |                        |                        |                        |
| Over Voltage Category                              | OVC II(DC), OVC III(AC)                                                                                 |                        |                        |                        |                        |
| Cabinet Size (WxHxD mm)                            | 358×255.5×36.5 (Excluding Connectors and Brackets)                                                      |                        |                        |                        |                        |
| Weight (kg)                                        | 4.95                                                                                                    |                        |                        |                        |                        |
| Warranty                                           | 10 Years                                                                                                |                        |                        |                        |                        |
| Type of Cooling                                    | Natural Cooling                                                                                         |                        |                        |                        |                        |
| Grid Regulation                                    | IEC 61727,IEC 62116,CEI 0-21,EN 50549 , NRS 097,RD 140,UNE 217002,OVE-Richtlinie R25, G98,VDE-AR-N 4105 |                        |                        |                        |                        |
| Safety EMC/Standard                                | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                  |                        |                        |                        |                        |

# Micro Hybrid Inverter

SUN-BK60/80/100SG01-EU-AM2



- ✓ IP67 protection degree
- ✓ WIFI communication
- ✓ Wireless CT, Wireless Smart Switch and Wireless BMS communication
- ✓ AC couple to retrofit existing solar system
- ✓ Max. charging/discharging current 25A
- ✓ Expand two independent PV inputs
- ✓ Working in Microinverter mode or storage inverter mode
- ✓ Supports UPS load, fast switching within 4ms

## Technical Data

| Model                                                  | SUN-BK60SG01-EU-AM2                                                                                                                                                                                                                                                                                           |         | SUN-BK80SG01-EU-AM2 | SUN-BK100SG01-EU-AM2 |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------|----------------------|
| Battery Input Data                                     |                                                                                                                                                                                                                                                                                                               |         |                     |                      |
| Battery Type                                           | Lead-acid or Lithium-ion                                                                                                                                                                                                                                                                                      |         |                     |                      |
| Battery Voltage Range (V)                              | 40-60                                                                                                                                                                                                                                                                                                         |         |                     |                      |
| Max. Charging Current (A)                              | 25                                                                                                                                                                                                                                                                                                            |         |                     |                      |
| Max. Discharging Current (A)                           | 25                                                                                                                                                                                                                                                                                                            |         |                     |                      |
| Charging Strategy for Li-ion Battery                   | Self-adaption to BMS                                                                                                                                                                                                                                                                                          |         |                     |                      |
| Number of Battery Input                                | 1                                                                                                                                                                                                                                                                                                             |         |                     |                      |
| PV String Input Data                                   |                                                                                                                                                                                                                                                                                                               |         |                     |                      |
| Max. PV Access Power (W)                               | 1320                                                                                                                                                                                                                                                                                                          | 1760    | 2200                |                      |
| Max. PV Input Power (W)                                | 960                                                                                                                                                                                                                                                                                                           | 1280    | 1600                |                      |
| Max. PV Input Voltage (V)                              | 60                                                                                                                                                                                                                                                                                                            |         |                     |                      |
| Start-up Voltage (V)                                   | 25                                                                                                                                                                                                                                                                                                            |         |                     |                      |
| MPPT Voltage Range (V)                                 | 20-55                                                                                                                                                                                                                                                                                                         |         |                     |                      |
| Rated PV Input Voltage (V)                             | 42.5                                                                                                                                                                                                                                                                                                          |         |                     |                      |
| Max. Operating PV Input Current (A)                    | 18+18                                                                                                                                                                                                                                                                                                         |         |                     |                      |
| Max. Input Short-Circuit Current (A)                   | 27+27                                                                                                                                                                                                                                                                                                         |         |                     |                      |
| No. of MPP Trackers/<br>No. of Strings per MPP Tracker | 2/1                                                                                                                                                                                                                                                                                                           |         |                     |                      |
| AC Input/Output Data                                   |                                                                                                                                                                                                                                                                                                               |         |                     |                      |
| Rated AC Input/Output Active Power (W)                 | 600                                                                                                                                                                                                                                                                                                           | 800     | 1000                |                      |
| Max. AC Input/Output Active Power (W)                  | 660                                                                                                                                                                                                                                                                                                           | 880     | 1100                |                      |
| Max. AC Input/Output Apparent Power (VA)               | 660                                                                                                                                                                                                                                                                                                           | 880     | 1100                |                      |
| Rated AC Input/Output Current (A)                      | 2.8/2.7                                                                                                                                                                                                                                                                                                       | 3.7/3.5 | 4.6/4.4             |                      |
| Max. AC Input/Output Current (A)                       | 3/2.9                                                                                                                                                                                                                                                                                                         | 4/3.9   | 5/4.8               |                      |
| Max. Continuous AC Passthrough (grid to load) (A)      | 10                                                                                                                                                                                                                                                                                                            |         |                     |                      |
| Peak Power (off-grid) (W)                              | 2 times of rated power, 10s                                                                                                                                                                                                                                                                                   |         |                     |                      |
| Power Factor Adjustment Range                          | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                                    |         |                     |                      |
| Rated Input/Output Voltage/Range (V)                   | 220/230 0.85Un-1.1Un                                                                                                                                                                                                                                                                                          |         |                     |                      |
| Rated Input/Output Grid Frequency/Range(Hz)            | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                            |         |                     |                      |
| Grid Connection Form                                   | L+N+PE                                                                                                                                                                                                                                                                                                        |         |                     |                      |
| Total Current Harmonic Distortion THDi                 | <3% (of nominal power)                                                                                                                                                                                                                                                                                        |         |                     |                      |
| DC Injection Current                                   | <0.5% In                                                                                                                                                                                                                                                                                                      |         |                     |                      |
| Efficiency                                             |                                                                                                                                                                                                                                                                                                               |         |                     |                      |
| Max. Efficiency                                        | 96.5%                                                                                                                                                                                                                                                                                                         |         |                     |                      |
| Euro Efficiency                                        | 96.0%                                                                                                                                                                                                                                                                                                         |         |                     |                      |
| MPPT Efficiency                                        | >99%                                                                                                                                                                                                                                                                                                          |         |                     |                      |
| Equipment Protection                                   |                                                                                                                                                                                                                                                                                                               |         |                     |                      |
| Integrated                                             | DC Reverse Polarity Protection, AC Output Overcurrent Protection<br>AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection<br>Insulation Impedance Detection, DC Component Monitoring, Ground Fault Current Monitoring<br>Anti-islanding Protection, Surge protection level |         |                     |                      |
| Surge Protection Level                                 | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                      |         |                     |                      |
| General Data                                           |                                                                                                                                                                                                                                                                                                               |         |                     |                      |
| Operating Temperature Range (°C)                       | -40 to +65°C, >45°C Derating                                                                                                                                                                                                                                                                                  |         |                     |                      |
| Permissible Ambient Humidity                           | 0-100%                                                                                                                                                                                                                                                                                                        |         |                     |                      |
| Permissible Altitude                                   | 2000m                                                                                                                                                                                                                                                                                                         |         |                     |                      |
| Noise (dB)                                             | ≤25                                                                                                                                                                                                                                                                                                           |         |                     |                      |
| Ingress Protection(IP) Rating                          | IP 67                                                                                                                                                                                                                                                                                                         |         |                     |                      |
| Inverter Topology                                      | Isolated                                                                                                                                                                                                                                                                                                      |         |                     |                      |
| Over Voltage Category                                  | OVC II(DC), OVC III(AC)                                                                                                                                                                                                                                                                                       |         |                     |                      |
| Communication                                          | Wi-Fi, Lora, Bluetooth                                                                                                                                                                                                                                                                                        |         |                     |                      |
| Cabinet Size (WxHxD mm)                                | 364.5×183×32.85 (Excluding Connectors and Brackets)                                                                                                                                                                                                                                                           |         |                     |                      |
| Weight (kg)                                            | 4.3                                                                                                                                                                                                                                                                                                           |         |                     |                      |
| Type of Cooling                                        | Natural Cooling                                                                                                                                                                                                                                                                                               |         |                     |                      |
| Warranty                                               | 10 Years/15 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy                                                                                                                                                                           |         |                     |                      |
| Grid Regulation                                        | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, VDE-AR-N 4105                                                                                                                                                                                                                     |         |                     |                      |
| Safety / EMC Standard                                  | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                                                                                                                                                                                                                        |         |                     |                      |

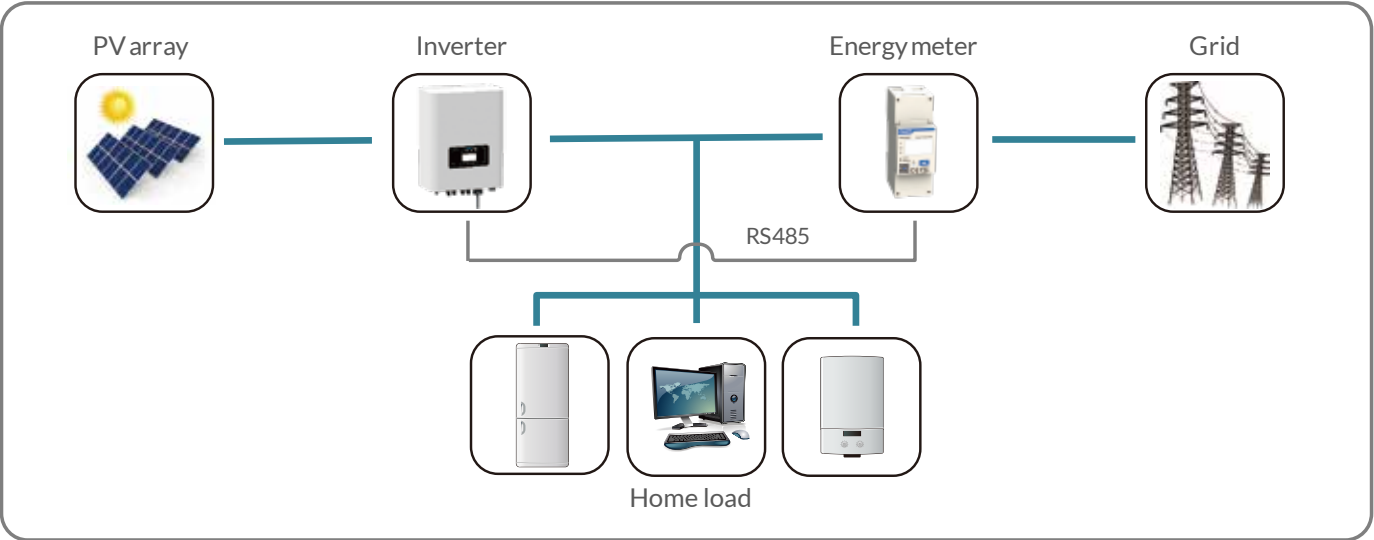
# Energy Meter



## Technical Data

| Model                                           | CHNT DDSU666 | CHNT DTSU666 | EASTRON SDM<br>230 Modbus | EASTRON SDM<br>630-Modbus V2 | EASTRON SDM<br>630 MCT |
|-------------------------------------------------|--------------|--------------|---------------------------|------------------------------|------------------------|
| Battery Data                                    |              |              |                           |                              |                        |
| Max. direct current measurement (A)             | 60           | 80           | 100                       | 100                          | 1-9999A (with CT)      |
| Direct Voltage measurement<br>between phases    | /            | 176-458V     | /                         | 147-480V                     | 50-950V                |
|                                                 |              |              |                           |                              | 50-550V                |
| Direct measurement between<br>phase and neutral | 176-264V     | 100-265V     | 176-276V                  | 85-480V                      | 20-550V                |
| Accuracy Class                                  |              |              |                           |                              |                        |
| Active power                                    | Class1       |              |                           |                              |                        |
| Reactive power                                  | Class2       |              |                           |                              |                        |
| Power Supply                                    |              |              |                           |                              |                        |
| Power consumption                               | ≤1W / 8VA    | ≤1.5W / 6VA  | ≤2W / 10VA                | ≤2W / 10VA                   | ≤2W / 10VA             |
| AC power supply input voltage                   | 176-264V     | 100-265V     | 176-276V                  | 85-480V                      | 85-275V / 120-380V     |
| AC power supply input frequency                 | 50/60Hz      |              | 50Hz                      | 50/60Hz ±2%                  | 50/60Hz ±2%            |
| Generation Specifications                       |              |              |                           |                              |                        |
| Dimenstions (L/H/W) in mm                       | 36×85×66     | 100×72×66    | 36×99×63                  | 72×100×66                    | 72×94.5×65             |
| Weight (kg)                                     | 0.21         | 0.44         | 0.21                      | 0.42                         | 0.29                   |
| Mounting options                                | DIN Rail     |              |                           |                              |                        |
| Degree of protection                            | IP51         |              |                           |                              |                        |
| Display                                         | LCD          |              |                           |                              |                        |
| Communication interface                         | RS485        |              |                           |                              |                        |
| Max. number of devices to connect               | 32           |              |                           |                              |                        |
| Regulated working temperature range             | -25-55℃      | -10-45℃      | -25-55℃                   |                              |                        |
| Limited working temperature range               | -40-70℃      | 25-75℃       | /                         |                              |                        |
| Humidity                                        | ≤75%         |              | 0~95%, non-Condensing     |                              |                        |
| Warranty                                        | 1.5 years    |              |                           |                              |                        |

## Typical Application Diagram



# Stick Logger

## GPRS / WIFI / 4G / Ethernet

Monitor your system anywhere in the world.



- ◆ External light indicator, logging status at a glance;
- ◆ Plug & play, pick power within inverter, no external power needed, easy to install;
- ◆ Independent from inverter to protect parts inside inverter, eliminate potential problems;
- ◆ IP65 water-proof design, resistant to bad weather, enhance stability;
- ◆ External design, easier to replace faulty equipment;
- ◆ End-user can monitor yields at any time with Deye Cloud.

### Technical Data

| Product Model                  | LSG-3                                    | LSG-4                                    | LSW-3                       | LS4G-3                        | LSE-3                        |
|--------------------------------|------------------------------------------|------------------------------------------|-----------------------------|-------------------------------|------------------------------|
| Remote Communication Interface | GPRS                                     | GPRS                                     | WiFi                        | 4G                            | LAN                          |
| Working Frequency              | GSM850 / EGSM900 / DCS1800 / PCS 1900MHz | GSM850 / EGSM900 / DCS1800 / PCS 1900MHz | 2.142GHz-2.484GHz           | 704MHZ-960MHZ 1710MHZ-2690MHZ | Adaptive Network; 10M / 100M |
| Satellite Positioning          | /                                        | GPS / Beidou < 15m                       | /                           | /                             | /                            |
| Antenna                        | External GPRS Stick Antenna              | External GPRS Stick Antenna              | External WiFi Stick Antenna | External 4G Stick Antenna     | /                            |
| Data Interface                 | RS485 / RS232 / TTL                      |                                          |                             |                               |                              |
| Working Voltage                | DC4.7V~DC15V                             |                                          |                             |                               |                              |
| Working Power                  | 3W                                       | 3W                                       | 1.5W                        | 5W                            | 1W                           |
| SIM Card                       | Chip Card / MicroSIM                     | Chip Card / MicroSIM                     | /                           | MicroSIM                      | /                            |
| Memory                         | 2M Flash (2M-16M Optional)               |                                          |                             |                               |                              |
| Working Temperature            | -40°C-85°C                               |                                          |                             |                               |                              |
| Working Humidity               | < 90% (No Condensing)                    |                                          |                             |                               |                              |
| No.of Connections              | One                                      |                                          |                             |                               |                              |
| Serial Communication Rate      | bps (1200-115200bps Configurable)        |                                          |                             |                               |                              |
| Data Acquisition Interval      | Default 5min (1-15min Configurable)      |                                          |                             |                               |                              |
| User Configuration             | AT+InstructionSet                        |                                          |                             |                               |                              |
|                                | Remote Server                            |                                          |                             |                               |                              |
|                                | Bluetooth                                |                                          | APP / Web                   | Local Serial Port             | Web                          |
| Firmware Upgrade               | Remote Upgrade                           |                                          |                             |                               |                              |
| Others                         | Real-time Control, Data resuming         |                                          |                             |                               |                              |

Stick logger supports GPRS, WIFI, 4G, Ethernet and other communication modes. Its bluetooth function enables local debugging configuration to collect operation and power generation data from inverters. It pairs with Deye Cloud professional platform to enable remote PV system monitoring and to realize distributed power station management with lower cost and higher efficiency.

# Deye Cloud



Support the establishment, data collection, monitoring, operation, maintenance, and after-sales services for new energy power stations like photovoltaic, energy storage, and micro-inverters.

The Deye Smart Cloud Big Data platform enables transparent management of all power station types, enhancing their value. It offers a variety of power station and equipment types, comprehensive monitoring, efficient troubleshooting, intelligent data analysis, energy flow visualization, and diverse management modes.

Additionally, our new data center feature allows collaboration with merchants for shared operation and maintenance, ensuring power station security and stability.



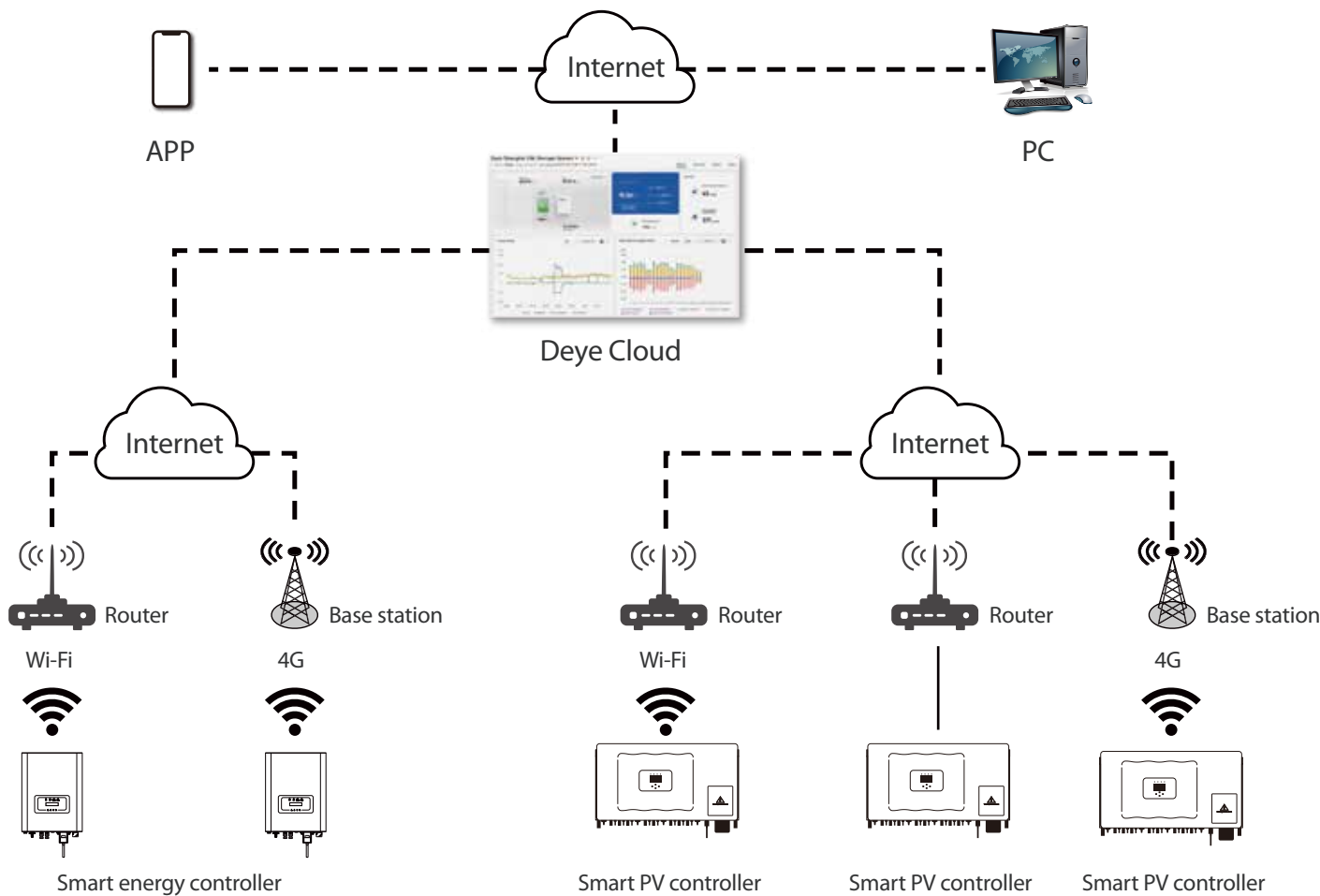
All in one

- Supports multiple devices such as photovoltaic, batteries, wind turbines, power grids, micro-inverters, diesel generators, loads, UPS, and Smartload in all aspects;
- Supports both business users and owners in one APP.



Security

- Separate data centers in Europe and America;
- Comply with ETSI/EN 303645, GDPR.





- ▶ 20kW
- ▶ Germany
- ▶ SUN-10K-G



- ▶ 220kW
- ▶ China
- ▶ SUN-110K-G



- ▶ 5kW
- ▶ Australia
- ▶ SUN-5K-G

## Project cases



- ▶ 660kW
- ▶ Ching
- ▶ SUN-110K-G



- ▶ 50kW
- ▶ Brazil
- ▶ SUN-25K-G

# Project cases



- ▶ 320kW
- ▶ Brazil
- ▶ SUN-80K-G



- ▶ 16kW
- ▶ South Africa
- ▶ SUN-8K-SG



- ▶ 150kW
- ▶ South Africa
- ▶ SUN-50K-SG

- ▶ 32kW
- ▶ South Africa
- ▶ SUN-8K-SG



- ▶ 6kW
- ▶ Italy
- ▶ SUN-6K-SG

# Project cases



- ▶ 48kW
- ▶ Lebanon
- ▶ SUN-12K-SG



- ▶ 12kW
- ▶ Myanmar
- ▶ SUN-12K-SG

- ▶ 120kW
- ▶ Philippines
- ▶ SUN-12K-SG



- ▶ 50kW
- ▶ India
- ▶ SUN-50K-SG



- ▶ 12kW
- ▶ Vietnam
- ▶ SUN-12K-SG