



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

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Deye Inverter



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Company Profile

1

Ningbo Deye Inverter Technology Co., Ltd, founded in 2007 with registered capital 56 million USD, is one of the China's high-tech enterprises and a subsidiary of Deye Group. With a plant area over 600,000m² 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-50kW, and microinverter 300W-2200W.

3

As a technology-oriented company, Deye has always been committing to research and develop 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.

4

Deye New Energy Australia, a subsidiary of Deye, is focused on serving our local Australian clients better. We are establishing local warehouses and on-site technical services to enhance operations and ensure prompt, efficient service tailored to our customers' needs.

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 South Africa, 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

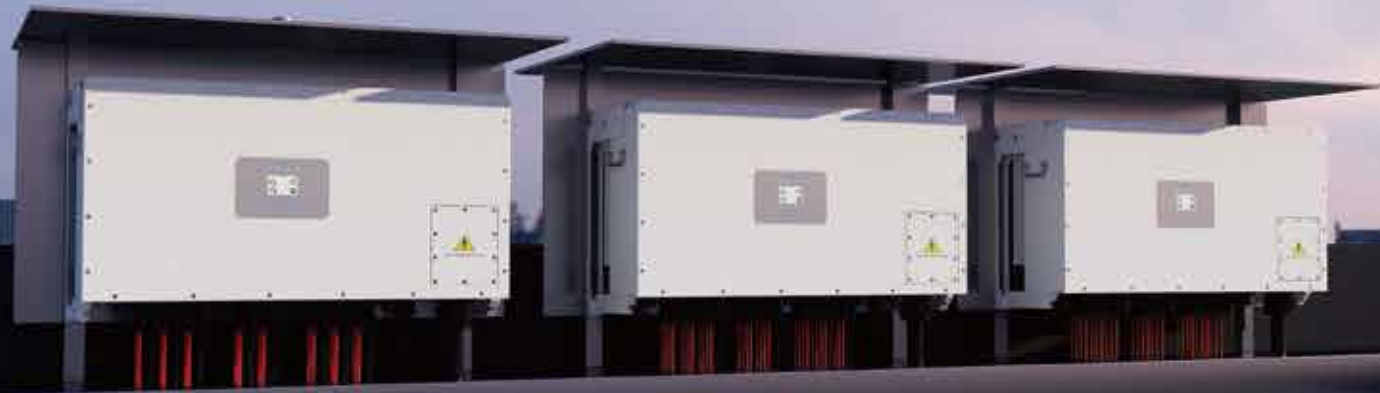
- ◆ Automatic switching time 4ms
- ◆ 6 time periods for battery charging/discharging
- ◆ V/f droop control, Max. 16pcs in parallel
- ◆ Supports using diesel generator to charge battery directly, ensuring system energy supply 7* 24H
- ◆ Max. conversion efficiency of 97.6%; Max. battery charge efficiency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



Core Features

Deye grid-connected inverter 1-136kW

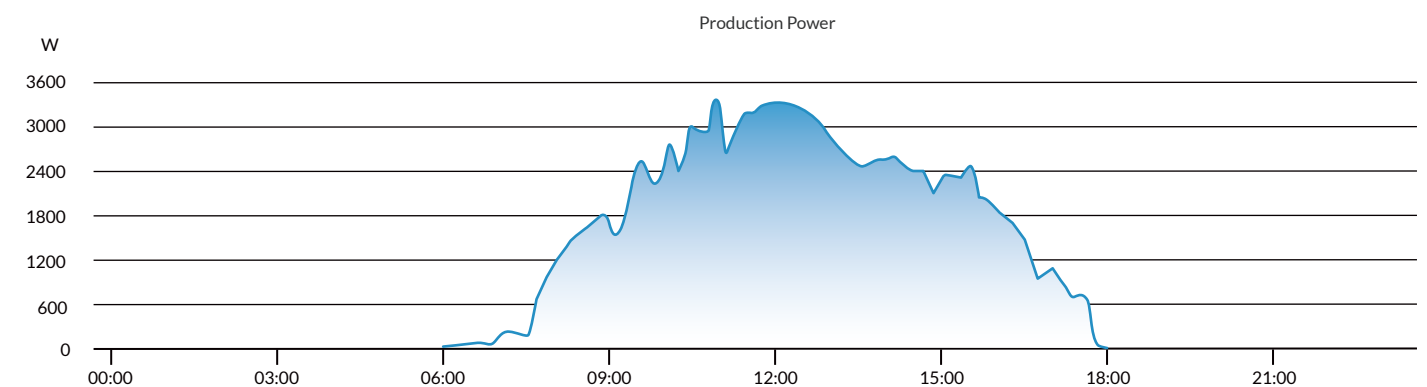
- ◆ Max. 8 MPP trackers, Max. efficiency up to 98.9%
- ◆ High DC/AC ratio 1.5 times for more yields
- ◆ Wide output voltage range 277-520Vac
- ◆ Zero export application, response speed within 0.5S
- ◆ T-type three-level topology and enhanced SVPWM
- ◆ Type II DC / AC SPD, frequency droop control technology
- ◆ 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 700W 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

SUN-3K-G04-AU



-  1 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-3K-G04-AU
PV String Input Data	
Max. PV Input Power (kW)	4.5
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
Max. Input Short Circuit Current (A)	19.5
No. of MPP Trackers/ No. of Strings MPP Tracker	1/1
AC Output Data	
Rated AC Output Active Power(kW)	3
Max. AC Output Apparent Power(kVA)	3
Rated AC Output current (A)	13
Max. AC Output Current(A)	13
Rated Output voltage/range (V)	230 0.85Un-1.1Un
Grid Connection Form	L/N/PE
Rated Output Grid Frequency/range(Hz)	50Hz/45Hz-55Hz
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	97.5%
Euro Efficiency	97%
MPPT Efficiency	>99%
Equipment Protection	
DC Polarity Reverse Connection Protection	Yes
AC Output Overcurrent Protection	Yes
AC Output Overvoltage Protection	Yes
AC Output Short Circuit Protection	Yes
Thermal Protection	Yes
DC Terminal Insulation Impedance Monitoring	Yes
DC Component Monitoring	Yes
Ground Fault Current Monitoring	Yes
Arc Fault Circuit Interrupter (AFCI)	Optional
Power Network Monitoring	Yes
Island Protection Monitoring	Yes
Earth Fault Detection	Yes
Overvoltage Load Drop Protection	Yes
Residual Current (RCD) Detection	Yes
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)	-25 to +65°C, >45°C Derating
Permissible Ambient Humidity	0-100%
Permissible Altitude (m)	2000m
Noise (dB)	≤ 35 dB(A)
Ingress Protection(IP) Rating	IP 65
Inverter Topology	Transformerless
Over Voltage Category	OVC II(DC), OVC III(AC)
Cabinet Size (mm)	280W×310H×184 D (Excluding Connectors and Brackets)
Weight (kg)	4.8
Warranty	10 Years
Type of Cooling	Natural Cooling
Grid Regulation	AS/NZS 4777.2
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2

Single Phase String Inverter

SUN-3.6/5/6K-G04-AU



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-AU		SUN-5K-G04-AU	SUN-6K-G04-AU
PV String Input Data				
Max. PV Input Power (kW)	5.4	7.5	9	
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/ No. of Strings MPP Tracker	2/1			
AC Output Data				
Rated AC Output Active Power(kW)	3.6	5	6	
Max. AC Output Apparent Power(kVA)	3.6	5	6	
Rated AC Output current (A)	13	21.7	26.1	
Max. AC Output Current(A)	13	21.7	26.1	
Rated Output voltage/range (V)	230 0.85Un-1.1Un			
Grid Connection Form	L/N/PE			
Rated Output Grid Frequency/range(Hz)	50Hz/45Hz-55Hz			
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%		
MPPT Efficiency	>99%			
Equipment Protection				
DC Polarity Reverse Connection Protection	Yes			
AC Output Overcurrent Protection	Yes			
AC Output Overvoltage Protection	Yes			
AC Output Short Circuit Protection	Yes			
Thermal Protection	Yes			
DC Terminal Insulation Impedance Monitoring	Yes			
DC Component Monitoring	Yes			
Ground Fault Current Monitoring	Yes			
Arc Fault Circuit Interrupter (AFCI)	Optional			
Power Network Monitoring	Yes			
Island Protection Monitoring	Yes			
Earth Fault Detection	Yes			
Overvoltage Load Drop Protection	Yes			
Residual Current (RCD) Detection	Yes			
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)	-25 to +65°C, >45°C Derating			
Permissible Ambient Humidity	0-100%			
Permissible Altitude (m)	2000m			
Noise (dB)	≤ 35 dB(A)			
Ingress Protection(IP) Rating	IP 65			
Inverter Topology	Transformerless			
Over Voltage Category	OVC II(DC), OVC III(AC)			
Cabinet Size (mm)	330W×323H×190D (Excluding Connectors and Brackets)			
Weight (kg)	8			
Warranty	10 Years			
Type of Cooling	Natural Cooling			
Grid Regulation	AS/NZS 4777.2			
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-AU-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-AU-AM2		SUN-7.5K-G02P1-AU-AM2		SUN-8K-G02P1-AU-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/ 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		7.5		8	
Rated AC Output Current (A)	30.5		32.7		34.8	
Max. AC Output Current (A)	30.5		32.7		34.8	
Rated Output Voltage/Range (V)	230 0.85Un-1.1Un					
Grid Connection Form	L/N/PE					
Rated Output Grid Frequency/Range(Hz)	50/45-55					
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 Polarity Reverse Connection Protection	Yes					
AC Output Overcurrent Protection	Yes					
AC Output Overvoltage Protection	Yes					
AC Output Short Circuit Protection	Yes					
Thermal Protection	Yes					
DC Terminal Insulation Impedance Monitoring	Yes					
DC Component Monitoring	Yes					
Ground Fault Current Monitoring	Yes					
Arc Fault Circuit Interrupter (AFCI)	Optional					
Power Network Monitoring	Yes					
Island Protection Monitoring	Yes					
Earth Fault Detection	Yes					
Overvoltage Load Drop Protection	Yes					
Residual Current (RCD) Detection	Yes					
Surge Protection Level	TYPE II(DC), TYPE II(AC)					
Interface						
Communication Interface	RS485					
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	Transformerless					
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	10 Years					
Type of Cooling	Natural Cooling					
Grid Regulation	AS/NZS 4777.2					
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-AU-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-AU-AM2		SUN-10K-G02P1-AU-AM2	SUN-10.5K-G02P1-AU-AM2
PV String Input Data				
Max. PV Input Power (kW)	13.5	15	15.75	
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/ No. of Strings MPP Tracker	2/2+2			
AC Output Side				
Rated AC Output Active Power (kW)	9	9.99	10.5	
Max. AC Output Apparent Power (kVA)	9	9.99	10.5	
Rated AC Output Current (A)	39.2	43.5	45.7	
Max. AC Output Current (A)	39.2	43.5	45.7	
Rated Output Voltage/Range (V)	230 0.85Un-1.1Un			
Grid Connection Form	L/N/PE			
Rated Output Grid Frequency/Range(Hz)	50/45-55,			
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	97.7%			
Euro Efficiency	97.2%			
MPPT Efficiency	>99%			
Equipment Protection				
DC Polarity Reverse Connection Protection	Yes			
AC Output Overcurrent Protection	Yes			
AC Output Overvoltage Protection	Yes			
AC Output Short Circuit Protection	Yes			
Thermal Protection	Yes			
DC Terminal Insulation Impedance Monitoring	Yes			
DC Component Monitoring	Yes			
Ground Fault Current Monitoring	Yes			
Arc Fault Circuit Interrupter (AFCI)	Optional			
Power Network Monitoring	Yes			
Island Protection Monitoring	Yes			
Earth Fault Detection	Yes			
Overvoltage Load Drop Protection	Yes			
Residual Current (RCD) Detection	Yes			
Surge Protection Level	TYPE II(DC), TYPE II(AC)			
Interface				
Communication Interface	RS485			
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	Transformerless			
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	10 Years			
Type of Cooling	Natural Cooling			
Grid Regulation	AS/NZS 4777.2			
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2			

Three Phase String Inverter

SUN-3/5/6/8/10/12K-G05-AU



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-3K -G05-AU	SUN-5K -G05-AU	SUN-6K -G05-AU	SUN-8K -G05-AU	SUN-10K -G05-AU	SUN-12K -G05-AU
PV String Input Data						
Max. PV Input Power (kW)	4.5	7.5	9	12	15	18
Max. PV Input Voltage (V)	550					
Start-up Voltage (V)	80					250
MPPT Voltage Range (V)	70-500					200~850
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/ No. of Strings MPP Tracker	2/1					
AC Output Data						
Rated AC Output Active Power(kW)	3	5	6	8	10	12
Max. AC Output Apparent Power(kVA)	3	5	6	8	10	12
Rated AC Output current (A)	4.3	7.2	7.8	11.6	14.5	17.4
Max. AC Output Current(A)	4.3	7.2	7.8	11.6	14.5	17.4
Rated Output voltage/range (V)	230V/400V 240V/415V 0.85Un-1.1Un					
Grid Connection Form	3L/N/PE					
Rated Output Grid Frequency/range(Hz)	50Hz/45Hz-55Hz					
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	97.1%	98.2%		98.3%		
Euro Efficiency	97.5%	97.6%		97.8%		
MPPT Efficiency	>99%					
Equipment Protection						
DC Polarity Reverse Connection Protection	Yes					
AC Output Overcurrent Protection	Yes					
AC Output Overvoltage Protection	Yes					
AC Output Short Circuit Protection	Yes					
Thermal Protection	Yes					
DC Terminal Insulation Impedance Monitoring	Yes					
DC Component Monitoring	Yes					
Ground Fault Current Monitoring	Yes					
Arc Fault Circuit Interrupter (AFCI)	Optional					
Power Network Monitoring	Yes					
Island Protection Monitoring	Yes					
Earth Fault Detection	Yes					
Overvoltage Load Drop Protection	Yes					
Residual Current (RCD) Detection	Yes					
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)	-25 to +65°C, >45°C Derating					
Permissible Ambient Humidity	0-100%					
Permissible Altitude (m)	4000m					
Noise (dB)	≤ 30 dB(A)					
Ingress Protection(IP) Rating	IP 65					
Inverter Topology	Transformerless					
Over Voltage Category	OVC II(DC), OVC III(AC)					
Cabinet Size (mm)	332W×457H×203D (Excluding Connectors and Brackets)					
Weight (kg)	11					
Warranty	10 Years					
Type of Cooling	Natural Cooling					
Grid Regulation	AS/NZS 4777.2					
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2					

Three Phase String Inverter

SUN-15K-G05-AU



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-15K-G05-AU		
PV String Input Data			
Max. PV Input Power (kW)	22.5		
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)	13+26		
Max. Input Short Circuit Current (A)	19.5+39		
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+2		
AC Output Data			
Rated AC Output Active Power(kW)	15		
Max. AC Output Apparent Power(kVA)	15		
Rated AC Output current (A)	21.7		
Max. AC Output Current(A)	21.7		
Rated Output voltage/range (V)	230V/400V	240V/415V	0.85Un-1.1Un
Grid Connection Form	3L/N/PE		
Rated Output Grid Frequency/range(Hz)	50Hz/45Hz-55Hz		
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	90%		
MPPT Efficiency	>99%		
Equipment Protection			
DC Polarity Reverse Connection Protection	Yes		
AC Output Overcurrent Protection	Yes		
AC Output Overvoltage Protection	Yes		
AC Output Short Circuit Protection	Yes		
Thermal Protection	Yes		
DC Terminal Insulation Impedance Monitoring	Yes		
DC Component Monitoring	Yes		
Ground Fault Current Monitoring	Yes		
Arc Fault Circuit Interrupter (AFCI)	Optional		
Power Network Monitoring	Yes		
Island Protection Monitoring	Yes		
Earth Fault Detection	Yes		
Overvoltage Load Drop Protection	Yes		
Residual Current (RCD) Detection	Yes		
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)	-25 to +65°C, >45°C Derating		
Permissible Ambient Humidity	0-100%		
Permissible Altitude (m)	4000m		
Noise (dB)	≤ 40 dB(A)		
Ingress Protection(IP) Rating	IP 65		
Inverter Topology	Transformerless		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Cabinet Size (mm)	332W×472H×203D (Excluding Connectors and Brackets)		
Weight (kg)	15		
Warranty	10 Years		
Type of Cooling	Natural Cooling		
Grid Regulation	AS/NZS 4777.2		
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		

Three Phase String Inverter

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



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-18K-G05-AU	SUN-20K-G05-AU	SUN-22K-G05-AU	SUN-23K-G05-AU	SUN-25K-G05-AU
PV String Input Data					
Max. PV Input Power (kW)	27	30	33	34.5	37.5
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)	26+26				
Max. Input Short Circuit Current (A)	39+39				
No. of MPP Trackers/ No. of Strings MPP Tracker	2/2+2				
AC Output Data					
Rated AC Output Active Power(kW)	18	20	22	23	25
Max. AC Output Apparent Power(kVA)	18	20	22	23	25
Rated AC Output current (A)	26.1	29	31.9	33.4	36.2
Max. AC Output Current(A)	26.1	29	31.9	33.4	36.2
Rated Output voltage/range (V)	230V/400V 240V/415V 0.85Un-1.1Un				
Grid Connection Form	3L/N/PE				
Rated Output Grid Frequency/range(Hz)	50Hz/45Hz-55Hz				
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 Polarity Reverse Connection Protection	Yes				
AC Output Overcurrent Protection	Yes				
AC Output Overvoltage Protection	Yes				
AC Output Short Circuit Protection	Yes				
Thermal Protection	Yes				
DC Terminal Insulation Impedance Monitoring	Yes				
DC Component Monitoring	Yes				
Ground Fault Current Monitoring	Yes				
Arc Fault Circuit Interrupter (AFCI)	Optional				
Power Network Monitoring	Yes				
Island Protection Monitoring	Yes				
Earth Fault Detection	Yes				
Overvoltage Load Drop Protection	Yes				
Residual Current (RCD) Detection	Yes				
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)	-25 to +65°C, >45°C Derating				
Permissible Ambient Humidity	0-100%				
Permissible Altitude (m)	4000m				
Noise (dB)	≤ 50 dB(A)				
Ingress Protection(IP) Rating	IP 65				
Inverter Topology	Transformerless				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Cabinet Size (mm)	362W×527H×220D (Excluding Connectors and Brackets)				
Weight (kg)	20				
Warranty	10 Years				
Type of Cooling	Natural Cooling				
Grid Regulation	AS/NZS 4777.2				
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				

Single Phase Hybrid Inverter

SUN-3/3.6/5/6K-SG04LP1-AU



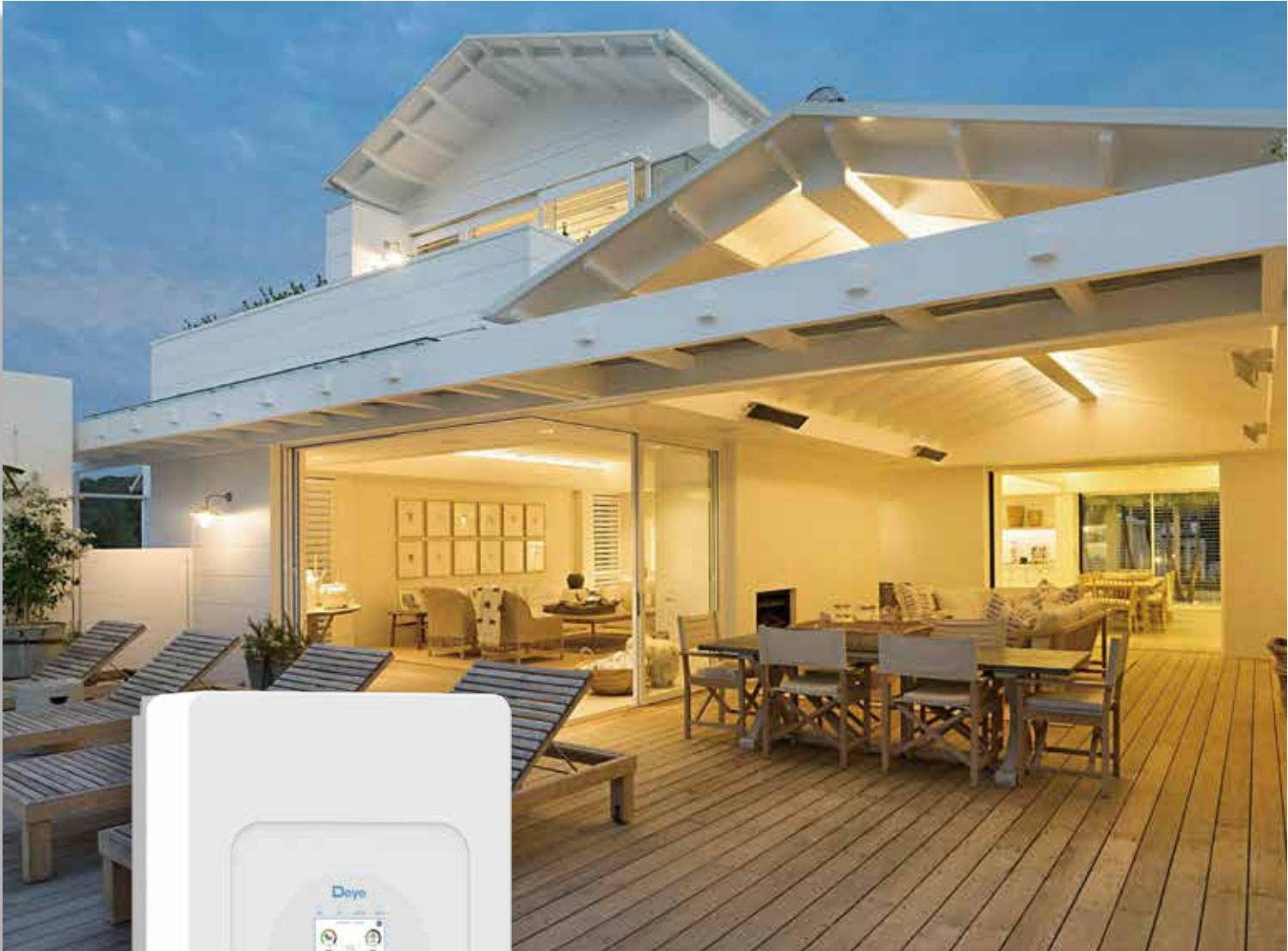
-  Colorful touch LCD, IP65 protection degree
-  AC couple to retrofit existing solar system
-  Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
-  Max. charging/discharging current of 135A
-  6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

Technical Data

Model	SUN-3K -SG04LP1-24-AU	SUN-3K -SG04LP1-AU	SUN-3.6K -SG04LP1-AU	SUN-5K -SG04LP1-AU	SUN-6K -SG04LP1-AU
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range (V)	20-30	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. DC Input Power (W)	4500	4500	5400	7500	9000
Rated PV Input Voltage (V)	500				
Start-up Voltage (V)	125				
MPPT Voltage Range (V)	150-425				
Rated DC Input Voltage(V)	370				
Max. Operating PV Input Current (A)	13	13+13			
Max. Input Short-Circuit Current (A)	19.5	19.5+19.5			
No. of MPP Trackers/ No. of Strings MPP Tracker	1/1	2/1+1			
AC Output Data					
Rated AC Output Active Power (W)	3000		3600	5000	6000
Max AC Output Active Power (W)	3000		3600	5000	6000
AC Output Rated Current (A)	13		15.7	21.7	26.1
Max. AC Output Current (A)	13		15.7	21.7	26.1
Max. Continuous AC Passthrough (A)	35				40
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated Input/Output Voltage/Range (V)	230 /240 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz				
Grid Connection Form	L+N+PE				
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)				
DC Current Injection	<0.5% In				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	96.50%				
MPPT Efficiency	99.90%				
Protection					
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
Communication Interface	RS485/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 dB				
Inverter Topology (solar/battery)	Transformerless/ HF Transformer				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Weight (kg)	17				
Cabinet size (mm)	330W x 433H x229D (Excluding connectors and brackets)				
Protection Degree	IP65				
Type of Cooling	Intelligent Air Cooling				
Warranty	10 Years				
Grid Regulation	AS/NZS 4777.2				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				

Single Phase Hybrid Inverter

SUN-8K-SG05LP1-AU



Colorful touch LCD, IP65 protection degree



AC couple to retrofit existing solar system



Max. 16pcs 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-8K-SG05LP1-AU
Battery Input Data	
Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range (V)	40-60
Max. Charging Current (A)	190
Max. Discharging Current (A)	190
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
Max. DC Input Power (W)	12000
Rated PV Input Voltage (V)	500
Start-up Voltage (V)	125
MPPT Voltage Range (V)	150-425
Rated DC Input Voltage(V)	370
Max. Operating PV Input Current (A)	26+26
Max. Input Short-Circuit Current (A)	39+39
No. of MPP Trackers/ No. of Strings MPP Tracker	2/2+2
AC Output Data	
Rated AC Output Active Power (W)	8000
Max AC Output Active Power (W)	8000
AC Output Rated Current (A)	34.8
Max. AC Output Current (A)	34.8
Max. Continuous AC Passthrough (A)	50
Peak Power (off grid)	2 time of rated power, 10 S
Power Factor Adjustment Range	0.8 leading to 0.8 lagging
Rated Input/Output Voltage/Range (V)	230 /240 0.85Un-1.1Un
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz
Grid Connection Form	L+N+PE
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)
DC Current Injection	<0.5% In
Efficiency	
Max. Efficiency	97.60%
Euro Efficiency	96.50%
MPPT Efficiency	99.90%
Protection	
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level
Surge Protection Level	TYPE II(DC), TYPE II(AC)
Interface	
Communication Interface	RS485/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 dB
Inverter Topology (solar/battery)	Transformerless/ HF Transformer
Over Voltage Category	OVC II(DC), OVC III(AC)
Weight (kg)	24.9
Cabinet size (mm)	330W x 580H x232D (Excluding connectors and brackets)
Protection Degree	IP65
Type of Cooling	Intelligent Air Cooling
Warranty	10 Years
Grid Regulation	AS/NZS 4777.2
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2

Single Phase Hybrid Inverter

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



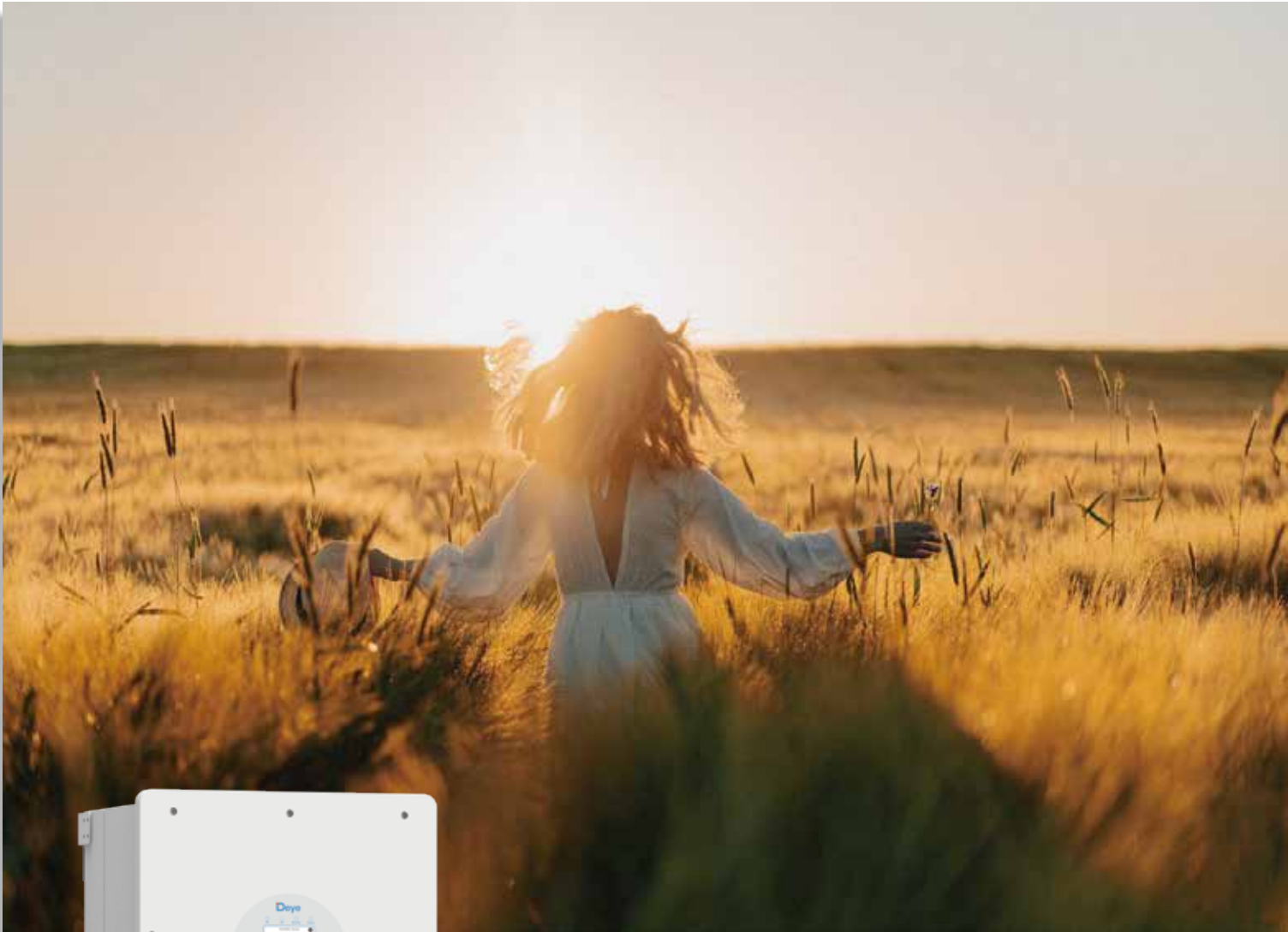
-  Colorful touch LCD, IP65 protection degree
-  AC couple to retrofit existing solar system
-  Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
-  Max. charging/discharging current of 250A
-  6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

Technical Data

Model	SUN-10K-SG02 LP1-AU-AM3	SUN-12K-SG02 LP1-AU-AM3
Battery Input Data		
Battery Type	Lead-acid or Lithium-ion	
Battery Voltage Range (V)	40-60	
Max. Charging Current (A)	220	250
Max. Discharging Current (A)	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)	20000	24000
Max. DC Input Power (W)	15000	18000
Rated PV Input Voltage (V)	500	
Start-up Voltage (V)	125	
MPPT Voltage Range (V)	150-425	
Rated DC 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/ No. of Strings MPP Tracker	3/2+2+2	
AC Output Data		
Rated AC Output Active Power (W)	9999	12000
Max. AC Input/Output Apparent Power (VA)	9999	12000
AC Output Rated Current (A)	43.5	52.2
Max. AC Output Current (A)	43.5	52.2
Max. Continuous AC Passthrough (A)	60	
Peak Power (off grid)	2 time of rated power, 10 S	
Power Factor Adjustment Range	0.8 leading to 0.8 lagging	
Rated Input/Output Voltage/Range (V)	230 /240 0.85Un-1.1Un	
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz	
Grid Connection Form	L+N+PE	
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)	
DC Current Injection	<0.5% In	
Efficiency		
Max. Efficiency	97.60%	
Euro Efficiency	96.50%	
MPPT Efficiency	99.90%	
Protection		
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level	
Surge Protection Level	TYPE II(DC), TYPE II(AC)	
Interface		
Communication Interface	RS485/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 dB	
Inverter Topology (solar/battery)	Transformerless/ HF Transformer	
Over Voltage Category	OVC II(DC), OVC III(AC)	
Weight (kg)	35.6	
Cabinet size (mm)	420W×670H×233 D (Excluding connectors and brackets)	
Protection Degree	IP65	
Type of Cooling	Intelligent Air Cooling	
Warranty	10 Year	
Grid Regulation	AS/NZS 4777.2	
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-AU



Colorful touch LCD, IP65 protection degree



AC couple to retrofit existing solar system



Max. 16pcs 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



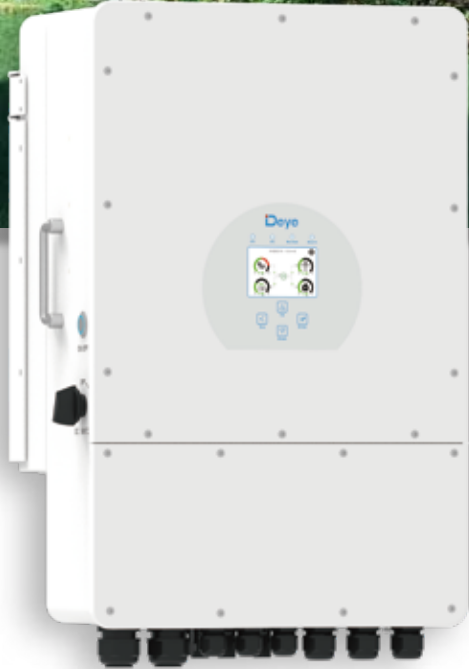
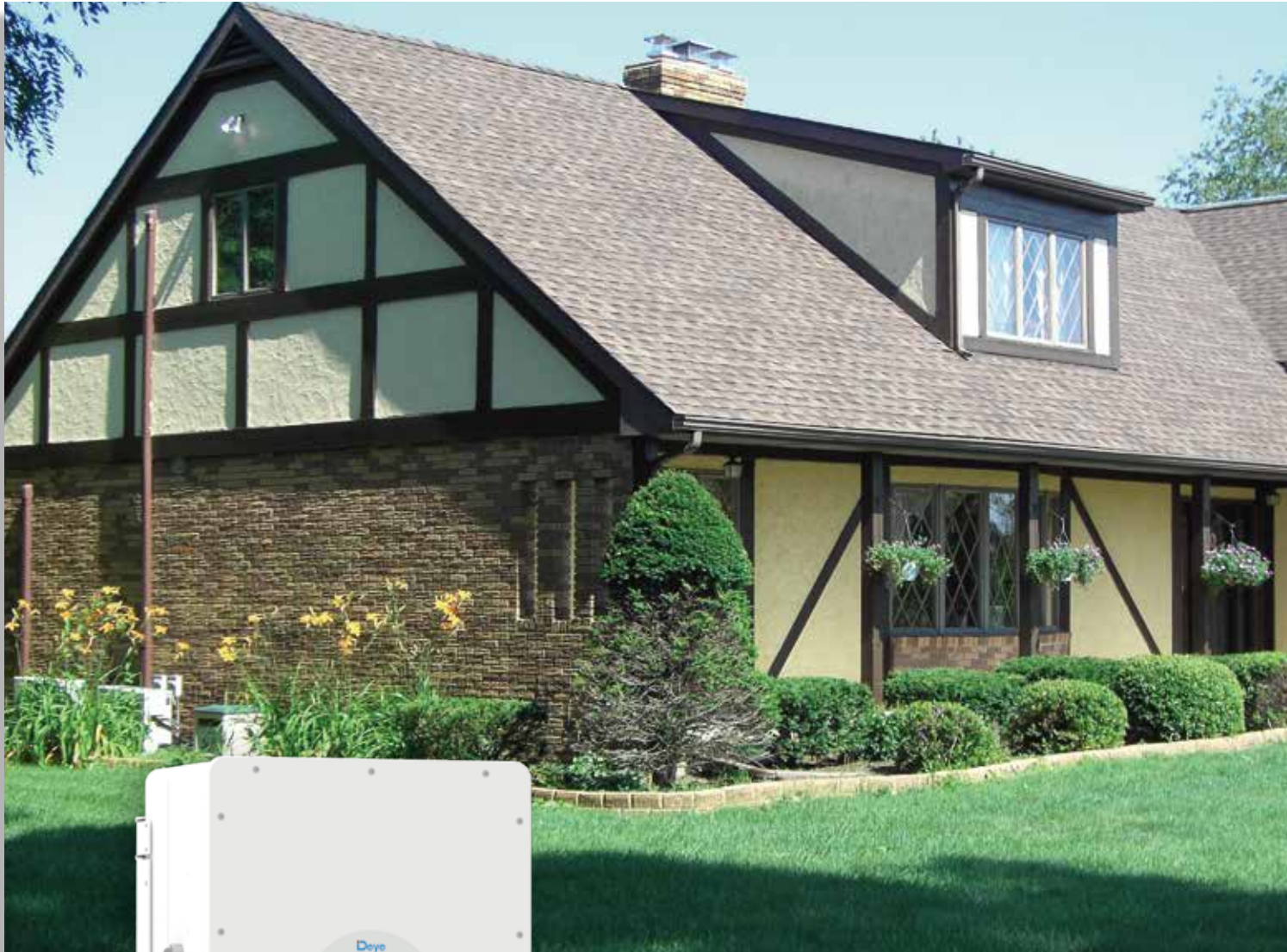
Support storing energy from diesel generator

Technical Data

Model	SUN-12K -SG01LP1-AU	SUN-14K -SG01LP1-AU	SUN-16K -SG01LP1-AU
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	1		
PV String Input Data			
Max. PV access power(W)	24000	28000	32000
Max. DC Input Power (W)	18000	21000	24000
Rated PV Input Voltage (V)	500		
Start-up Voltage (V)	125		
MPPT Voltage Range (V)	150-425		
Rated DC 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/ No. of Strings MPP Tracker	3/2+2+2		
AC Output Data			
Rated AC Output Active Power (W)	12000	14000	16000
Max AC Output Active Power (W)	12000	14000	16000
AC Output Rated Current (A)	52.2	60.9	69.6
Max. AC Output Current (A)	52.2	60.9	69.6
Max. Continuous AC Passthrough (A)	100		
Peak Power (off grid)	2 time of rated power, 10 S		
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Rated Input/Output Voltage/Range (V)	230 /240 0.85Un-1.1Un		
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz		
Grid Connection Form	L+N+PE		
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)		
DC Current Injection	<0.5% In		
Efficiency			
Max. Efficiency	97.60%		
Euro Efficiency	96.50%		
MPPT Efficiency	99.90%		
Protection			
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level		
Surge Protection Level	TYPE II(DC), TYPE II(AC)		
Interface			
Communication Interface	RS485/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 dB		
Inverter Topology (solar/battery)	Transformerless/ HF Transformer		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Weight (kg)	48		
Cabinet size (mm)	464W x 763H x282D (Excluding connectors and brackets)		
Protection Degree	IP65		
Type of Cooling	Intelligent Air Cooling		
Warranty	10 Years		
Grid Regulation	AS/NZS 4777.2		
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-AU



- 100 100% unbalanced output, each phase; Max. output up to 50% rated power
- AC couple to retrofit existing solar system
- 10 Max. 10pcs 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-5K -SG04LP3-AU	SUN-6K -SG04LP3-AU	SUN-8K -SG04LP3-AU	SUN-10K -SG04LP3-AU	SUN-12K -SG04LP3-AU
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. DC Input Power (W)	7500	9000	12000	15000	18000
Rated PV Input Voltage (V)	800				
Start-up Voltage (V)	160				
MPPT Voltage Range (V)	200-650				
Rated DC Input Voltage(V)	550				
Max. Operating PV Input Current (A)	13+13			26+13	
Max. Input Short-Circuit Current (A)	19.5+19.5			39+19.5	
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1			2/2+1	
AC Output Data					
Rated AC Output Active Power (W)	5000	6000	8000	10000	12000
Max AC Output Active Power (W)	5000	6000	8000	10000	12000
AC Output Rated Current (A)	7.2	8.7	11.6	14.5	17.4
Max. AC Output Current (A)	7.2	8.7	11.6	14.5	17.4
Max. Continuous AC Passthrough (A)	45				
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated Input/Output Voltage/Range (V)	230 /240 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz				
Grid Connection Form	3L+N+PE				
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)				
DC Current Injection	<0.5% In				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	97.0%				
MPPT Efficiency	99.90%				
Protection					
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
Communication Interface	RS485/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				
Inverter Topology (solar/battery)	Transformerless/ HF Transformer				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Noise (dB)	<55 dB				
Weight (kg)	38				
Cabinet size (mm)	422W x 658H x254D (Excluding connectors and brackets)				
Protection Degree	IP65				
Type of Cooling	Intelligent Air Cooling				
Warranty	10 Years				
Grid Regulation	AS/NZS 4777.2				
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-AU-SM2



- 100

100% unbalanced output, each phase; Max. output up to 50% rated power
- 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 -AU-SM2	SUN-15K-SG05LP3 -AU-SM2	SUN-16K-SG05LP3 -AU-SM2	SUN-18K-SG05LP3 -AU-SM2	SUN-20K-SG05LP3 -AU-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/ 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)	14000	15000	16000	18000	20000
Rated AC Input/Output Current (A)	20.3	21.8	23.2	26.1	29
Max. AC Input/Output Current (A)	20.3	21.8	23.2	26.1	29
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)	230/400V , 240/415V 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55				
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 Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
Communication Interface	RS485/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 (solar/battery)	Transformerless/ HF Transformer				
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	10 Years				
Grid Regulation	AS/NZS 4777.2				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				

Three Phase Hybrid Inverter

SUN-10/12/15/20/25K-SG01HP3-AU-AM2



- 100 100% unbalanced output, each phase
- 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 storing energy from diesel generator

Technical Data

Model	SUN-10K-SG01 HP3-AU-AM2	SUN-12K-SG01 HP3-AU-AM2	SUN-15K-SG01 HP3-AU-AM2	SUN-20K-SG01 HP3-AU-AM2	SUN-25K-SG01 HP3-AU-AM2
Battery Input Data					
Battery Type	Lithium-ion				
Battery Voltage Range (V)	160-700				
Max. Charging Current (A)	37				50
Max. Discharging Current (A)	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)	20000	24000	30000	40000	50000
Max. PV Input Power (W)	15000	18000	22500	30000	37500
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/ 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)	10000	12000	15000	20000	25000
Max. AC Input/Output Apparent Power (VA)	10000	12000	15000	20000	25000
Rated AC Input/Output Current (A)	14.5	17.4	21.8	29	36.3
Max. AC Input/Output Current (A)	14.5	17.4	21.8	29	36.3
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)	230/400V 240/415V 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range(Hz)	50Hz/45Hz-55Hz				
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 Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
Communication Interface	RS485/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	Transformerless				
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	Intelligent Air Cooling				
Warranty	10 Year				
Grid Regulation	AS/NZS 4777.2				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				

Three Phase Hybrid Inverter

SUN-29.9/35K-SG01HP3-AU-BM3
SUN-40/50K-SG01HP3-AU-BM4



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

Technical Data

Model	SUN-29.9K-SG01HP3 -AU-BM3	SUN-35K-SG01HP3 -AU-BM3	SUN-40K-SG01HP3 -AU-BM4	SUN-50K-SG01HP3 -AU-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	70000	80000	10000
Max. PV Input Power (W)	44850	52500	60000	75000
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/ 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	35000	40000	50000
Max. AC Input/Output Apparent Power (VA)	29900	35000	40000	50000
Rated AC Input/Output Current (A)	43.4	50.8	58	72.5
Max. AC Input/Output Current (A)	43.4	50.8	58	72.5
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)	230/400V 0.85Un-1.1Un			
Rated Input/Output Grid Frequency/Range(Hz)	50Hz/45Hz-55Hz			
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 Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level			
Surge Protection Level	TYPE II(DC), TYPE II(AC)			
Interface				
Communication Interface	RS485/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	Transformerless			
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	10 Years			
Grid Regulation	AS/NZS 4777.2			
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2			

Microinverter

SUN-M60/80/100G5-AU-Q1



- 30

Max. DC input current of 30A, adapt to 700W PV module
- 1 MPP tracker, module level monitoring
- Rapid shutdown function

IP67 protection degree, 10 years warranty

WIFI communication

Technical Data

Model	SUN-M60G5-AU-Q1		SUN-M80G5-AU-Q1	SUN-M100G5-AU-Q1
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)	15			
MPPT Voltage Range (V)	25-55			
Rated PV Input Voltage (V)	42.5			
Max. Operating PV Input Current (A)	30			
Max. Input Short Circuit Current (A)	45			
No. of MPP Trackers/ No. of Strings per MPP Tracker	1/2			
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)	2.7	3.5	4.4	
Max. AC Output Current (A)	2.7	3.5	4.4	
Rated Output Voltage/Range (V)	230V/240V 0.85Un-1.1Un			
Grid Connection Form	L+N+PE			
Rated Output Grid Frequency/Range(Hz)	50/45-55			
Max. Unit per Branch	8	6	5	
Power Factor Adjustment Range	0.8 leading-0.8 lagging			
Total Current Harmonic Distortion THDi	<5%			
DC Injection Current	<0.5%In			
Efficiency				
Max. Efficiency	96.5%			
Euro Efficiency	96.0%			
MPPT Efficiency	>99%			
Equipment Protection				
DC Polarity Reverse Connection Protection	Yes			
AC Output Overcurrent Protection	Yes			
AC Output Overvoltage Protection	Yes			
AC Output Short Circuit Protection	Yes			
Thermal Protection	Yes			
DC Terminal Insulation Impedance Monitoring	Yes			
Power Network Monitoring	Yes			
Island Protection Monitoring	Yes			
Earth Fault Detection	Yes			
Overvoltage Load Drop Protection	Yes			
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	HF Transformer			
Over Voltage Category	OVC II(DC), OVC IV(AC)			
Communication	WiFi			
Cabinet Size (WxHxD mm)	217.3×175.5×32.4 (Excluding Connectors and Brackets)			
Weight (kg)	2.7			
Warranty	Standard 10/15 years, extended warranty			
Type of Cooling	Natural Cooling			
Grid Regulation	AS/NZS 4777.2			
Safety EMC/Standard	IEC 62920,IEC 61000-6-1/2/3/4, IEC 62109-1, IEC 62109-2			

Microinverter

SUN-M130/160/180/200/220/225G5-AU-Q1



-  IP67 protection degree, 10 years warranty
-  WIFI communication
-  Max. DC input current of 36A, adapt to 790W PV module
-  2 MPP tracker, module level monitoring
-  Rapid shutdown function

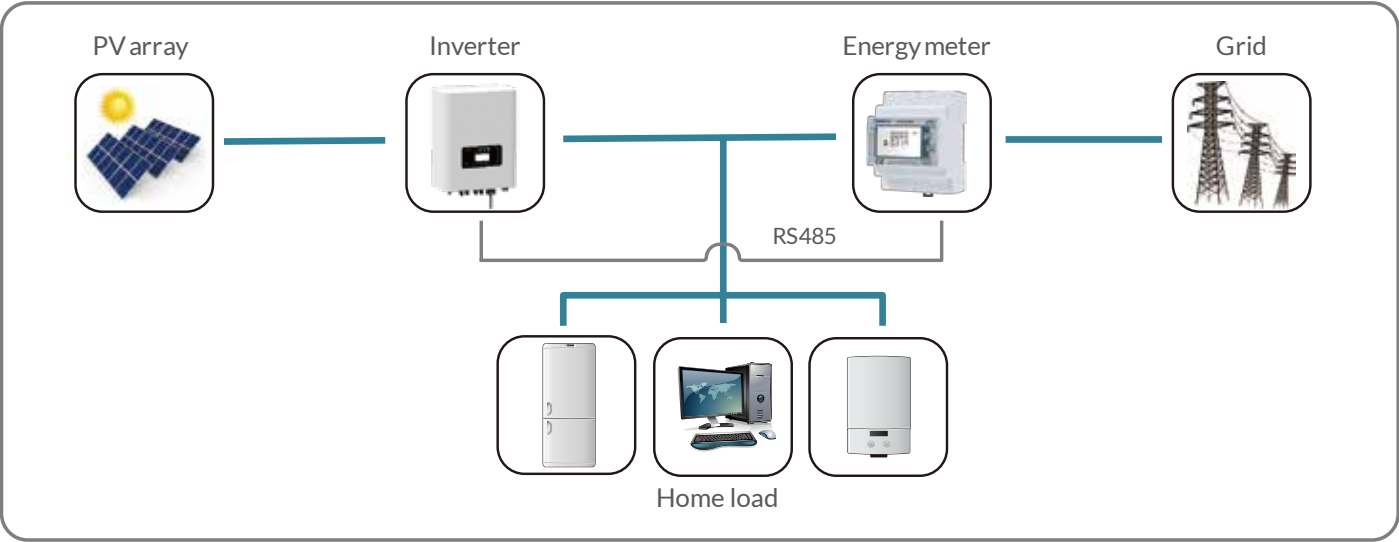
Technical Data

Model	SUN-M130G5 -AU-Q1	SUN-M160G5 -AU-Q1	SUN-M180G5 -AU-Q1	SUN-M200G5 -AU-Q1	SUN-M220G5 -AU-Q1	SUN-M225G5 -AU-Q1
PV String Input Data						
Max. PV Input Power (W)	210-460 (4 Pieces)	210-560 (4 Pieces)	210-630 (4 Pieces)	210-700 (4 Pieces)	210-770 (4 Pieces)	210-790 (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)	36+36					
Max. Input Short Circuit Current (A)	54+54					
No. of MPP Trackers/ No. of Strings per MPP Tracker	2/2+2					
AC Output Side						
Rated AC Output Active Power (W)	1300	1600	1800	2000	2200	2250
Max. AC Output Apparent Power (VA)	1300	1600	1800	2000	2200	2250
Rated AC Output Current (A)	5.7	7	7.9	8.7	9.6	9.8
Max. AC Output Current (A)	5.7	7	7.9	8.7	9.6	9.8
Rated Output Voltage/Range (V)	230V/240V 0.85Un-1.1Un					
Grid Connection Form	L/N/PE					
Rated Output Grid Frequency/Range(Hz)	50/45-55					
Max. Unit per Branch	5	4	3	3	3	3
Power Factor Adjustment Range	0.8 leading-0.8 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 Polarity Reverse Connection Protection	Yes					
AC Output Overcurrent Protection	Yes					
AC Output Overvoltage Protection	Yes					
AC Output Short Circuit Protection	Yes					
Thermal Protection	Yes					
DC Terminal Insulation Impedance Monitoring	Yes					
Power Network Monitoring	Yes					
Island Protection Monitoring	Yes					
Earth Fault Detection	Yes					
Overvoltage Load Drop Protection	Yes					
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	HF Transformer					
Communication Interface	WiFi					
Over Voltage Category	OVC II(DC), OVC III(AC)					
Cabinet Size (WxHxD mm)	367.2×228.7×36 (Excluding Connectors and Brackets)					
Weight (kg)	5.7					
Warranty	Standard 10/15 years, Extended warranty					
Type of Cooling	Natural Cooling					
Grid Regulation	AS/NZS 4777.2					
Safety EMC/Standard	IEC 62920,IEC 61000-6-1/2/3/4, IEC 62109-1, IEC 62109-2					

Energy Meter



Typical Application Diagram



Technical Data

Model	SDM120CTM 40mA	SDM630MCT 1A/5A	SDM630MCT 40mA
Technical Spec			
Nominal Volatage (Un)	120/230V	230/400V	230/400V
Operation Voltage	80%-120%Un		
Primary current (A)	5-9999A (with CT)		
Secondary current (A)	40mA CT	1A/5A CT	40mA CT
Operation frequency	50/60Hz		
Power consumption	≤2W/10VA		
Accuracy Class			
Active power	Class1		
Reactive power	Class2		
Performance criteria			
Dimenstions (L/H/W) in mm	118*64*18	94.5*65*72	94.5*65*72
Mounting options	DIN Rail		
Degree of protection	IP51		
Display	LCD		
Max. number of devices to connect	32		
Operation temperature	-25°C~+55°C		
Humidity	≤90%		
Warranty	1.5 years		

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 SOLARMAN APP.

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 solarman professional platform to enable remote PV system monitoring and to realize distributed power station management with lower cost and higher efficiency.

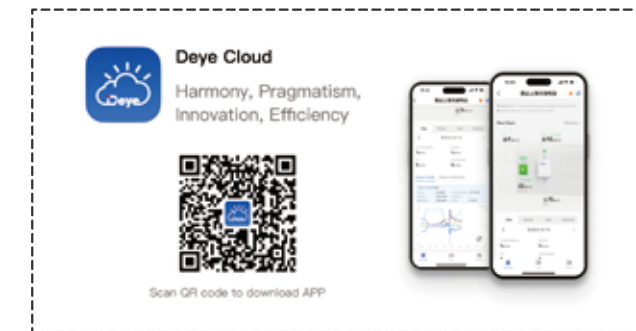
Deye Cloud



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.



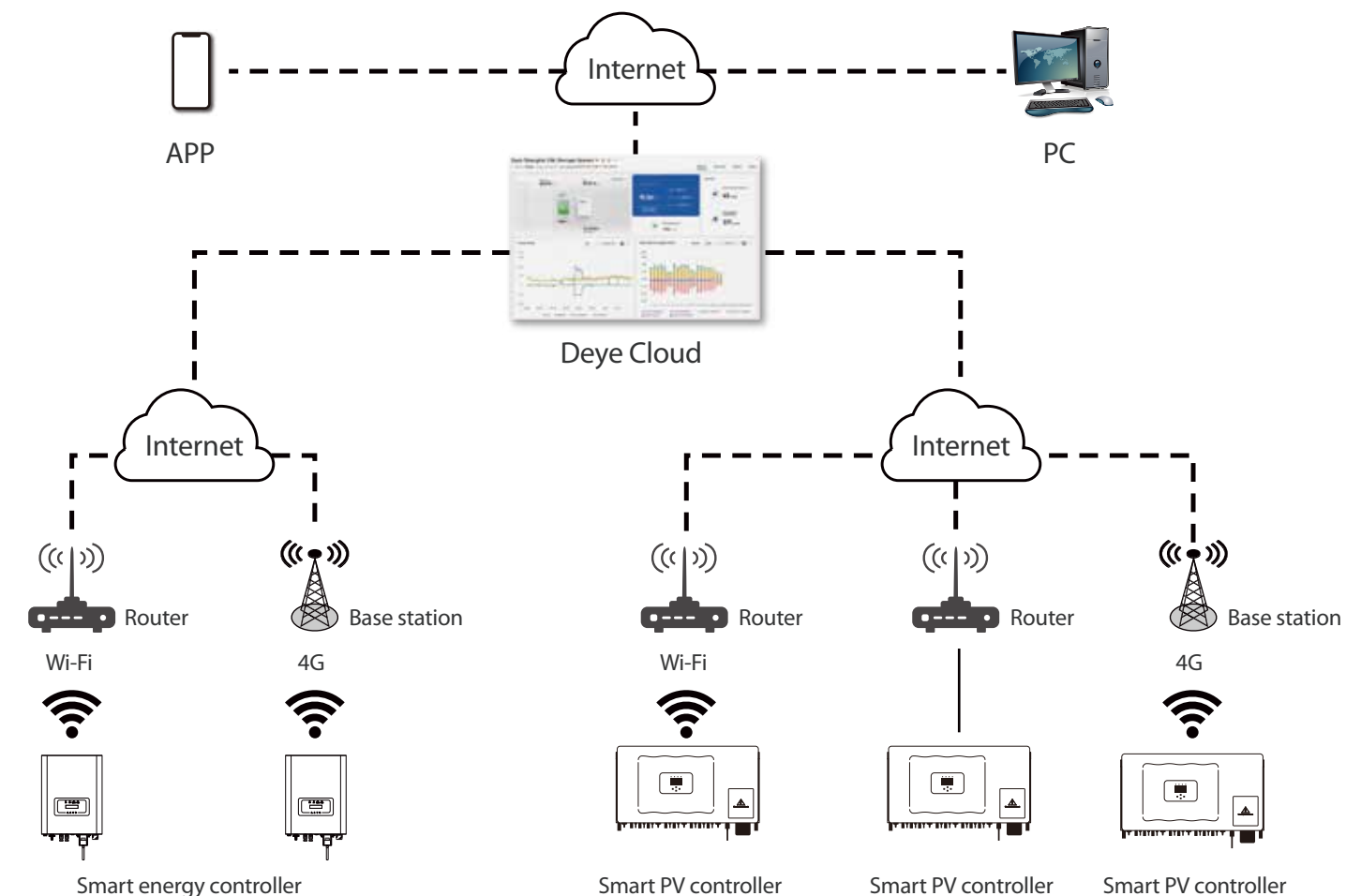
All in one

- 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



- ▶ 5kW/6kWh ESS
- ▶ Australia
- ▶ SUN-5K-SG/RW-W6.1-B



- ▶ 50kW/60kWh
- ▶ Australia
- ▶ SUN-50K/GE-F60

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