

# 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

**Deye**

Stock Code: 605117.SH

| 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 |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------------------|-------------------------|---------------------------|---------------------------|---------------------------|-------------------------|---------------------------|---------------------------|-------------------------|
| Input Side                            |                                                                                                                 |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Max. DC Input Power (kW)              | 1.3                                                                                                             | 2                         | 2.6                     | 2.9                       | 3.3                       | 3.5                       | 3.9                     | 4.3                       | 4.7                       | 5.2                     |
| Max. DC Input Voltage (V)             | 550                                                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Start-up DC Input Voltage (V)         | 80                                                                                                              |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| MPPT Operating Range (V)              | 70~500                                                                                                          |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Max. DC Input Current (A)             | 13                                                                                                              |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Max. Short Circuit Current (A)        | 19.5                                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| No.of MPP Trackers                    | 1                                                                                                               |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| No.of Strings per MPP Tracker         | 1                                                                                                               |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Output Side                           |                                                                                                                 |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Rated Output Power (kW)               | 1                                                                                                               | 1.5                       | 2                       | 2.2                       | 2.5                       | 2.7                       | 3                       | 3.3                       | 3.6                       | 4                       |
| Max. Active Power (kW)                | 1.1                                                                                                             | 1.65                      | 2.2                     | 2.42                      | 2.75                      | 2.97                      | 3.3                     | 3.63                      | 3.96                      | 4.4                     |
| Nominal Output Voltage / Range (V)    | L/N/PE 220/230V (Optional)                                                                                      |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Rated Grid Frequency (Hz)             | 50 / 60 (Optional)                                                                                              |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Operating Phase                       | Single Phase                                                                                                    |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Rated AC Grid 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                 |
| Output Power Factor                   | 0.8 leading to 0.8 lagging                                                                                      |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Grid Current THD                      | <3%                                                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| DC Injection Current (mA)             | <0.5%                                                                                                           |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Grid Frequency Range                  | 45~55 or 55~65 (Optional)                                                                                       |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Efficiency                            |                                                                                                                 |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Max. Efficiency                       | 97.3%                                                                                                           | 97.3%                     | 97.3%                   | 97.3%                     | 97.3%                     | 97.3%                     | 97.5%                   | 97.5%                     | 97.5%                     | 97.5%                   |
| Euro Efficiency                       | 97.1%                                                                                                           | 97.1%                     | 97.1%                   | 97.1%                     | 97.1%                     | 97.1%                     | 97.3%                   | 97.3%                     | 97.3%                     | 97.3%                   |
| MPPT Efficiency                       | >99%                                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Protection                            |                                                                                                                 |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| DC Reverse-Polarity Protection        | Yes                                                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| AC Short Circuit Protection           | Yes                                                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| AC Output Overcurrent Protection      | Yes                                                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Output Overvoltage Protection         | Yes                                                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Insulation Resistance Protection      | Yes                                                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Ground Fault Monitoring               | Yes                                                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Anti-islanding Protection             | Yes                                                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Temperature Protection                | Yes                                                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Integrated DC Switch                  | Yes                                                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Remote Software Upload                | Yes                                                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Remote Change of Operating Parameters | Yes                                                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Surge Protection                      | DC Type II / AC Type II                                                                                         |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| General Data                          |                                                                                                                 |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Cabinet Size (WxHxD mm)               | 280×310×184 (Excluding Connectors and Brackets)                                                                 |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Weight (kg)                           | 4.8                                                                                                             |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Topology                              | Transformerless                                                                                                 |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Internal Consumption                  | <1W (Night)                                                                                                     |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Running Temperature                   | -25~65°C, >45°C Derating                                                                                        |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Ingress Protection                    | IP65                                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Noise Emission (Typical)              | ≤35 dB                                                                                                          |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Cooling Concept                       | Free Cooling                                                                                                    |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Permissible Altitude (m)              | 2000                                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Warranty                              | 5 Years                                                                                                         |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Grid Connection Standard              | VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150 |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Operating Surroundings Humidity       | 0-100%                                                                                                          |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Safety EMC / Standard                 | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                          |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Features                              |                                                                                                                 |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| DC Connection                         | MC-4 Mateable                                                                                                   |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| AC Connection                         | IP65 Rated Plug                                                                                                 |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Display                               | LCD1602                                                                                                         |                           |                         |                           |                           |                           |                         |                           |                           |                         |
| Interface                             | RS485/RS232/Wifi/LAN                                                                                            |                           |                         |                           |                           |                           |                         |                           |                           |                         |