




# Hybrid Inverter

SUN- 3.6 / 5 / 6 K-SG03LP1-EU



-  Colorful touch LCD, IP65 protection degree
-  DC couple and AC couple to retrofit existing solar system
- 16** Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 120** Max. charging/discharging current of 120A
- 6** 6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

## Technical Data

| Model                                | SUN-3.6K-SG03LP1-EU   | SUN-5K-SG03LP1-EU | SUN-6K-SG03LP1-EU |
|--------------------------------------|---|-------------------|-------------------|
| <b>Battery Input Data</b>            |   |                   |                   |
| Battery Type                         | Lead-acid or Li-Ion   |                   |                   |
| Battery Voltage Range (V)            | 40~60   |                   |                   |
| Max. Charging Current (A)            | 90  | 120               | 135               |
| Max. Discharging Current (A)         | 90  | 120               | 135               |
| External Temperature Sensor          | Yes   |                   |                   |
| Charging Curve                       | 3 Stages / Equalization   |                   |                   |
| Charging Strategy for Li-Ion Battery | Self-adaption to BMS  |                   |                   |
| <b>PV String Input Data</b>          |   |                   |                   |
| Max. DC Input Power (W)              | 4680  | 6500              | 7800              |
| Rated PV Input Voltage (V)           | 370 (125~500)   |                   |                   |
| Start-up Voltage (V)                 | 125   |                   |                   |
| MPPT Voltage Range (V)               | 150-425   |                   |                   |
| Full Load DC Voltage Range (V)       | 300-425   |                   |                   |
| PV Input Current (A)                 | 13+13   |                   |                   |
| Max. PV I <sub>SC</sub> (A)          | 17+17   |                   |                   |
| No. of MPP Trackers                  | 2   |                   |                   |
| No. of Strings per MPP Tracker       | 1   |                   |                   |
| <b>AC Output Data</b>                |   |                   |                   |
| Rated AC Output and UPS Power (W)    | 3600  | 5000              | 6000              |
| Max. AC Output Power (W)             | 3690  | 5500              | 6600              |
| AC Output Rated Current (A)          | 16.4/15.7   | 22.7/21.7         | 27.3/26.1         |
| Max. AC Current (A)                  | 18/17.2   | 25/23.9           | 30/28.7           |
| Max. Continuous AC Passthrough (A)   | 35  |                   |                   |
| Peak Power (off grid)                | 2 time of rated power, 10 S   |                   |                   |
| Power Factor                         | 0.8 leading to 0.8 lagging  |                   |                   |
| Output Frequency and Voltage         | 50/60Hz; L/N/PE 220/230Vac (single phase)   |                   |                   |
| Grid Type                            | Single Phase  |                   |                   |
| Total Harmonic Distortion (THD)      | <3% (of nominal power)  |                   |                   |
| DC current injection                 | <0.5% I <sub>n</sub>  |                   |                   |
| <b>Efficiency</b>                    |   |                   |                   |
| Max. Efficiency                      | 97.60%  |                   |                   |
| Euro Efficiency                      | 96.50%  |                   |                   |
| MPPT Efficiency                      | 99.90%  |                   |                   |
| <b>Protection</b>                    |   |                   |                   |
| Integrated                           | PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge protection |                   |                   |
| Output Over Voltage Protection       | DC Type II/AC Type III  |                   |                   |
| <b>Certifications and Standards</b>  |   |                   |                   |
| 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  |                   |                   |
| <b>General Data</b>                  |   |                   |                   |
| Operating Temperature Range (°C)     | -40~60°C, >45°C derating  |                   |                   |
| Cooling                              | Natural cooling   |                   |                   |
| Noise (dB)                           | <30 dB  |                   |                   |
| Communication with BMS               | RS485; CAN  |                   |                   |
| Weight (kg)                          | 20.5  |                   |                   |
| Size (mm)                            | 330W x 580H x 232D  |                   |                   |
| Protection Degree                    | IP65  |                   |                   |
| Installation Style                   | Wall-mounted  |                   |                   |
| Warranty                             | 5 years   |                   |                   |