

# Hybrid Inverter

## SUN-3.6/5K-SG01/03LP1-EU



Colorful touch LCD,  
IP65 protection degree



6 time periods for battery  
charging/discharging



Max. charging/discharging  
current of 120A



16 Frequency droop control,  
Max.3pcs parallel



DC couple and AC couple to  
retrofit existing solar system



Support storing energy from  
diesel generator

| Model                                       | SUN-3.6K-SG01/03LP1-EU   | SUN-5K-SG01/03LP1-EU |
|---|--|----------------------|
| <b>Battery Input Data</b>                   |  |                      |
| Battery Type                                | Lead-acid or Lithium-ion   |                      |
| Battery Voltage Range (V)                   | 40~60V   |                      |
| Max. Charging Current (A)                   | 90A  | 120A                 |
| Max. Discharging Current (A)                | 90A  | 120A                 |
| Charging Curve                              | 3 Stages / Equalization  |                      |
| External Temperature Sensor                 | Optional   |                      |
| Charging Strategy for Li-Ion Battery        | Self-adaption to BMS   |                      |
| <b>PV String Input Data</b>                 |  |                      |
| Max. DC Input Power (W)                     | 4680W  | 6500W                |
| PV Input Voltage (V)                        | 370V (100V~500V)   |                      |
| MPPT Range (V)                              | 125~425V   |                      |
| Full Load DC Voltage Range                  | 240~425V   |                      |
| Start-up Voltage (V)                        | 150V   |                      |
| PV Input Current (A)                        | 11A+11A  |                      |
| No.of MPPT Trackers                         | 2  |                      |
| No.of Strings Per MPPT Tracker              | 1+1  |                      |
| <b>AC Output Data</b>                       |  |                      |
| Rated AC Output and UPS Power (W)           | 3600W  | 5000W                |
| Max. AC Output Power (W)                    | 3960W  | 5500W                |
| Peak Power (off grid)                       | 2 times of rated power, 10 S   |                      |
| AC Output Rated Current (A)                 | 15.7A  | 21.7A                |
| Max. AC Current (A)                         | 18A  | 25A                  |
| Max. Continuous AC Passthrough (A)          | 35A  |                      |
| Power Factor                                | 0.8 leading to 0.8 lagging   |                      |
| Output Frequency and Voltage                | 50/60Hz; 220/230 / 240Vac (single phase)   |                      |
| Grid Type                                   | Single Phase   |                      |
| Current Harmonic Distortion                 | THD<3% (Linear load<1.5%)  |                      |
| <b>Efficiency</b>                           |  |                      |
| Max. Efficiency                             | 97.60%   |                      |
| Euro Efficiency                             | 96.50%   |                      |
| MPPT Efficiency                             | 99.90%   |                      |
| <b>Protection</b>                           |  |                      |
| PV Input Lightning Protection               | Integrated   |                      |
| Anti-islanding Protection                   | Integrated   |                      |
| PV String Input Reverse Polarity Protection | Integrated   |                      |
| Insulation Resistor Detection               | Integrated   |                      |
| Residual Current Monitoring Unit            | Integrated   |                      |
| Output Over Current Protection              | Integrated   |                      |
| Output Shorted Protection                   | Integrated   |                      |
| Output Over Voltage Protection              | Integrated   |                      |
| Surge protection                            | DC Type II / AC Type II  |                      |
| <b>Certifications and Standards</b>         |  |                      |
| Grid Regulation                             | VDE 0126, AS4777, NRS2017, G98, G99, IEC61683, IEC62116, IEC61727, RD1699:2011, XP C15-712-3, CEI 0-21 |                      |
| Safety Regulation                           | IEC62109-1, IEC62109-2   |                      |
| EMC   | EN61000-6-1, EN61000-6-3   |                      |
| <b>General Data</b>                         |  |                      |
| Operating Temperature Range (°C)            | -25~60°C, >45°C Derating   |                      |
| Cooling                                     | Smart cooling  |                      |
| Noise (dB)                                  | <30 dB   |                      |
| Communication with BMS                      | RS485; CAN   |                      |
| Weight (kg)                                 | 20.5   |                      |
| Size (mm)                                   | 330Wx580Hx232D   |                      |
| Protection Degree                           | IP65   |                      |
| Installation Style                          | Wall-mounted   |                      |
| Warranty                                    | 5 years  |                      |