

## HYBRID INVERTER SUN-3.6/5/6K-SG01LP1-EU



-  Colorful touch LCD, IP65 protection degree
-  DC couple and 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 135A
-  6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

## Technical Data

| Model                                | SUN-3.6K-SG01LP1-EU                                                                                                                                                                                                                                 | SUN-5K-SG01LP1-EU | SUN-6K-SG01LP1-EU |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|
| <b>Battery Input Data</b>            |                                                                                                                                                                                                                                                     |                   |                   |
| Battery Type                         | Lead-acid or Lithium-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 Active Power (W)     | 3600                                                                                                                                                                                                                                                | 5000              | 6000              |
| Max AC Output Active Power (W)       | 3960                                                                                                                                                                                                                                                | 5500              | 6600              |
| AC Output Rated Current (A)          | 16.4/15.7                                                                                                                                                                                                                                           | 22.7/21.7         | 27.3/26.1         |
| Max AC Output Current (A)            | 18/17.2                                                                                                                                                                                                                                             | 25/23.9           | 30/28.7           |
| 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                                                                                                                                                                                                                          |                   |                   |
| Power Factor                         | 1                                                                                                                                                                                                                                                   |                   |                   |
| Output Frequency and Voltage         | 50/60Hz; L/N/PE 220/230Vac                                                                                                                                                                                                                          |                   |                   |
| 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, NRS 097                                                                                                                            |                   |                   |
| 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 , >45 derating                                                                                                                                                                                                                               |                   |                   |
| Cooling                              | Smart cooling                                                                                                                                                                                                                                       |                   |                   |
| Noise (dB)                           | ≤30 dB                                                                                                                                                                                                                                              |                   |                   |
| Communication with BMS               | RS485; CAN                                                                                                                                                                                                                                          |                   |                   |
| Weight (kg)                          | 20.5                                                                                                                                                                                                                                                |                   |                   |
| Size (mm)                            | 330W x 580H x232D                                                                                                                                                                                                                                   |                   |                   |
| Protection Degree                    | IP65                                                                                                                                                                                                                                                |                   |                   |
| Installation Style                   | Wall-mounted                                                                                                                                                                                                                                        |                   |                   |
| Warranty                             | 5 years                                                                                                                                                                                                                                             |                   |                   |