

# Hybrid Inverter

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



Colorful touch LCD, IP65 protection degree

6

6 time periods for battery charging/discharging

120

Max. charging/discharging current of 120A

16

Frequency droop control, Max.16pcs parallel



DC couple and AC couple to retrofit existing solar system



Support storing energy from diesel generator

**Deye**

*Clean Power For You*

| 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)                   | 40~60                                                                                                                                                                 |                      |
| Max. Charging Current (A)                   | 90                                                                                                                                                                    | 120                  |
| Max. Discharging Current (A)                | 90                                                                                                                                                                    | 120                  |
| Charging Curve                              | 3 Stages / Equalization                                                                                                                                               |                      |
| External Temperature Sensor                 | Yes                                                                                                                                                                   |                      |
| Charging Strategy for Li-Ion Battery        | Self-adaption to BMS                                                                                                                                                  |                      |
| <b>PV String Input Data</b>                 |                                                                                                                                                                       |                      |
| Max. DC Input Power (W)                     | 4680                                                                                                                                                                  | 6500                 |
| PV Input Voltage (V)                        | 370 (100~500)                                                                                                                                                         |                      |
| MPPT Range (V)                              | 125~425                                                                                                                                                               |                      |
| Full Load DC Voltage Range (V)              | 240~425                                                                                                                                                               |                      |
| Start-up Voltage (V)                        | 150                                                                                                                                                                   |                      |
| PV Input Current (A)                        | 13+13                                                                                                                                                                 |                      |
| Max. PV ISC (A)                             | 17+17                                                                                                                                                                 |                      |
| 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)           | 3600                                                                                                                                                                  | 5000                 |
| Max. AC Output Power (W)                    | 3960                                                                                                                                                                  | 5500                 |
| Peak Power (off grid)                       | 2 times of rated power, 10 S                                                                                                                                          |                      |
| AC Output Rated Current (A)                 | 15.7                                                                                                                                                                  | 21.7                 |
| Max. AC Current (A)                         | 18                                                                                                                                                                    | 25                   |
| Max. Continuous AC Passthrough (A)          | 35                                                                                                                                                                    |                      |
| 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 Connection Standard                    | EN50549-1, CEI 0-21, IEC61727, IEC62116, IEC60068, IEC61683, ABNT NBR 16149, ABNT NBR 16150, AS4777.2, VDE 4105, XP C15-712-3, RD1699, UNE 206006 IN, UNE 206007-1 IN |                      |
| Safety EMC / Standard                       | IEC62040-1, IEC62109-1/-2, IEC61000-6-1, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12, IEC61000-4-16, IEC61000-4-18, IEC61000-4-29                                      |                      |
| <b>General Data</b>                         |                                                                                                                                                                       |                      |
| Operating Temperature Range (°C)            | -25~60°C, >45°C Derating                                                                                                                                              |                      |
| Cooling                                     | Natural cooling                                                                                                                                                       |                      |
| Noise (dB)                                  | <30 dB                                                                                                                                                                |                      |
| Communication with BMS                      | RS485; CAN                                                                                                                                                            |                      |
| Weight (kg)                                 | 20.5                                                                                                                                                                  |                      |
| Size (mm)                                   | 330W×580H×232D                                                                                                                                                        |                      |
| Protection Degree                           | IP65                                                                                                                                                                  |                      |
| Installation Style                          | Wall-mounted                                                                                                                                                          |                      |
| Warranty                                    | 5 years                                                                                                                                                               |                      |