# Three Phase Hybrid Inverter

## SUN- 25 / 30 / 40 / 50 K-SG01HP3-EU-BM2/3/4






- 100% unbalanced output, each phase; Max. output up to **50%** rated power
- DC couple and AC couple to retrofit existing solar system
- Max. 10pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 100A
- High voltage battery, higher efficiency
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Deye

Tesla Solar SA

Stock Code: 605117.SH

# Technical Data

| Model | SUN-25K-SG01HP3 -EU-BM2 | SUN-30K-SG01HP3 -EU-BM3 | SUN-40K-SG01HP3 -EU-BM4 | SUN-50K-SG01HP3 -EU-BM4 |
|---|---|---|---|---|
| **Battery Input Data** | | | | |
| Battery Type | Li-Ion | | | |
| Battery Voltage Range (V) | 160~800 | | | |
| Max. Charging Current (A) | 50+50 | | | |
| Max. Discharging Current (A) | 50+50 | | | |
| Number of battery input | 2 | | | |
| Charging Strategy for Li-Ion Battery | Self-adaption to BMS | | | |
| **PV String Input Data** | | | | |
| Max. DC Input Power (W) | 32500 | 39000 | 52000 | 65000 |
| Max. DC Input Voltage (V) | 1000 | | | |
| Start-up Voltage (V) | 180 | | | |
| MPPT Range (V) | 150-850 | | | |
| Full Load DC Voltage Range (V) | 450-850 | 360-850 | 360-850 | 450-850 |
| Rated DC Input Voltage (V) | 600 | | | |
| PV Input Current (A) | 36+36 | 36+36+36 | 36+36+36+36 | |
| Max. PV $I_{SC}$ (A) | 55+55 | 55+55+55 | 55+55+55+55 | |
| No.of MPP Trackers | 2 | 3 | 4 | |
| No.of Strings per MPP Tracker | 2 | | | |
| **AC Output Data** | | | | |
| Rated AC Output and UPS Power (W) | 25000 | 30000 | 40000 | 50000 |
| Max. AC Output Power (W) | 27500 | 33000 | 44000 | 55000 |
| AC Output Rated Current (A) | 37.9/36.3 | 45.5/43.5 | 60.7/58 | 75.8/72.5 |
| Max. AC Current (A) | 50 | 60 | 70 | 83.3 |
| Max. Continuous AC Passthrough (A) | 150 | | | |
| Peak Power (off grid) | 1.5 time of rated power, 10 S | | | |
| Generator input/Smart load /AC couple current (A) | 37.9 / 150 / 37.9 | 45.5 / 150 / 45.5 | 60.8 / 150 / 60.8 | 75.8 / 150 / 75.8 |
| Power Factor | 0.8 leading to 0.8 lagging | | | |
| Output Frequency and Voltage | 50/60Hz; 3L/N/PE 220/380, 230/400Vac | | | |
| Grid Type | Three Phase | | | |
| DC injection current (mA) | <0.5%1n | | | |
| **Efficiency** | | | | |
| Max. Efficiency | 97.60% | | | |
| Euro Efficiency | 97.00% | | | |
| MPPT Efficiency | 99.90% | | | |
| **Protection** | | | | |
| 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 | | | |
| **Certifications and Standards** | | | | |
| Grid Regulation | EN50549, AS4777.2:2015, VDE0126-1-1, IEC61727, VDEN4105-2018, G99 | | | |
| Safety EMC / Standard | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2 | | | |
| **General Data** | | | | |
| Operating Temperature Range (℃) | -40~60℃, >45℃ derating | | | |
| Cooling | Smart cooling | | | |
| Noise (dB) | <45 dB | | | |
| Communication with BMS | RS485; CAN | | | |
| Weight (kg) | 75 | | | |
| Size (mm) | 527W×894H×294D | | | |
| Protection Degree | IP65 | | | |
| Installation Style | Wall-mounted | | | |
| Warranty | 5 years | | | |