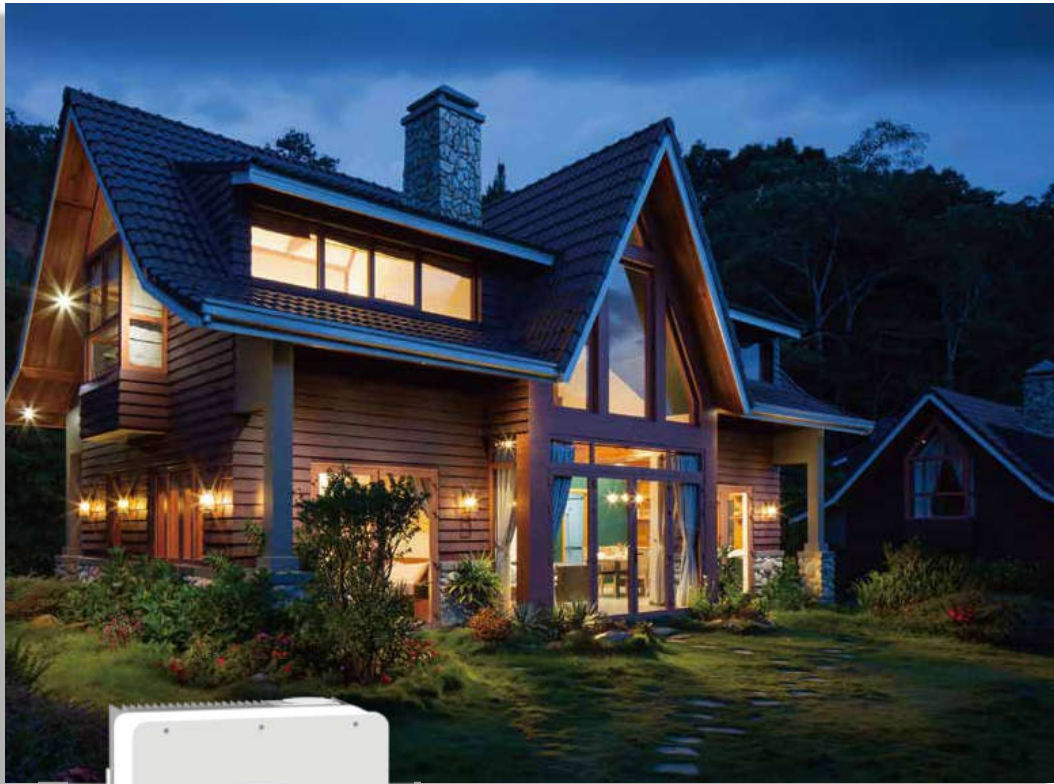


Three Phase Hybrid Inverter

SUN-5/6/8/10/12/15/20/25K-SG01HP3-EU-AM2



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

Technical Data

| Model | SUN-5K-SG01 HP3-EU-AM2 | SUN-6K-SG01 HP3-EU-AM2 | SUN-8K-SG01 HP3-EU-AM2 | SUN-10K-SG01 HP3-EU-AM2 | SUN-12K-SG01 HP3-EU-AM2 | SUN-15K-SG01 HP3-EU-AM2 | SUN-20K-SG01 HP3-EU-AM2 | SUN-25K-SG01 HP3-EU-AM2 | |
|---|--|---------------------------|---------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|--|
| Battery Input Data | | | | | | | | | |
| Battery Type | Lithium-ion | | | | | | | | |
| Battery Voltage Range (V) | 160-700 | | | | | | | | |
| Max. Charging Current (A) | 30 | | | 37 | | | | 50 | |
| Max. Discharging Current (A) | 30 | | | 37 | | | | 50 | |
| Number of Battery Input | 1 | | | | | | | | |
| Charging Strategy for Li-Ion Battery | Self-adaptation to BMS | | | | | | | | |
| PV String Input Data | | | | | | | | | |
| Max. DC Input Power (W) | 6500 | 7800 | 10400 | 13000 | 15600 | 19500 | 26000 | 32500 | |
| Max. DC Input Voltage (V) | 1000 | | | | | | | | |
| Start-up Voltage (V) | 180 | | | | | | | | |
| MPPT Range (V) | 150-850 | | | | | | | | |
| Full Load DC Voltage Range (V) | 195-850 | 195-850 | 260-850 | 325-850 | 340-850 | 420-850 | 500-850 | 625-850 | |
| Rated DC Input Voltage (V) | 600 | | | | | | | | |
| PV Input Current (A) | 20+20 | | | | 26+20 | | 26+26 | | |
| Max. PV I _{sc} (A) | 30+30 | | | | 39+30 | | 39+39 | | |
| No. of MPP Trackers | | | | | 2 | | | | |
| No. of Strings per MPP Tracker | 1+1 | | | | 2+1 | | 2+2 | | |
| AC Output Data | | | | | | | | | |
| Rated AC Output and UPS Power (W) | 5000 | 6000 | 8000 | 10000 | 12000 | 15000 | 20000 | 25000 | |
| Max. AC Output Active Power (W) | 5500 | 6600 | 8800 | 11000 | 13200 | 16500 | 22000 | 27500 | |
| AC Output Rated Current (A) | 7.6/7.3 | 9.1/8.7 | 12.2/11.6 | 15.2/14.5 | 18.2/17.4 | 22.8/21.8 | 30.4/29 | 37.9/36.3 | |
| Max. AC Output Current (A) | 8.4/8 | 10/9.6 | 13.4/12.8 | 16.7/16 | 20/19.2 | 25/24 | 33.4/31.9 | 41.7/39.9 | |
| Max. Three-phase Unbalanced Output Current(A) | 13 | 13 | 18 | 22 | 25 | 30 | 35 | 41.7 | |
| Max. Continuous AC Passthrough (A) | | | | | 40 | | 80 | | |
| Peak Power (off grid) | 1.5 time of rated power, 10 S | | | | | | | | |
| Generator Input/Smart Load /AC Couple Current (A) | 7.6/40/7.6 | 9.1/40/9.1 | 12.2/40/12.2 | 15.2/40/15.2 | 18.2/80/18.2 | 22.8/80/22.8 | 30.4/80/30.4 | 37.9/80/37.9 | |
| Power Factor Adjustment Range | 0.8 leading to 0.8 lagging | | | | | | | | |
| Output Frequency and Voltage | 50/60Hz; 3L/N/PE 220/380, 230/400Vac | | | | | | | | |
| Grid Type | Three Phase | | | | | | | | |
| Total Harmonics Current Distortion (THDi) | <3% (of nominal power) | | | | | | | | |
| DC Current Injection | <0.5% In | | | | | | | | |
| Efficiency | | | | | | | | | |
| Max. Efficiency | 97.60% | | | | | | | | |
| Euro Efficiency | 97.00% | | | | | | | | |
| MPPT Efficiency | 99.90% | | | | | | | | |
| Protection | | | | | | | | | |
| Integrated | 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, Arc Fault Circuit Interruption (AFCI optional) | | | | | | | | |
| Over Voltage Category | DC Type II/AC Type III | | | | | | | | |
| Certifications and Standards | | | | | | | | | |
| Grid Regulation | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105 | | | | | | | | |
| Safety / EMC Standard | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2 | | | | | | | | |
| General Data | | | | | | | | | |
| Operating Temperature Range (°C) | -40 to +60°C, >45°C Derating | | | | | | | | |
| Cooling | Free Cooling | Smart Cooling | | | | | | | |
| Noise (dB) | ≤55 dB | | | | | | | | |
| Communication with BMS | CAN | | | | | | | | |
| Weight (kg) | 30.5 | | | | | | | | |
| Cabinet Size (WxHxD mm) | 408×638×237 (Excluding Connectors and Brackets) | | | | | | | | |
| Protection Degree | IP65 | | | | | | | | |
| Installation Style | Wall-mounted | | | | | | | | |
| Warranty | 5 Years (10 Years Optional) | | | | | | | | |