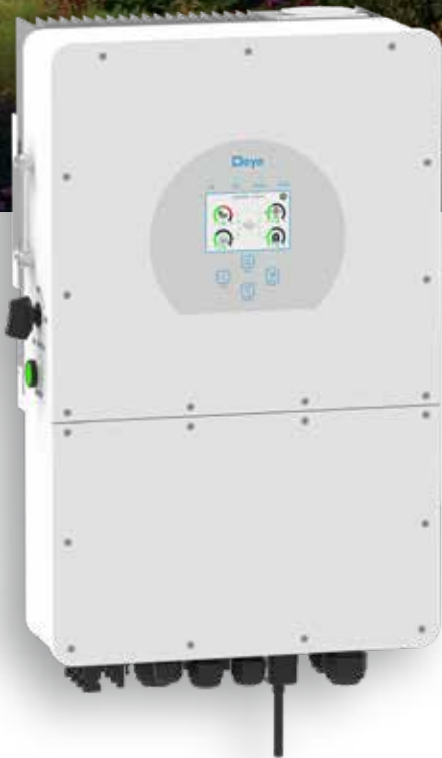


Three Phase Hybrid Inverter

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



- 100** 100% unbalanced output, each phase
- AC** AC couple to retrofit existing solar system
- 16** Max. 16pcs 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

Deye

Stock Code: 605117.SH

| Model | SUN-5K-SG01 HP3-AU-AM2 | SUN-6K-SG01 HP3-AU-AM2 | SUN-8K-SG01 HP3-AU-AM2 | SUN-10K-SG01 HP3-AU-AM2 | SUN-12K-SG01 HP3-AU-AM2 | SUN-15K-SG01 HP3-AU-AM2 | SUN-20K-SG01 HP3-AU-AM2 | SUN-25K-SG01 HP3-AU-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-adaption to BMS | | | | | | | |
| PV String Input Data | | | | | | | | |
| Max. PV Input Power (W) | 7500 | 9000 | 12000 | 15000 | 18000 | 22500 | 30000 | 37500 |
| Max. PV Input Voltage (V) | 1000 | | | | | | | |
| Start-up Voltage (V) | 180 | | | | | | | |
| MPPT Range (V) | 150-850 | | | | | | | |
| Full Load PV Voltage Range (V) | 195-850 | 195-850 | 260-850 | 325-850 | 340-850 | 420-850 | 500-850 | 625-850 |
| Rated PV Input Voltage (V) | 600 | | | | | | | 700 |
| 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 | | | | 2+1 | | 2 | |
| AC Output Data | | | | | | | | |
| Rated AC Output and UPS Power (W) | 5000 | 6000 | 8000 | 10000 | 12000 | 15000 | 20000 | 25000 |
| Rated Apparent Output Power (VA) | 5000 | 6000 | 8000 | 10000 | 12000 | 15000 | 20000 | 25000 |
| Max. AC Output Power (W) | 5000 | 6000 | 8000 | 10000 | 12000 | 15000 | 20000 | 25000 |
| AC Output Rated Current (A) | 7.3 | 8.7 | 11.6 | 14.5 | 17.4 | 21.8 | 29 | 36.3 |
| Max. AC Output Current (A) | 7.3 | 8.7 | 11.6 | 14.5 | 17.4 | 21.8 | 29 | 36.3 |
| Max. Three-phase Unbalanced Output Current | 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) | 7.3/40/7.3 | 8.7/40/8.7 | 11.6/40/11.6 | 14.5/40/14.5 | 17.4/80/17.4 | 21.8/80/21.8 | 29/80/29 | 36.3/80/36.3 |
| Power Factor | 0.8 leading to 0.8 lagging | | | | | | | |
| Output Frequency and Voltage | 50/60Hz; 3L/N/PE 230/400, 240/415Vac | | | | | | | |
| Grid Connection Form | 3L+N+PE | | | | | | | |
| Total Harmonics Current Distortion (THDi) | <3% (of nominal power) | | | | | | | |
| DC current injection | <0.5% I _n | | | | | | | |
| 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) | | | | | | | |
| Protection Level | Class I | | | | | | | |
| Over Voltage Category | DC Type II/AC Type III | | | | | | | |
| Certifications and Standards | | | | | | | | |
| Grid Regulation | AS/NZS 4777.2 | | | | | | | |
| 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 to +60°C, >45°C derating | | | | | | | |
| Cooling | Free Cooling | Smart cooling | | | | | | |
| Noise (dB) | ≤55 dB | | | | | | | |
| Communication with BMS | RS485; CAN | | | | | | | |
| Weight (kg) | 30.5 | | | | | | | |
| Size (mm) | 408W×638H×237D (Excluding connectors and brackets) | | | | | | | |
| Protection Degree | IP65 | | | | | | | |
| Installation Style | Wall-mounted | | | | | | | |
| Inverter topology | Non-isolated | | | | | | | |
| Warranty | 10 Years | | | | | | | |