

Hybrid Inverter

SUN-5/6K-SG01LP1-US SUN-7.6/8K-SG01LP1-US/EU



Colorful touch LCD, IP65 protection degree



DC couple and AC couple to retrofit existing solar system

16

Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel

190

Max. charging/discharging current of 190A

6

6 time periods for battery charging/discharging



Support storing energy from diesel generator

Deye

Stock Code: 605117.SH

| Model | SUN-5K -SG01LP1-US | SUN-6K -SG01LP1-US | SUN-7.6K -SG01LP1-US/EU | SUN-8K -SG01LP1-US/EU | | |
|--------------------------------------|---|-----------------------|----------------------------|--------------------------|-----------|-----------|
| Battery Input Data | | | | | | |
| Battery Type | Lead-acid or Li-Ion | | | | | |
| Battery Voltage Range (V) | 40~60 | | | | | |
| Max. Charging Current (A) | 120 | 135 | 190 | 190 | | |
| Max. Discharging Current (A) | 120 | 135 | 190 | 190 | | |
| External Temperature Sensor | Yes | | | | | |
| Charging Curve | 3 Stages / Equalization | | | | | |
| Charging Strategy for Li-Ion Battery | Self-adaption to BMS | | | | | |
| PV String Input Data | | | | | | |
| Max. DC Input Power (W) | 6500 | 7800 | 9880 | 10400 | | |
| 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 | 200-425 | | | | |
| PV Input Current (A) | 13+13 | 26+13 | 26+26 | | | |
| Max. PV I _{SC} (A) | 22+22 | 44+22 | 44+44 | | | |
| 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 | 7600 | 8000 | | |
| Max. AC Output Power (W) | 5500 | 6600 | 8360 | 8800 | | |
| AC Output Rated Current (A) | 20.8/24 | 25/28.8 | 31.7/36.5 | 34.5/33 | 33.3/38.5 | 36.4/34.8 |
| Max. AC Current (A) | 22.9/26.4 | 27.5/31.7 | 34.8/40.2 | 38/36.3 | 36.7/42.3 | 40/38.3 |
| Max. Continuous AC Passthrough (A) | 50 | | | | | |
| Peak Power (off grid) | 2 time of rated power, 10 S | | | | | |
| Power Factor | 0.8 leading to 0.8 lagging | | | | | |
| Output Frequency and Voltage | 50 / 60Hz; L1/L2/N(PE) 120/240Vac (split phase), 208Vac (2/3 phase), L/N/PE 220/230Vac (single phase) | | | | | |
| Grid Type | Split phase; 2/3 phase; Single Phase | | | | | |
| Total Harmonic Distortion (THD) | <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 | 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 | VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150 | | | | | |
| 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°C, >45°C derating | | | | | |
| Cooling | Smart cooling | | | | | |
| Noise (dB) | <30 dB | | | | | |
| Communication with BMS | RS485; CAN | | | | | |
| Weight (kg) | 32 | | | | | |
| Size (mm) | 420W×670H×233D | | | | | |
| Protection Degree | IP65 | | | | | |
| Installation Style | Wall-mounted | | | | | |
| Warranty | 5 years | | | | | |