

Hybrid Inverter

SUN-5K/6K-SG01LP1-US

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



Max. Efficiency
97.6%



2 MPPT



RS485/CAN



Internal SPD



Zero Export



IP65
Ingress Protection



High Power
Factor



High Surge
Endurance



AC Coupled



Support Generator
Connection

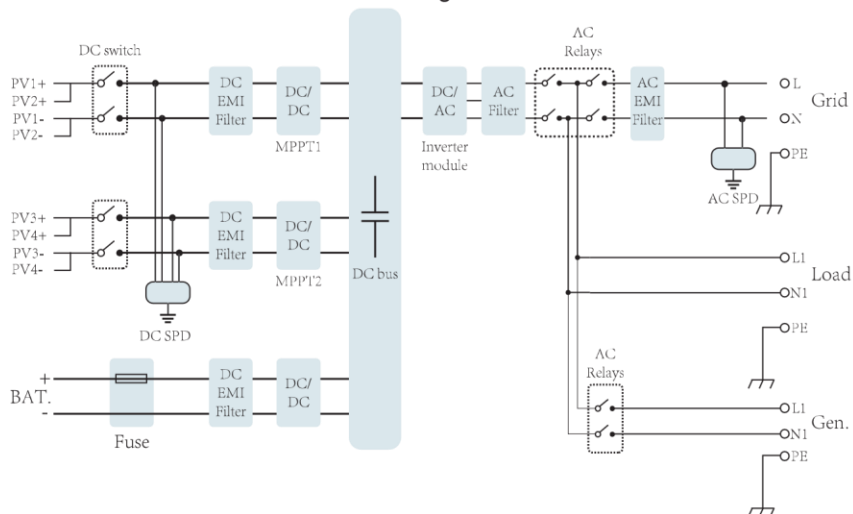


Six Time of
Use Setting

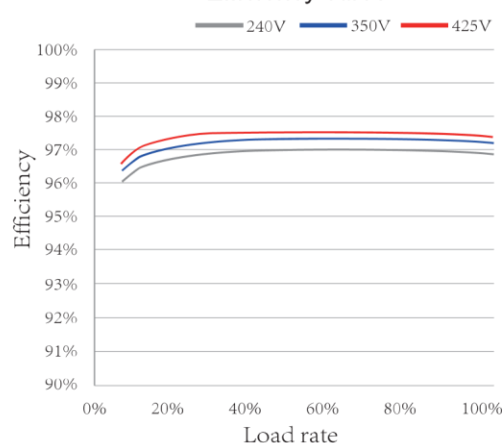


Support Multiple
Parallel

Circuit block diagram



Efficiency curve



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

Technical Specifications

| 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) | 40~60V | | | |
| Max.Charging Current (A) | 120A | 135A | 190A | 190A |
| Max.Discharging Current (A) | 120A | 135A | 190A | 190A |
| Charging Curve | 3 Stages/Equalization | | | |
| External Temperature Sensor | Optional | | | |
| Charging Strategy for Li-Ion Battery | Self-adaption to BMS | | | |
| PV String Input Data | | | | |
| Max.DC Input Power (W) | 6500W | 7800W | 9880W | 10400W |
| PV Input Voltage (V) | 370V(100V~500V) | | | |
| MPPT Range (V) | 125V-425V | | | |
| Start-up Voltage (V) | 125V | | | |
| PV Input Current (A) | 11A+11A | 18A+9A | 18A+18A | 18A+18A |
| No.of MPPT Trackers | 2 | | | |
| No.of Strings Per MPPT Tracker | 1+1 | 2+1 | 2+2 | 2+2 |
| AC Output Data | | | | |
| Rated AC Output and UPS Power (W) | 5000W | 6000W | 7600W | 8000W |
| Max AC Output Power (W) | 5500W | 6600W | 8360W | 8800W |
| Peak Power(off grid) | 2 times of rated power, 10 S | | | |
| AC Output Rated Current(A) | 20.8A | 25A | 31.7A/33A | 33.4A/35A |
| Max.AC Current(A) | 24A | 28.8A | 36.4A/38A | 38.3A/40A |
| Max Continuous AC Passthrough(A) | 35A | 35A | 50A | 50A |
| Output Frequency and Voltage | 50/60Hz; 120/240Vac(split phase), 208Vac(2/3 phase),230Vac(single phase) | | | |
| Grid Type | Split phase、2/3 phase、Single Phase | | | |
| Current Harmonic Distortion | THD<3%(Linear load<1.5%) | | | |
| Efficiency | | | | |
| Max.Efficiency | 97.60% | | | |
| Euro Efficiency | 97.00% | | | |
| MPPT Efficiency | 99.90% | | | |
| Protection | | | | |
| PV Arc Fault Detection | Integrated (Except European Type) | | | |
| 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 | | | |
| Certifications and Standards | | | | |
| Grid Regulation | UL1741,IEEE1547,RULE21,VDE 0126,AS4777,NRS2017,G98,G99 | | | |
| Safety Regulation | IEC62109-1, IEC62109-2 | | | |
| EMC | EN61000-6-1, EN61000-6-3, FCC 15 class B | | | |
| General Data | | | | |
| Operating Temperature Range (°C) | -25~60°C, >45°C Derating | | | |
| Cooling | Fan | | | |
| Noise (dB) | <30 | | | |
| Communication with BMS | RS485; CAN | | | |
| Weight (kg) | 32KG | | | |
| Size (Length*Width*Height mm) | 680×420×233mm | | | |
| Protection Degree | IP65 | | | |
| Installation Style | Wall-mounted | | | |
| Warranty | 5 years | | | |