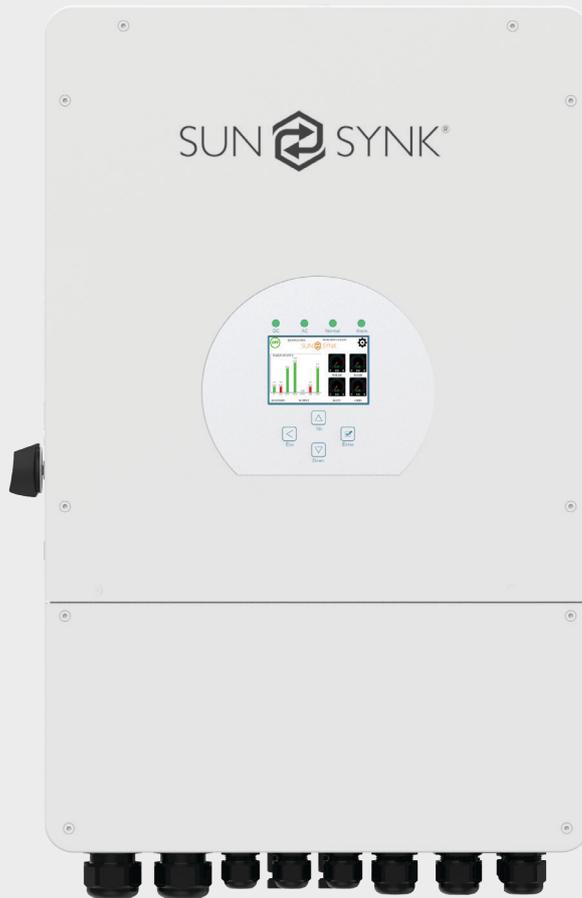




SINGLE-PHASE HYBRID INVERTER



DATASHEET

SUNSYNK-8K-SG01LP1 / SUNSYNK-8K-SG02LP1

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v.22 (07/05/25)

 **PLEASE RETAIN FOR
FUTURE REFERENCE**

| Model | SUNSYNK-8K-SG01LP1 / SUNSYNK-8K-SG02LP1 |
|--------------------------------------|---|
| Battery Input Data | |
| Battery Type | Lead-acid or Li-Ion |
| Battery Voltage Range | 48Vd.c (40Vd.c ~ 60Vd.c) |
| Max. Charging/Discharging Current | 190Ad.c (max.) |
| Charging Curve | 3 Stages / Equalization |
| External Temperature Sensor | Yes |
| Charging Strategy for Li-Ion Battery | Self-adaption to BMS |
| PV String Input Data | |
| Max. DC Input Power | 10400W |
| PV Input Voltage | 370V (125V~500V) |
| MPPT Range | 150~425V |
| Start-up Voltage | 125V |
| PV Input Current | 26Ad.c + 26Ad.c |
| Max PV Isc | 44Ad.c + 44Ad.c |
| No. of MPPT Trackers | 2 |
| No. of Strings Per MPPT Tracker | 2+2 |
| AC Output Data | |
| Rated AC Output and UPS Power | 8000W |
| Max. AC Output Power | 8800W |
| Peak Power (off grid) | 2 times of rated power, 10s |
| AC Output Rated Current | 34.8A |
| Max. AC Current | 38.3A |
| Max. Continuous AC Passthrough | 50A |
| Power Factor | 0.8 leading to 0.8 lagging |
| Output Frequency and Voltage | 50 / 60Hz; 208Vac (2 / 3 Phase), 220/230Vac (Single Phase) |
| Grid Type | 2 / 3 Phase; Single Phase |
| Total Harmonic Distortion (THD) | <3% (of nominal power) |
| DC current injection | <0.5% In |
| Efficiency | |
| Max. Efficiency | 97.60% |
| Euro Efficiency | 97.00% |
| MPPT Efficiency | >99% |
| Protection | |
| Integrated | PV Arc Fault Detection, 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 | DC Type II / AC Type II |
| Over Voltage Category | DC Type II / AC Type III |
| Certifications and Standards | |
| Grid Regulation | EN 50549-1, AS-NZS 4777.2, NRS 097-2-1; Additional connections available upon request |
| EMC/Safety Regulation | 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 | <30 dB |
| Communication with BMS | RS485; CAN |
| Net Weight | 32kg |
| Gross Weight | 38.5kg |
| Cabinet size | 420W×670H×233D (Excluding connectors and brackets) |
| Protection Degree | IP65 |
| Installation Style | Wall-mounted |
| Warranty | 5 years (10 years when installed with a Sunsynk battery) |



NOTE:

Safe Transport and Handling of Inverter:

When transporting the equipment, use its original packaging and keep it as a complete unit. Store the product in a dry environment, avoiding direct sunlight, and maintain a temperature range between -40°C and 60°C. Since the equipment can be quite heavy, always consider its total weight when moving, transporting, or installing it, ensuring that the installation site has adequate load-bearing capacity. Transporting and installing the inverter should be carried out solely by qualified personnel.



Contact Us

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