

S6-EH1P(3-8)K-L-PLUS

Solis Single Phase Low Voltage Energy Storage Inverters

New PLUS model provides solutions for demanding power scenarios

Features:

- Built-in Backup Port with Automatic UPS switching
- Up to 190A max charge/discharge current
- 6 customisable charge/discharge time settings
- 10 second 200% surge power backup overload capability
- Generator connectivity with multiple input methods and automatic generator On/Off control
- Supports 1ph and 3ph flexible connection with max 48kW in parallel
- Intelligent AC coupling scheme, easily upgrade existing grid-connected systems
- Supports peak shaving control in both "self-use" and "generator" mode
- Compatible with lead-acid and lithium batteries, with multiple battery protection features

Models:

S6-EH1P3K-L-PLUS / S6-EH1P3.6K-L-PLUS

S6-EH1P5K-L-PLUS / S6-EH1P6K-L-PLUS

S6-EH1P8K-L-PLUS



DATASHEET
S6-EH1P(3-8)K-L-PLUS

| Models | 3K | 3.6K | 5K | 6K | 8K |
|---|---|-----------------|-----------------|-----------------------------------|-----------------|
| Input DC (PV side) | | | | | |
| Recommended max. PV array size | 6 kW | 7.2 kW | 10 kW | 12 kW | 16 kW |
| Max. usable PV input power | 4.8 kW | 5.76 kW | 8 kW | 9.6 kW | 12.8 kW |
| Max. input voltage | 500 V | | | | |
| Rated voltage | 330 V | | | | |
| Start-up voltage | 90 V | | | | |
| MPPT voltage range | 90-435 V | | | | |
| Max. input current | 16 A / 16 A | | | | 32A / 32 A |
| Max. short circuit current | 20 A / 20 A | | | | 40 A / 40 A |
| MPPT number/Max. input strings number | 2/2 | | | | 2/4 |
| Battery | | | | | |
| Battery type | Li-ion / Lead-acid | | | | |
| Battery voltage range | 40-60 V | | | | |
| Max. charge / discharge power | 3 kW | 3.6 kW | 5 kW | 6 kW | 8 kW |
| Max. charge / discharge current | 70 A | 80 A | 112 A | 135 A | 190 A |
| Communication | CAN/RS485 | | | | |
| Output AC (Grid side) | | | | | |
| Rated output power | 3 kW | 3.6 kW | 5 kW | 6 kW | 8 kW |
| Max. apparent output power | 3 kVA | 3.6 kVA | 5 kVA | 6 kVA | 8 kVA |
| Operation phase | 1/N/PE | | | | |
| Rated grid voltage | 220 V / 230 V | | | | |
| Rated grid frequency | 50 Hz / 60 Hz | | | | |
| Rated grid output current | 13.7 A / 13.1 A | 16.4 A / 15.7 A | 22.8 A / 21.8 A | 27.3 A / 26.1 A | 36.4 A / 34.8 A |
| Max. output current | 13.7 A / 13.1 A | 16.4 A / 15.7 A | 22.8 A / 21.8 A | 27.3 A / 26.1 A | 36.4 A / 34.8 A |
| Power factor | >0.99 (0.8 leading - 0.8 lagging) | | | | |
| THDi | <2% | | | | |
| Input AC (Grid side) | | | | | |
| Input voltage range | 187-253 V | | | | |
| Max. input current | 21 A | 25 A | 32 A | 40 A | 50 A |
| Frequency range | 45-55 Hz / 55-65 Hz | | | | |
| Output AC (Back-up) | | | | | |
| Rated output power | 3 kW | 3.6 kW | 5 kW | 6 kW | 8 kW |
| Max. apparent output power | 2 times of rated power, 10 s | | | | |
| Back-up switch time | <4 ms | | | | |
| Rated output voltage | 1/N/PE, 220 V / 230 V | | | | |
| Rated frequency | 50 Hz / 60 Hz | | | | |
| Rated output current | 13.7 A / 13.1 A | 16.4 A / 15.7 A | 22.8 A / 21.8 A | 27.3 A / 26.1 A | 36.4 A / 34.8 A |
| Max. AC Passthrough current | 35 A | 35 A | 40 A | 40 A | 50 A |
| THDv (@linear load) | <2% | | | | |
| Efficiency | | | | | |
| Max. efficiency | 97.5% | | | | |
| EU efficiency | 96.5% | | | | |
| BAT charged by PV/AC Max. efficiency | 95.3% / 93.9% | | | | |
| BAT discharged to AC Max. efficiency | 93.8% | | | | |
| Protection | | | | | |
| Ground fault monitoring | Yes | | | | |
| DC reverse-polarity protection | Yes | | | | |
| Integrated AFCI (DC arc-fault circuit protection) | Yes ⁽¹⁾ | | | | |
| Protection class/Over voltage category | I / II (PV and BAT), III (MAINS and BACKUP and GEN) | | | | |
| General Data | | | | | |
| Dimensions (W*H*D) | 335*560*227 mm | | | | |
| Weight | 21.6 kg | | | | 22.2 kg |
| Topology | High frequency isolation (for battery) | | | | |
| Operating ambient temperature range | -40 ~ +60°C | | | | |
| Ingress protection | IP66 | | | | |
| Cooling concept | Natural convection | | | Intelligent redundant fan-cooling | |
| Max. operation altitude | 4000 m | | | | |
| Grid connection standard | NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA | | | | |
| Safety/EMC standard | IEC/EN 62109-1/-2, EN 61000-6-2/-3 | | | | |
| Features | | | | | |
| DC connection | MC4 plug (PV port) / Terminal Block (BAT port) | | | | |
| AC connection | Terminal Block | | | | |
| Display | LCD + Bluetooth + APP | | | | |
| Communication | RS485, CAN, Optional: Wi-Fi, GPRS, LAN | | | | |

(1) Activation required.