

## S6-EH1P8K-L-PLUS

# Solis Single Phase Low Voltage Energy Storage Inverters

**New** PLUS model provides solutions for demanding power scenarios

### Features:

- Generator-compatible to extend backup duration during grid power outage
- Multiple inverters can operate together to form a microgrid
- Supports dual backup ports for intelligent control of critical and non-critical loads
- 10 seconds of 200% overload capability
- Automatic switchover time is <4ms, providing seamless transitions from grid to backup
- Ensures excellent power supply stability, keeping the load unaffected by a weak grid or generator supply fluctuations

### Models:

S6-EH1P8K-L-PLUS



# DATASHEET

## S6-EH1P8K-L-PLUS

| Models                                 | 8K                                                                                                |
|----------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Input DC (PV side)</b>              |                                                                                                   |
| Recommended max. PV array size         | 16 kW                                                                                             |
| Max. usable PV input power             | 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                     | 32 A / 32 A                                                                                       |
| Max. short circuit current             | 40 A / 40 A                                                                                       |
| MPPT number/Max. input strings number  | 2/4                                                                                               |
| <b>Battery</b>                         |                                                                                                   |
| Battery type                           | Li-ion / Lead-acid                                                                                |
| Battery voltage range                  | 40-60 V                                                                                           |
| Max. charge / discharge power          | 8 kW                                                                                              |
| Max. charge / discharge current        | 190 A                                                                                             |
| Communication                          | CAN/RS485                                                                                         |
| <b>Output AC (Grid side)</b>           |                                                                                                   |
| Rated output power                     | 8 kW                                                                                              |
| Max. apparent output power             | 8 kVA                                                                                             |
| Operation phase                        | L/N/PE                                                                                            |
| Rated grid voltage                     | 220 V / 230 V                                                                                     |
| Rated grid frequency                   | 50 Hz / 60 Hz                                                                                     |
| Rated grid output current              | 36.4 A / 34.8 A                                                                                   |
| Max. output current                    | 36.4 A / 34.8 A                                                                                   |
| Power factor                           | >0.99 (0.8 leading - 0.8 lagging)                                                                 |
| THDi                                   | <2%                                                                                               |
| <b>Input AC (Grid side)</b>            |                                                                                                   |
| Input voltage range                    | 187-253 V                                                                                         |
| Max. input current                     | 50 A                                                                                              |
| Frequency range                        | 45-55 Hz / 55-65 Hz                                                                               |
| <b>Output AC (Back-up)</b>             |                                                                                                   |
| Rated output power                     | 8 kW                                                                                              |
| Max. apparent output power             | 2 times of rated power, 10 s                                                                      |
| Back-up switch time                    | <4 ms                                                                                             |
| Rated output voltage                   | L/N/PE, 220 V / 230 V                                                                             |
| Rated frequency                        | 50 Hz / 60 Hz                                                                                     |
| Rated output current                   | 36.4 A / 34.8 A                                                                                   |
| Max. AC Passthrough current            | 50 A                                                                                              |
| THDv (@linear load)                    | <2%                                                                                               |
| <b>Efficiency</b>                      |                                                                                                   |
| Max. efficiency                        | 96.2%                                                                                             |
| EU efficiency                          | 96.1%                                                                                             |
| BAT charged by PV/AC Max. efficiency   | 95.3%/93.9%                                                                                       |
| BAT discharged to AC Max. efficiency   | 93.8%                                                                                             |
| <b>Protection</b>                      |                                                                                                   |
| Ground fault monitoring                | Yes                                                                                               |
| DC reverse-polarity protection         | Yes                                                                                               |
| Integrated AFCI 2.0                    | Optional                                                                                          |
| Protection class/Over voltage category | I / II (PV and BAT), III (MAINS and BACKUP and GEN)                                               |
| <b>General Data</b>                    |                                                                                                   |
| Dimensions (W*H*D)                     | 335*560*227 mm                                                                                    |
| Weight                                 | 22.2 kg                                                                                           |
| Topology                               | High frequency isolation (for battery)                                                            |
| Operating ambient temperature range    | -40 ~ +60°C                                                                                       |
| Ingress protection                     | IP66                                                                                              |
| Cooling concept                        | Intelligent redundant fan-cooling                                                                 |
| Max. operation altitude                | 3000 m                                                                                            |
| Grid connection standard               | NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA, NBR 16149, NBR 16150 |
| Safety/EMC standard                    | IEC/EN 62109-1/-2, EN 61000-6-2/-3                                                                |
| <b>Features</b>                        |                                                                                                   |
| 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                                                            |