

**3-10K**

# SOLARATOR SERIES

Operates Seamlessly with Generator: Experience Uninterrupted Power, Even in Areas with Grid Instability

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

## S6-EH1P10K-L-PLUS(21A)

Single Phase | Low Voltage



- Supports PV input up to 160% of the inverter's rated DC power, maximising solar utilisation
- Supports up to 21A PV input current, compatible with future higher-power PV modules
- 200% overload for 10s in off-grid mode, ensuring stable startup of motors, water pumps and air conditioners
- Seamless on/off-grid switching in under 10ms, guaranteeing an uninterrupted power supply
- More battery options, compatible with any battery (between 40V-60V)
- Supports existing PV grid-tied power connection for export control and off-grid use
- Multiple methods of generator connection and auto control, enabling flexible local deployment
- Support max 6 units in parallel, expanding system capacity
- Smart Load management, extending backup time for critical loads
- Customizable battery backup level for uninterrupted power
- Supports PV-only off-grid operation, reducing upfront costs
- SolisCloud: Smart remote control, AI optimisation, and instant troubleshooting - all in one platform
- 7-inch industrial-grade LCD screen, providing a larger, user-friendly interface for local operation
- Ingress protection IP66, for operation in harsh conditions

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# DATASHEET

| Models                                      | 3K   | 3.6K            | 5K              | 6K                                | 8K              | 10K(21A)        |
|---|--|-----------------|-----------------|-----------------------------------|-----------------|-----------------|
| <b>Input DC (PV side)</b>                   |  |                 |                 |                                   |                 |                 |
| Recommended max. PV array size              | 6 kW   | 7.2 kW          | 10 kW           | 12 kW                             | 16 kW           | 20 kW           |
| Max. usable PV input power                  | 4.8 kW   | 5.76 kW         | 8 kW            | 9.6 kW                            | 12.8 kW         | 16 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  |                 |                 |                                   | 32 A / 32 A     | 42 A / 42 A     |
| Max. current per DC input                   |  |                 | 16 A            |                                   |                 |                 |
| Max. short circuit current                  | 20 A / 20 A  |                 |                 |                                   | 40 A / 40 A     | 48 A / 48 A     |
| MPPT number / Max. input strings number     | 2 / 2  |                 |                 |                                   | 2 / 4           |                 |
| <b>Battery</b>                              |  |                 |                 |                                   |                 |                 |
| 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            | 10 kW           |
| Max. charge / discharge current             | 70 A   | 80 A            | 112 A           | 135 A                             | 190 A           | 210 A           |
| Number of battery port / number of BMS port | 1 / 1  |                 |                 |                                   |                 |                 |
| Communication                               | CAN / RS485  |                 |                 |                                   |                 |                 |
| <b>Output AC (Grid side)</b>                |  |                 |                 |                                   |                 |                 |
| Rated output power                          | 3 kW   | 3.6 kW          | 5 kW            | 6 kW                              | 8 kW            | 10 kW           |
| Max. apparent output power                  | 3 kVA  | 3.6 kVA         | 5 kVA           | 6 kVA                             | 8 kVA           | 10 kVA          |
| Rated grid voltage                          | L/N/PE, 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 | 45.5 A / 43.5 A |
| Power factor                                | > 0.99 (0.8 leading - 0.8 lagging)   |                 |                 |                                   |                 |                 |
| THDi  | < 3%   |                 |                 |                                   |                 |                 |
| <b>Input AC (Grid side)</b>                 |  |                 |                 |                                   |                 |                 |
| Input voltage range                         | 187 - 253 V  |                 |                 |                                   |                 |                 |
| Max. input current                          | 21 A   | 25 A            | 32 A            | 40 A                              | 50 A            | 65 A            |
| <b>Output AC (Back-up)</b>                  |  |                 |                 |                                   |                 |                 |
| Rated output power                          | 3 kW   | 3.6 kW          | 5 kW            | 6 kW                              | 8 kW            | 10 kW           |
| Max. apparent output power                  | 2 times of rated power, 10 s   |                 |                 |                                   |                 |                 |
| Back-up switch time                         | < 10 ms  |                 |                 |                                   |                 |                 |
| Rated output voltage                        | L/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 | 45.5 A / 43.5 A |
| Max. AC passthrough current                 | 35 A   | 35 A            | 40 A            | 40 A                              | 50 A            | 65 A            |
| THDv (@linear load)                         | < 2%   |                 |                 |                                   |                 |                 |
| <b>Input AC (Generator side)</b>            |  |                 |                 |                                   |                 |                 |
| Max. input power                            | 3 kW   | 3.6 kW          | 5 kW            | 6 kW                              | 8 kW            | 10 kW           |
| Rated input 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 | 45.5 A / 43.5 A |
| Rated input voltage                         | 1/N/PE, 220 V / 230 V  |                 |                 |                                   |                 |                 |
| Rated input frequency                       | 50 Hz / 60 Hz  |                 |                 |                                   |                 |                 |
| <b>Efficiency</b>                           |  |                 |                 |                                   |                 |                 |
| Max. efficiency                             | 96.2%  |                 |                 |                                   |                 |                 |
| EU efficiency                               | 96.1%  |                 |                 |                                   |                 |                 |
| BAT charged by PV / AC max. efficiency      | 95.3% / 93.9%  |                 |                 |                                   |                 |                 |
| Battery discharged efficiency               | 93.8%  |                 |                 |                                   |                 |                 |
| <b>Protection</b>                           |  |                 |                 |                                   |                 |                 |
| Surge protection                            | Yes  |                 |                 |                                   |                 |                 |
| Output over current protection              | Yes  |                 |                 |                                   |                 |                 |
| Insulation resistance monitoring            | Yes  |                 |                 |                                   |                 |                 |
| Residual current detection                  | Yes  |                 |                 |                                   |                 |                 |
| Integrated PV switch                        | Yes  |                 |                 |                                   |                 |                 |
| DC reverse-polarity protection              | Yes  |                 |                 |                                   |                 |                 |
| Protection class / Over voltage category    | I / II (PV and BAT), III (MAINS and BACKUP and GEN)  |                 |                 |                                   |                 |                 |
| Integrated AFCI 2.0                         | Optional   |                 |                 |                                   |                 |                 |
| Anti-islanding protection                   | Yes  |                 |                 |                                   |                 |                 |
| <b>General Data</b>                         |  |                 |                 |                                   |                 |                 |
| Dimensions (W × H × D)                      | 335 × 560 × 253 mm   |                 |                 |                                   |                 |                 |
| Weight                                      | 23 kg  |                 |                 |                                   | 23.5 kg         | 23.8 kg         |
| Topology                                    | Non-isolated (PV), Isolated (Battery)  |                 |                 |                                   |                 |                 |
| Self-consumption                            | < 40 W   |                 |                 |                                   |                 |                 |
| Operating ambient temperature range         | -25 ~ +60°C  |                 |                 |                                   |                 |                 |
| Relative humidity                           | 0 - 100%   |                 |                 |                                   |                 |                 |
| Ingress protection                          | IP66   |                 |                 |                                   |                 |                 |
| Noise emission (typical)                    | < 40 dB(A)   |                 |                 | < 65 dB(A)                        |                 |                 |
| Cooling concept                             | Natural cooling  |                 |                 | 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, EN 50549-1, MEA, PEA, NBR 16149, NBR 16150, G98, G99, CEI 0-21, NTS 631 TypeA |                 |                 |                                   |                 |                 |
| Safety / EMC standard                       | IEC/EN 62109-1/-2, EN 61000-6-2/-3   |                 |                 |                                   |                 |                 |
| <b>Features</b>                             |  |                 |                 |                                   |                 |                 |
| PV connection                               | MC4 connector  |                 |                 |                                   |                 |                 |
| Battery connection                          | Terminal Block   |                 |                 |                                   |                 |                 |
| AC connection                               | Terminal Block   |                 |                 |                                   |                 |                 |
| Display                                     | 7.0" LCD display & Bluetooth + APP   |                 |                 |                                   |                 |                 |
| Communication interface                     | Standard: WIFI+LAN+Bluetooth, CAN-BMS, CAN-Parallel×2, RS485-Meter, RS485, DRM, DI, DO×2; Optional: 2G/3G/4G                                     |                 |                 |                                   |                 |                 |