

## S6-EH1P(3-6)K-L-PRO

# Solis Single Phase Low Voltage Energy Storage Inverters

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

### Features:

- Generator connectivity with multiple input methods and automatic generator On/Off control
- Automatic UPS switching
- 10 second 200% surge power backup overload capability
- Supports 1ph and 3ph flexible connection with max 36kW in parallel
- Up to 135A max charge/discharge current
- 6 customisable charge/discharge time settings
- Compatible with lead-acid and lithium batteries, with multiple battery protection features
- Supports peak shaving control in both "self-use" and "generator" mode

### Models:

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

S6-EH1P5K-L-PRO / S6-EH1P6K-L-PRO



# DATASHEET

## S6-EH1P(3-6)K-L-PRO

| Models                                            | 3K                                                                          | 3.6K            | 5K              | 6K              |
|---------------------------------------------------|-----------------------------------------------------------------------------|-----------------|-----------------|-----------------|
| Input DC (PV side)                                |                                                                             |                 |                 |                 |
| Recommended max. PV power                         | 4.8 kW                                                                      | 5.76 kW         | 8 kW            | 9.6 kW          |
| Max. input voltage                                | 600 V                                                                       |                 |                 |                 |
| Rated voltage                                     | 330 V                                                                       |                 |                 |                 |
| Start-up voltage                                  | 90 V                                                                        |                 |                 |                 |
| MPPT voltage range                                | 90-520 V                                                                    |                 |                 |                 |
| Max. input current                                | 16 A / 16 A                                                                 |                 |                 |                 |
| Max. short circuit current                        | 24 A / 24 A                                                                 |                 |                 |                 |
| MPPT number/Max. input strings number             | 2/2                                                                         |                 |                 |                 |
| 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            |
| Max. charge / discharge current                   | 70 A                                                                        | 80 A            | 112 A           | 135 A           |
| Communication                                     | CAN/RS485                                                                   |                 |                 |                 |
| Output AC (Grid side)                             |                                                                             |                 |                 |                 |
| Rated output power                                | 3 kW                                                                        | 3.6 kW          | 5 kW            | 6 kW            |
| Max. apparent output power                        | 3.3 kVA                                                                     | 4 kVA           | 5.5 kVA         | 6.6 kVA         |
| Operation phase                                   | 1/N/PE                                                                      |                 |                 |                 |
| Rated grid voltage                                | 220 V / 230 V                                                               |                 |                 |                 |
| Rated grid frequency                              | 50 Hz                                                                       |                 |                 |                 |
| Rated grid output current                         | 13.6 A / 13.0 A                                                             | 16.4 A / 15.7 A | 22.7 A / 21.7 A | 27.3 A / 26.1 A |
| Max. output current                               | 15 A                                                                        | 20 A            | 25 A            | 30 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                                | 20 A                                                                        | 25 A            | 32 A            | 40 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            |
| 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                                                                       |                 |                 |                 |
| Rated output current                              | 13.6 A / 13.0 A                                                             | 16.4 A / 15.7 A | 22.7 A / 21.7 A | 27.3 A / 26.1 A |
| Max. output current                               | 15 A                                                                        | 20 A            | 25 A            | 30 A            |
| Max. AC Passthrough current                       | 35 A                                                                        |                 | 40 A            |                 |
| THDv (@linear load)                               | <2%                                                                         |                 |                 |                 |
| Efficiency                                        |                                                                             |                 |                 |                 |
| Max. efficiency                                   | > 96.9%                                                                     |                 |                 |                 |
| EU efficiency                                     | > 96.5%                                                                     |                 |                 |                 |
| Protection                                        |                                                                             |                 |                 |                 |
| DC reverse-polarity protection                    | Yes                                                                         |                 |                 |                 |
| Ground fault monitoring                           | Yes                                                                         |                 |                 |                 |
| Integrated AFCI (DC arc-fault circuit protection) | Yes <sup>(1)</sup>                                                          |                 |                 |                 |
| Protection class/Over voltage category            | I/II (PV and BAT), III (MAINS and BACKUP and GEN)                           |                 |                 |                 |
| General Data                                      |                                                                             |                 |                 |                 |
| Dimensions (W*H*D)                                | 406*560*205 mm                                                              |                 |                 |                 |
| Weight                                            | 24 kg                                                                       |                 |                 |                 |
| Topology                                          | High frequency isolation (for battery)                                      |                 |                 |                 |
| Operating ambient temperature range               | -40 ~ +60°C                                                                 |                 |                 |                 |
| Ingress protection                                | IP66                                                                        |                 |                 |                 |
| Cooling concept                                   | Natural convection                                                          |                 |                 |                 |
| 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                                           | LED + APP                                                                   |                 |                 |                 |
| Communication                                     | RS485, CAN, Optional: Wi-Fi, GPRS, LAN                                      |                 |                 |                 |

(1) Activation required.