

## S6-GR1P(1-3)K-M

# Solis Single Phase Grid-Tied Inverters

### Features:

- Max. efficiency 97.5%
- String current up to 14A
- Super high frequency switching technology
- Wide voltage range and low startup voltage
- Precise MPPT algorithm
- Compact and lightweight
- Friendly and adaptable connection to the grid

### Models:

S6-GR1P1K-M

S6-GR1P2K-M

S6-GR1P3K-M



## DATASHEET

## S6-GR1P(1-3)K-M

| Models  | 1K            | 2K   | 3K            |
|---|---------------|--|---------------|
| <b>Input DC</b>                                   |               |  |               |
| Recommended max. PV power                         | 1.5 kW        | 3 kW   | 4.5 kW        |
| Max. input voltage                                |               | 550V   |               |
| Rated voltage                                     |               | 330 V  |               |
| Start-up voltage                                  | 60V           |  | 90V           |
| MPPT voltage range                                | 50-500 V      |  | 80-500 V      |
| Max. input current                                |               | 14A  |               |
| Max. short circuit current                        |               | 22 A   |               |
| MPPT number/Max. input strings number             |               | 1/1  |               |
| <b>Output AC</b>                                  |               |  |               |
| Rated output power                                | 1 kW          | 2 kW   | 3 kW          |
| Max. apparent output power                        | 1.1 kVA       | 2.2 kVA  | 3.3 kVA       |
| Max. output power                                 | 1.1 kW        | 2.2 kW   | 3.3 kW        |
| Rated grid voltage                                |               | 1/N/PE, 220 V / 230 V  |               |
| Rated grid frequency                              |               | 50 Hz / 60 Hz  |               |
| Rated grid output current                         | 4.5 A / 4.3 A | 9.1 A / 8.7 A  | 13.6 A / 13 A |
| Max. output current                               | 5.2A          | 10.5A  | 15.7A         |
| Power factor                                      |               | >0.99 (0.8 leading - 0.8 lagging)  |               |
| THDi  |               | <3%  |               |
| DC injection current                              |               | <0.5% In   |               |
| <b>Efficiency</b>                                 |               |  |               |
| Max. efficiency                                   |               | 97.5%  |               |
| EU efficiency                                     |               | 97.0%  |               |
| <b>Protection</b>                                 |               |  |               |
| DC reverse-polarity protection                    |               | Yes  |               |
| Short circuit protection                          |               | Yes  |               |
| Insulation resistance monitoring                  |               | Yes  |               |
| Residual current detection                        |               | Yes  |               |
| Output over current protection                    |               | Yes  |               |
| Surge protection                                  |               | T3 (DC), T2 (AC)   |               |
| Grid monitoring                                   |               | Yes  |               |
| Anti-islanding protection                         |               | Yes  |               |
| Temperature protection                            |               | Yes  |               |
| Integrated AFCI (DC arc-fault circuit protection) |               | Yes <sup>(1)</sup>   |               |
| Integrated DC switch                              |               | No   |               |
| <b>General Data</b>                               |               |  |               |
| Dimensions (W*H*D)                                |               | 310*373*160 mm   |               |
| Weight  | 7.1kg         |  | 7.4 kg        |
| Topology  |               | Transformerless  |               |
| Self-consumption (night)                          |               | <1 W   |               |
| Operating ambient temperature range               |               | -25 ~ +60°C  |               |
| Relative humidity                                 |               | 0-100%   |               |
| Ingress protection                                |               | IP66   |               |
| Noise emission (typical)                          |               | <20 dB(A)  |               |
| Cooling concept                                   |               | Natural convection   |               |
| Max. operation altitude                           |               | 4000 m   |               |
| Grid connection standard                          |               | IEC 61683, IEC 60068, IEC 61727, IEC 62116, EN 50530, IS 16169 / IS 16221(BIS) |               |
| Safety/EMC standard                               |               | IEC 62109-1/-2, IEC 61000-6-1/-2/-3/-4   |               |
| <b>Features</b>                                   |               |  |               |
| DC connection                                     |               | MC4 connector  |               |
| AC connection                                     |               | Quick connection plug  |               |
| Display   |               | LCD  |               |
| Communication                                     |               | RS485, Optional: S3-WiFi-ST, S3-GRPS-ST  |               |

(1) Activation required.