

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

# Solis Mini Series Inverters

### Features:

- Max. efficiency 97.1%
- String current up to 14A
- Super high frequency switching technology
- Wide voltage range and low startup voltage
- Precise MPPT algorithm
- Intergrated Export Power Manager (EPM)
- AFCI protection, proactively reduces fire risk
- Compact and lightweight
- Friendly and adaptable connection to the grid

### Models:

S6-GR1P1K-M / S6-GR1P1.5K-M

S6-GR1P2K-M / S6-GR1P2.5K-M

S6-GR1P3K-M



360° View



## DATASHEET

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

| Models  | 1K   | 1.5K          | 2K            | 2.5K            | 3K            |
|---|--|---------------|---------------|-----------------|---------------|
| <b>Input DC</b>                                   |  |               |               |                 |               |
| Recommended max. PV power                         | 1.5 kW   | 2.3 kW        | 3 kW          | 3.8 kW          | 4.5 kW        |
| Max. input voltage                                | 600 V  |               |               |                 |               |
| Rated voltage                                     | 200 V  |               | 330 V         |                 |               |
| Start-up voltage                                  | 60 V   |               | 90 V          |                 |               |
| MPPT voltage range                                | 50-500 V   |               | 80-500 V      |                 |               |
| Max. input current                                | 14 A   |               |               |                 |               |
| Max. short circuit current                        | 22 A   |               |               |                 |               |
| MPPT number/Max. input strings number             | 1/1  |               |               |                 |               |
| <b>Output AC</b>                                  |  |               |               |                 |               |
| Rated output power                                | 1 kW   | 1.5 kW        | 2 kW          | 2.5 kW          | 3 kW          |
| Max. apparent output power                        | 1.1 kVA  | 1.65 kVA      | 2.2 kVA       | 2.75 kVA        | 3.3 kVA       |
| Max. output power                                 | 1.1 kW   | 1.65 kW       | 2.2 kW        | 2.75 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  | 6.8 A / 6.5 A | 9.1 A / 8.7 A | 11.4 A / 10.9 A | 13.6 A / 13 A |
| Max. output current                               | 5.2 A  | 8.1 A         | 10.5 A        | 13.3 A          | 15.7 A        |
| Power factor                                      | >0.99 (0.8 leading - 0.8 lagging)  |               |               |                 |               |
| THDi  | <3%  |               |               |                 |               |
| DC injection current                              | <0.5% I <sub>n</sub>   |               |               |                 |               |
| <b>Efficiency</b>                                 |  |               |               |                 |               |
| Max. efficiency                                   | 96.6%  | 96.6%         | 97.1%         | 97.1%           |               |
| EU efficiency                                     | 95.3%  | 95.4%         | 96.4%         | 96.7%           |               |
| <b>Protection</b>                                 |  |               |               |                 |               |
| DC reverse-polarity protection                    | Yes  |               |               |                 |               |
| Short circuit protection                          | Yes  |               |               |                 |               |
| Output over current protection                    | Yes  |               |               |                 |               |
| Surge protection                                  | Yes  |               |               |                 |               |
| Grid monitoring                                   | Yes  |               |               |                 |               |
| Anti-islanding protection                         | Yes  |               |               |                 |               |
| Temperature protection                            | Yes  |               |               |                 |               |
| Integrated AFCI (DC arc-fault circuit protection) | Yes <sup>(1)</sup>   |               |               |                 |               |
| Integrated DC switch                              | Yes  |               |               |                 |               |
| <b>General Data</b>                               |  |               |               |                 |               |
| Dimensions (W*H*D)                                | 310*373*160 mm   |               |               |                 |               |
| Weight  | 7.4 kg   |               |               | 7.7 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.