

## S5-GC(50-60)K

# Solis Three Phase Grid-Tied Inverters

### Efficient

- Max. efficiency 98.7%
- String current up to 16A
- 5/6 MPPT design, supports multiple orientation system design
- Night time PID recovery function, increases overall system yield (optional)

### Smart

- Night SVG function
- Supports export power control
- Intelligent string monitoring, smart I-V curve scan
- Scan to register on SolisCloud, supports remote upgrade and control

### Safe

- IP66, C5 Anti-Corrosion Level
- Intelligent redundant fan-cooling
- Globally recognised branded componentry for longer life
- AFCI protection, proactively reduces fire risk

### Economic

- Supports GPRS/WiFi communication with less wiring and reduced installation costs
- DC side supports "Y" connector
- 10/12 string inputs allow for 150%+ DC oversizing

### Models:

S5-GC50K

S5-GC60K



360° View

# DATASHEET

## S5-GC(50-60)K

| Models                                | 50K  | 60K     |
|---------------------------------------|--|---------|
| <b>Input DC</b>                       |  |         |
| Recommended max. PV power             | 66.5 kW  | 79.8 kW |
| Max. input voltage                    | 1100 V   |         |
| Rated voltage                         | 600 V  |         |
| Start-up voltage                      | 195 V  |         |
| MPPT voltage range                    | 180-1000 V   |         |
| Max. input current                    | 5*32 A   | 6*32 A  |
| Max. short circuit current            | 5*40 A   | 6*40 A  |
| MPPT number/Max. input strings number | 5/10   | 6/12    |
| <b>Output AC</b>                      |  |         |
| Rated output power                    | 50 kW  | 60 kW   |
| Rated apparent output power           | 50 kVA   | 60 kVA  |
| Max. apparent output power            | 50 kVA   | 60 kVA  |
| Max. output power                     | 50 kW  | 60 kW   |
| Rated grid voltage                    | 3/N/PE, 230 V / 400 V  |         |
| Rated grid frequency                  | 50 Hz  |         |
| Rated grid output current             | 83.6 A   | 100.3 A |
| Max. output current                   | 83.6 A   | 100.3 A |
| Power factor                          | >0.99 (0.8 leading - 0.8 lagging)  |         |
| THDi                                  | <3%  |         |
| <b>Efficiency</b>                     |  |         |
| Max. efficiency                       | 98.7%  |         |
| CEC efficiency                        | 98.3%  |         |
| <b>Protection</b>                     |  |         |
| DC reverse-polarity protection        | Yes  |         |
| Short circuit protection              | Yes  |         |
| Output over current protection        | Yes  |         |
| Surge protection                      | DC Type II / AC Type II  |         |
| Grid monitoring                       | Yes  |         |
| Anti-islanding protection             | Yes  |         |
| Temperature protection                | Yes  |         |
| Strings monitoring                    | Yes  |         |
| I/V Curve scanning                    | Yes  |         |
| Integrated AFCI 2.0                   | Optional   |         |
| Integrated PID recovery               | Optional <sup>(2)</sup>  |         |
| Integrated DC switch                  | Yes (PV2 Switch)   |         |
| <b>General Data</b>                   |  |         |
| Dimensions (W*H*D)                    | 691*578*338 mm   |         |
| Weight                                | 53.7 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)              | <55 dB(A)  |         |
| Cooling concept                       | Intelligent redundant fan-cooling  |         |
| Max. operation altitude               | 4000 m   |         |
| Grid connection standard              | AS/NZS 4777.2:2020, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530 |         |
| Safety/EMC standard                   | IEC 62109-1/-2, IEC 61000-6-2/-4   |         |
| <b>Features</b>                       |  |         |
| DC connection                         | MC4 connector  |         |
| AC connection                         | OT terminal (max. 70 mm <sup>2</sup> )                                   |         |
| Display                               | LCD, Capacitive touch buttons  |         |
| Communication                         | RS485, USB, Optional: Wi-Fi, GPRS  |         |
| Country of manufacture                | China  |         |

(1) Due to the similar functional logic, when the night time PID-Recovery function is integrated, the night time var compensation function can not be used. Also, the negative grounding option is not available for inverters with night time PID-Recovery function.