

## S5-GC(25-40)K

# Solis Three Phase Grid-Tied Inverters

### Efficient

- Max. efficiency 98.7%
- String current up to 16A
- 3/4 MPPT design, supports multiple orientation system design
- Night time PID recovery function, increases overall system yield (optional)
- Wide voltage range and low startup voltage

### Smart

- Supports export power control
- Intelligent string monitoring, smart I-V curve scan
- Supports RS485, WiFi, GPRS
- Scan to register on SolisCloud, supports remote upgrade and control

### Safe

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

### Economic

- Supports GPRS/WiFi communication with less wiring and reduced installation costs
- > 150% DC/AC ratio
- Supports high power modules for lower installation costs

### Models:

S5-GC25K / S5-GC30K

S5-GC33K / S5-GC36K

S5-GC40K



360° View

# DATASHEET

## S5-GC(25-40)K

| Models  | 25K  | 30K             | 33K             | 36K             | 40K             |
|---|--|-----------------|-----------------|-----------------|-----------------|
| <b>Input DC</b>                                   |  |                 |                 |                 |                 |
| Recommended max. PV power                         | 37.5 kW  | 45 kW           | 49.5 kW         | 54 kW           | 60 kW           |
| Max. input voltage                                | 1100 V   |                 |                 |                 |                 |
| Rated voltage                                     | 600 V  |                 |                 |                 |                 |
| Start-up voltage                                  | 180 V  |                 |                 |                 |                 |
| MPPT voltage range                                | 200-1000 V   |                 |                 |                 |                 |
| Max. input current                                | 32 A / 32 A / 32 A   |                 |                 | 4*32 A          |                 |
| Max. short circuit current                        | 40 A / 40 A / 40 A   |                 |                 | 4*40 A          |                 |
| MPPT number/Max. input strings number             | 3/6  |                 |                 | 4/8             |                 |
| <b>Output AC</b>                                  |  |                 |                 |                 |                 |
| Rated output power                                | 25 kW  | 30 kW           | 33 kW           | 36 kW           | 40 kW           |
| Max. apparent output power                        | 27.5 kVA   | 33 kVA          | 36.3 kVA        | 39.6 kVA        | 44 kVA          |
| Max. output power                                 | 27.5 kW  | 33 kW           | 36.3 kW         | 39.6 kW         | 44 kW           |
| Rated grid voltage                                | 3/N/PE, 220 V / 380 V, 230 V / 400 V   |                 |                 |                 |                 |
| Rated grid frequency                              | 50 Hz / 60 Hz  |                 |                 |                 |                 |
| Rated grid output current                         | 38.0 A / 36.1 A  | 45.6 A / 43.3 A | 50.1 A / 47.6 A | 54.7 A / 52.0 A | 60.8 A / 57.7 A |
| Max. output current                               | 41.8 A   | 50.2 A          | 55.1 A          | 60.2 A          | 66.9 A          |
| Power factor                                      | >0.99 (0.8 leading - 0.8 lagging)  |                 |                 |                 |                 |
| THDi  | <3%  |                 |                 |                 |                 |
| <b>Efficiency</b>                                 |  |                 |                 |                 |                 |
| Max. efficiency                                   | 98.5%  |                 | 98.6%           |                 | 98.7%           |
| EU efficiency                                     | 98.1%  |                 | 98.2%           |                 | 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 (DC arc-fault circuit protection) | Yes <sup>(1)</sup>   |                 |                 |                 |                 |
| Integrated PID recovery                           | Optional   |                 |                 |                 |                 |
| Integrated DC switch                              | Optional   |                 |                 |                 |                 |
| <b>General Data</b>                               |  |                 |                 |                 |                 |
| Dimensions (W*H*D)                                | 647*629*252 mm   |                 |                 |                 |                 |
| Weight  | 38.2 kg  |                 |                 | 42.1 kg         |                 |
| Topology  | Transformerless  |                 |                 |                 |                 |
| Self-consumption (night)                          | <1 W   |                 |                 |                 |                 |
| Operating ambient temperature range               | -25 ~ +60°C  |                 |                 |                 |                 |
| Relative humidity                                 | 0-100%   |                 |                 |                 |                 |
| Ingress protection                                | IP66   |                 |                 |                 |                 |
| Cooling concept                                   | Intelligent redundant fan-cooling  |                 |                 |                 |                 |
| Max. operation altitude                           | 4000 m   |                 |                 |                 |                 |
| Grid connection standard                          | G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, RD 1699 / RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC60068, IEC 61683, EN 50530 |                 |                 |                 |                 |
| Safety/EMC standard                               | IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4   |                 |                 |                 |                 |
| <b>Features</b>                                   |  |                 |                 |                 |                 |
| DC connection                                     | MC4 connector  |                 |                 |                 |                 |
| AC connection                                     | OT terminal  |                 |                 |                 |                 |
| Display   | LCD  |                 |                 |                 |                 |
| Communication                                     | RS485, Optional: Wi-Fi, GPRS   |                 |                 |                 |                 |

(1) Activation required.