

## S5-GC(25-50)K

# Solis Three Phase Grid-Tied Inverters

### Efficient

- Max. efficiency 98.8%
- 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 / S5-GC40K-HV  
S5-GC50K-HV



DATASHEET

S5-GC(25-50)K

| Models                                | 25K             | 30K                | 33K  | 36K  | 40K             | 40K-HV      | 50K-HV |
|---------------------------------------|-----------------|--------------------|--|--|-----------------|-------------|--------|
| <strong>Input DC</strong>             |                 |                    |  |  |                 |             |        |
| Recommended max. PV power             | 37.5 kW         | 45 kW              | 49.5 kW  | 54 kW  | 60 kW           | 60 kW       | 75 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         |        |
| <strong>Output AC</strong>            |                 |                    |  |  |                 |             |        |
| Rated output power                    | 25 kW           | 30 kW              | 33 kW  | 36 kW  | 40 kW           | 40 kW       | 50 kW  |
| Max. apparent output power            | 27.5 kVA        | 33 kVA             | 36.3 kVA   | 39.6 kVA                                     | 44 kVA          | 44 kVA      | 55 kVA |
| Max. output power                     | 27.5 kW         | 33 kW              | 36.3 kW  | 39.6 kW                                      | 44 kW           | 44 kW       | 55 kW  |
| Rated grid voltage                    |                 |                    | 3/N/PE, 220 V / 380 V, 230 V / 400 V   |  |                 | 3/PE, 480 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 | 48.1 A      | 60.1 A |
| Max. output current                   | 41.8 A          | 50.2 A             | 55.1 A   | 60.2 A                                       | 66.9 A          | 53.0 A      | 66.2 A |
| Power factor                          |                 |                    |  | >0.99 (0.8 leading - 0.8 lagging)            |                 |             |        |
| THDi                                  |                 |                    |  | <3%  |                 |             |        |
| <strong>Efficiency</strong>           |                 |                    |  |  |                 |             |        |
| Max. efficiency                       |                 | 98.5%              | 98.6%  | 98.7%  |                 | 98.8%       |        |
| EU efficiency                         |                 | 98.1%              | 98.2%  | 98.3%  |                 | 98.4%       |        |
| <strong>Protection</strong>           |                 |                    |  |  |                 |             |        |
| 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                                     |                 |             |        |
| Integrated DC switch                  |                 |                    |  | Yes  |                 |             |        |
| <strong>General Data</strong>         |                 |                    |  |  |                 |             |        |
| 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   |                 |             |        |
| Noise emission (typical)              |                 |                    |  | ≤60 dB(A)                                    |                 |             |        |
| 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 |                 |             |        |
| <strong>Features</strong>             |                 |                    |  |  |                 |             |        |
| DC connection                         |                 |                    |  | MC4 connector                                |                 |             |        |
| AC connection                         |                 |                    |  | OT terminal                                  |                 |             |        |
| Display                               |                 |                    |  | LCD  |                 |             |        |
| Communication                         |                 |                    |  | RS485, Optional: Wi-Fi, GPRS                 |                 |             |        |