

S5-GC(15-23)K-LV

Solis Three Phase Grid-Tied Inverters

Efficient

- Max. efficiency 97.8%
- String current up to 16A
- 3 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-GC15K-LV

S5-GC20K-LV

S5-GC23K-LV



360° View

DATASHEET

S5-GC(15-23)K-LV

| Models | 15K | 20K | 23K |
|---|--|--------|---------|
| Input DC | | | |
| Recommended max. PV power | 22.5 kW | 30 kW | 34.5 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 | | |
| Max. short circuit current | 40 A / 40 A / 40 A | | |
| MPPT number/Max. input strings number | 3/6 | | |
| Output AC | | | |
| Rated output power | 15 kW | 20 kW | 23 kW |
| Max. apparent output power | 16.5 kVA | 22 kVA | 25 kVA |
| Max. output power | 16.5 kW | 22 kW | 25 kW |
| Rated grid voltage | 3/PE, 220 V | | |
| Rated grid frequency | 50 Hz / 60 Hz | | |
| Rated grid output current | 39.4 A | 52.5 A | 60.4 A |
| Max. output current | 43.3 A | 57.7 A | 65 A |
| Power factor | >0.99 (0.8 leading - 0.8 lagging) | | |
| THDi | <3% | | |
| Efficiency | | | |
| Max. efficiency | 97.8% | | |
| EU efficiency | 97.3% | | |
| Protection | | | |
| 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 ⁽¹⁾ | | |
| Integrated PID recovery | Optional | | |
| Integrated DC switch | Yes | | |
| General Data | | | |
| 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 | | |
| Features | | | |
| DC connection | MC4 connector | | |
| AC connection | OT terminal | | |
| Display | LCD | | |
| Communication | RS485, Optional: Wi-Fi, GPRS | | |

(1) Activation required.