

S5-GC(25-50)K/BE

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 / S5-GC30K-BE



360° View

DATASHEET

S5-GC(25-50)K/BE

| Models | 25K | 30K | 33K | 36K | 40K | 40K-HV | 50K-HV | 30K-BE |
|---|--|-----------------|-----------------|-----------------|-----------------|-------------|--------------------|--|
| Input DC | | | | | | | | |
| Recommended max. PV power | 37.5 kW | 45 kW | 49.5 kW | 54 kW | 60 kW | 60 kW | 75 kW | 45 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 | | | 32 A / 32 A / 32 A | |
| Max. short circuit current | 40 A / 40 A / 40 A | | | 4*40 A | | | 40 A / 40 A / 40 A | |
| MPPT number/Max. input strings number | 3/6 | | | 4/8 | | | 3/6 | |
| Output AC | | | | | | | | |
| Rated output power | 25 kW | 30 kW | 33 kW | 36 kW | 40 kW | 40 kW | 50 kW | 30 kW |
| Max. apparent output power | 27.5 kVA | 33 kVA | 36.3 kVA | 39.6 kVA | 44 kVA | 44 kVA | 55 kVA | 30 kVA |
| Max. output power | 27.5 kW | 33 kW | 36.3 kW | 39.6 kW | 44 kW | 44 kW | 55 kW | 30 kW |
| Rated grid voltage | 3/N/PE, 220 V / 380 V, 230 V / 400 V | | | | | 3/PE, 480 V | | 3 / N / PE, 220 / 380 V, 230 / 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 | 48.1 A | 60.1 A | 45.6 A / 43.3 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 | 50.2 A |
| Power factor | >0.99 (0.8 leading - 0.8 lagging) | | | | | | | |
| THDi | <3% | | | | | | | |
| Efficiency | | | | | | | | |
| Max. efficiency | 98.5% | | 98.6% | 98.7% | | 98.8% | | 98.5% |
| EU efficiency | 98.1% | | 98.2% | 98.3% | | 98.4% | | 98.1% |
| 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 | Optional | | | | | | | |
| General Data | | | | | | | | |
| Dimensions (W*H*D) | 647*629*252 mm | | | | | | | |
| Weight | 37 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.