

Solis Three Phase Inverters

» S5-GC(50-60)K



360 degree

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
- ▶ Supports aluminium wire access to reduce cost
- ▶ 10/12 string inputs allow for 150%+ DC oversizing

Model: 400V: S5-GC50K S5-GC60K

Datasheet

| Model Name | S5-GC50K | S5-GC60K |
|---|--|-----------------|
| Input DC | | |
| 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 |
| Output AC | | |
| Rated output power | 50 kW | 60 kW |
| Max. apparent output power | 55 kVA | 66 kVA |
| Max. output power | 55 kW | 66 kW |
| Rated grid voltage | 3/N/PE, 220 V / 380 V, 230 V / 400 V | |
| Rated grid frequency | 50 Hz | |
| Rated grid output current | 76.0 A / 72.2 A | 91.2 A / 86.6 A |
| Max. output current | 83.6 A | 100.3 A |
| Power Factor | >0.99 (0.8 leading - 0.8 lagging) | |
| THDi | <3% | |
| Efficiency | | |
| Max. efficiency | 98.7% | |
| EU efficiency | 98.3% | |
| Protection | | |
| DC reverse-polarity protection | Yes | |
| Short circuit protection | Yes | |
| Output over current protection | Yes | |
| Surge protection | DC Type II / AC Type II (DC Type I optional) | |
| 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 ⁽²⁾ | |
| Integrated DC switch | Optional | |
| General Data | | |
| Dimensions (W*H*D) | 691*578*338 mm | |
| Weight | 54.5 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 | G98 or 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, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC60068, IEC 61683, EN 50530 | |
| Safety/EMC standard | IEC 62109-1/-2, IEC62116 & IEC 61000-6-1/-2/-3/-4 | |
| Features | | |
| DC connection | MC4 connector | |
| AC connection | OT terminal (max. 70 mm ²) | |
| Display | LCD, Capacitive touch buttons | |
| Communication | RS485, USB, Optional: Wi-Fi, GPRS | |

(1) Activation required.

(2) 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.