

Solis Three Phase Inverters

» S5-GC(50-70)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 **480V:** S5-GC60K-HV S5-GC70K-HV

Datasheet

| Model Name | S5-GC50K | S5-GC60K | S5-GC60K-HV | S5-GC70K-HV |
|---|--|---|-------------|-------------|
| Input DC | | | | |
| Max. input voltage | | 1100 V | | |
| Rated voltage | 600 V | | 720 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 | 60 kW | 70 kW |
| Max. apparent output power | 55 kVA | 66 kVA | 66 kVA | 77 kVA |
| Max. output power | 55 kW | 66 kW | 66 kW | 77 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 | 76.0 A / 72.2 A | 91.2 A / 86.6 A | 72.2 A | 84.2 A |
| Max. output current | 83.6 A | 100.3 A | 79.4 A | 92.6 A |
| Power Factor | | >0.99 (0.8 leading - 0.8 lagging) | | |
| THDi | | <3% | | |
| Efficiency | | | | |
| Max. efficiency | | 98.7% | | |
| EU efficiency | 98.3% | | 98.4% | |
| 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 ⁽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.