solis

GINLONG TECHNOLOGIES CO.,LTD.

# S5-GC(50-60)K

## Solis Three Phase Grid-Tied Inverters

### Features:

- 5/6 MPPT, max. efficiency 98.7%
- Nighttime PID recovery function (optional)
- AFCI protection, proactively reduces fire risk
- Intelligent string monitoring, smart I-V curve scan
- 24-hour load consumption monitoring
- IP66, C5 Anti-Corrosion level
- Night SVG function

### Models:

S5-GC50K / S5-GC60K




360º View

# DATASHEET

| Models | 50K | 60K |
|---|---|---|
| **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 / 60 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 | |
| Grid monitoring | Yes | |
| Anti-islanding protection | Yes | |
| Temperature protection | Yes | |
| Strings monitoring | Yes | |
| I/V Curve scanning | Yes | |
| Integrated AFCI 2.0 | Optional | |
| Multi peak scan | Yes | |
| Integrated PID recovery | Optional ① | |
| Integrated DC switch | Yes | |
| **General Data** | | |
| Dimensions (W × H × D) | 691 × 578 × 338 mm | |
| Weight | 53.7 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) | < 55 dB(A) | |
| Cooling concept | Intelligent 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 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 | |
| Communication | RS485, USB, Optional: Wi-Fi, GPRS | |

① 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.