

S5-GC(80-110)K

Solis Three Phase Grid-Tied Inverters

Efficient

- 9/10 MPPTs, max. efficiency 98.8%
- > 150% DC/AC ratio
- String current up to 16A, perfectly match large current bifacial modules

Smart

- Night SVG function
- Intelligent string monitoring, smart I-V curve scan
- Remote firmware upgrade with simple operation

Safe

- IP66
- Built-in PID recovery for better module performance (optional)
- AFCI protection, proactively reduces fire risk
- Globally recognised branded componentry for longer life

Economic

- Power line communication (PLC) (optional)
- DC side supports "Y" connector

Models:

S5-GC80K

S5-GC100K-HV

S5-GC110K-BHV



360° View

DATASHEET

S5-GC(80-110)K

| Models | 80K | 100K-HV | 110K-BHV |
|---|---|-------------|-------------|
| 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 | 9 × 32 A | 10 × 32 A | |
| Max. short circuit current | 9 × 40 A | 10 × 40 A | |
| MPPT number / Max. input strings number | 9 / 18 | 10 / 20 | |
| Output AC | | | |
| Rated output power | 80 kW | 100 kW | 110 kW |
| Max. apparent output power | 88 kVA | 110 kVA | 121 kVA |
| Max. output power | 88 kW | 110 kW | 121 kW |
| Rated grid voltage | 3/N/PE, 220 V / 380 V, 230 V / 400 V | 3/PE, 480 V | 3/PE, 540 V |
| Rated grid frequency | 50 Hz / 60 Hz | | |
| Rated grid output current | 121.6 A / 115.5 A | 120.3 A | 117.6 A |
| Max. output current | 133.7 A | 132.3 A | 129.4 A |
| Power factor | > 0.99 (0.8 leading - 0.8 lagging) | | |
| THDi | < 3% | | |
| Efficiency | | | |
| Max. efficiency | 98.7% | 98.8% | |
| EU efficiency | 98.3% | 98.5% | |
| 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 | | |
| Integrated PID recovery | Optional | | |
| Integrated DC switch | Yes | | |
| Integrated AC switch | Optional | | |
| General Data | | | |
| Dimensions (W × H × D) | 1050 × 567 × 314.5 mm (with AC switch) | | |
| Weight | 85 kg | | |
| Topology | Transformerless | | |
| Self-consumption (night) | < 2 W | | |
| Operating ambient temperature range | -30 ~ +60°C | | |
| Relative humidity | 0 - 100% | | |
| Ingress protection | IP66 | | |
| Cooling concept | Intelligent fan-cooling | | |
| Max. operation altitude | 4000 m | | |
| Grid connection standard | G98 or G99, VDE-AR-N 4105/VDE-AR-N 4110/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530 | | |
| Safety / EMC standard | IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4 | | |
| Features | | | |
| DC connection | MC4 connector | | |
| AC connection | OT terminal (max. 185 mm ²) | | |
| Display | LCD | | |
| Communication | RS485, Optional: Wi-Fi, GPRS, PLC | | |