

S5-GC(100-110)K

Solis Three Phase Grid-Tied Inverters

Efficient

- 10 MPPTs, max. efficiency 98.7%
- > 150% DC/AC ratio
- High power tracking density 100MPPT/MW
- 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
- AFCI protection, proactively reduces fire risk
- Nighttime PID recovery function (optional)
- Overvoltage load reduction and leakage current suppression technology, low failure rate

Economic

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

Models:

S5-GC100K

S5-GC110K



DATASHEET

S5-GC(100-110)K

Models	100K	110K
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	10 × 32 A	
Max. short circuit current	10 × 40 A	
MPPT number / Max. input strings number	10 / 20	
Output AC		
Rated output power	100 kW	110 kW
Max. apparent output power	110 kVA	121 kVA
Max. output power	110 kW	121 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	152.0 A / 144.3 A	167.1 A / 158.8 A
Max. output current	167.1 A	183.8 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)	
THDi	< 3%	
DC injection current	< 0.5% In	
Efficiency		
Max. efficiency	98.7%	
EU efficiency	98.3%	
Protection		
DC reverse-polarity protection	Yes	
Short circuit protection	Yes	
Output over current protection	Yes	
Insulation resistance monitoring	Yes	
Residual current detection	Yes	
Surge protection	DC Type II / AC Type II (AC Type I optional)	
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)	1065 × 567 × 344.5 mm	
Weight	91 kg	
Topology	Transformerless	
Self-consumption (night)	< 2 W	
Operating ambient temperature range	- 30 ~ +60°C	
Relative humidity	0 - 100%	
Ingress protection	IP66	
Noise emission (typical)	≤ 80 dB(A)	
Cooling concept	Intelligent fan-cooling	
Max. operation altitude	4000 m	
Grid connection standard	IEC 61683, IEC 60068, IEC 61727, IEC 62116, EN 50530, IS 16169/IS 16221(BIS)	
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 (max. 185 mm²)	
Display	LCD	
Communication	RS485, Optional: S3-WiFi-ST, S3-GRPS-ST, PLC	