

S5-GC(50-60)K

Solis Three Phase Grid-Tied Inverters

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
- 10/12 string inputs allow for 150%+ DC oversizing

Models:

S5-GC50K

S5-GC60K



360° View

DATASHEET

S5-GC(50-60)K

Models	50K	60K
Input DC		
Recommended max. PV power	66.5 kW	79.8 kW
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
Rated apparent output power	50 kVA	60 kVA
Max. apparent output power	50 kVA	60 kVA
Max. output power	50 kW	60 kW
Rated grid voltage	3/N/PE, 230 V / 400 V	
Rated grid frequency	50 Hz	
Rated grid output current	83.6 A	100.3 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%	
CEC 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	
Integrated PID recovery	Optional ⁽¹⁾	
Integrated DC switch	Yes (PV2 Switch)	
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 redundant fan-cooling	
Max. operation altitude	4000 m	
Grid connection standard	AS/NZS 4777.2:2020, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530	
Safety/EMC standard	IEC 62109-1/-2, IEC 61000-6-2/-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	
Country of manufacture	China	

(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.