

S5-GC(50-70)K

Solis Three Phase Inverters



360 degree

Model:

400V: S5-GC50K S5-GC60K **480V:** S5-GC60K-HV S5-GC70K-HV



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)



Safe

- ▶ IP66, C5 Anti-Corrosion Level
- ▶ Intelligent redundant fan-cooling
- ▶ Globally recognised branded componentry for longer life
- ▶ AFCI protection, proactively reduces fire risk



Smart

- ▶ Night time SVG function
- ▶ Supports export power control
- ▶ Intelligent string monitoring, smart I-V curve scan
- ▶ Scan to register on SolisCloud, supports remote upgrade and control



Economic

- ▶ Supports PLC/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

Datasheet

Model Name	S5-GC50K	S5-GC60K	S5-GC60K-HV	S5-GC70K-HV
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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*50 A	6*50 A	
MPPT number/Max. input strings number	5/10	6/12	

Output AC

Rated output power	50 kW	60 kW	60 kW	70 kW
Rated apparent output power	50 kVA	60 kVA	60 kVA	70 kVA
Max. apparent output power	50 kVA	60 kVA	60 kVA	70 kVA
Max. output power	50 kW	60 kW	60 kW	70 kW
Rated grid voltage	3/N/PE, 230 V / 400 V		3/PE, 480 V	
Rated grid frequency	50 Hz			
Rated grid current	72.2 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%			
CEC 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 PID recovery	Optional ⁽¹⁾
Integrated DC switch	Yes (PV2 Switch)

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	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, PLC ⁽²⁾
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.

(2) The PLC communication can not work with RS485 communication at the same time. If already installed the PLC CCO for PLC communication on site, then the RS485 ports on the inverters can not be used to connect another monitoring/control device.