

# 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
<b>Input DC</b>				
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*40 A		6*40 A	
MPPT number/Max. input strings number	5/10		6/12	
<b>Output AC</b>				
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	83.6 A	100.3 A	79.4 A	92.6 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%			
<b>Efficiency</b>				
Max. efficiency	98.7%			
CEC efficiency	98.3%		98.4%	
<b>Protection</b>				
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(DC ari-fault circuit protection)	Yes <sup>(1)</sup>			
Integrated PID recovery	Optional <sup>(2)</sup>			
Integrated DC switch	Optional (PV2 Switch)			
<b>General Data</b>				
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			
<b>Features</b>				
DC connection	MC4 connector			
AC connection	OT terminal (max. 70 mm <sup>2</sup> )			
Display	LCD, Capacitive touch buttons			
Communication	RS485, USB, Optional: Wi-Fi, GPRS, PLC <sup>(3)</sup>			
Country of manufacture	China			

(1) Activation required.

(2) 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.

(3) 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.