

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)



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



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 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
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
Max. apparent output power	55 kVA	66 kVA	66 kVA	77 kVA
Max. output power	55 kW	66 kW	66 kW	77 kW
Rated grid voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V		3/PE, 480 V	
Rated grid frequency			50 Hz / 60 Hz	
Rated grid output current	76.0 A / 72.2 A	91.2 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%	
EU 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 AFCI (DC arc-fault circuit protection)			Yes ⁽¹⁾	
Integrated PID recovery			Optional ⁽²⁾	
Integrated DC switch			Optional	
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	VDE-AR-N 4105, VDE V 0124, VDE V 0126-1-1, UTE C15-712-1, NRS 097-1-2, G98, G99, EN 50549-1/-2, NTS 631, UNE 206006, UNE 206007-1, IEC61727, DEWA			
Safety/EMC standard	IEC 62109-1/-2, IEC62116 & IEC 61000-6-1/-2/-3/-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 ⁽³⁾	

(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.