

S6-GC(80-125)K

Solis Three Phase Grid-Tied Inverters

Efficient

- 8/10 MPPTs, max. efficiency 98.7%
- > 150% DC/AC ratio
- String current up to 21A, perfectly match large current bifacial modules

Smart

- Supports export power control
- Intelligent string monitoring, smart I-V curve scan
- Remote firmware upgrade with simple operation

Safe

- IP66
- AFCI protection, proactively reduces fire risk
- Globally recognised branded componentry for longer life

Economic

- Power line communication (PLC) (optional)
- Night time PID recovery function, increases overall system yield (optional)
- DC side supports "Y" connector

Models:

S6-GC80K / S6-GC100K

S6-GC110K / S6-GC125K

S6-GC125K-HV



DATASHEET

S6-GC(80-125)K

Models	80K	100K	110K	125K	125K-HV
Input DC					
Max. input voltage	1100 V				
Rated voltage	600 V				720 V
Start-up voltage	180 V				
MPPT voltage range	160-1000 V				
Max. input current	4*(42 A / 36 A)		5*(42 A / 36 A)		
Max. short circuit current	8*50 A		10*50 A		
MPPT number/Max. input strings number	8/16		10/20		
Output AC					
Rated output power	80 kW	100 kW	110 kW	125 kW	125kW
Max. apparent output power	88 kVA	110 kVA	121 kVA	125 kVA	137.5 kVA
Max. output power	88 kW	110 kW	121 kW	125kW	137.5 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	121.6 A / 115.5 A	152.0 A / 144.3 A	167.1 A / 158.8 A	189.9 A / 180.4 A	150.4 A
Max. output current	133.7 A	167.1 A	183.8 A	189.9 A	165.4 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				
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				
Integrated DC switch	Yes				
Integrated AC switch	Optional				
General Data					
Dimensions (W*H*D)	1014*567*345 mm				
Weight	93 kg	96 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)	≤65 dB(A)				
Cooling concept	Intelligent redundant fan-cooling				
Max. operation altitude	4000 m				
Grid connection standard	G99, IEC61727, EN50549-1/2, VDE4110				IEC61727
Safety/EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4				
Features					
DC connection	MC4 connector				
AC connection	OT terminal (max. 240 mm ²)				
Display	LCD				
Communication	RS485, Optional: S3-WiFi-ST, S3-GRPS-ST, PLC				

(1) Activation required.