

S5-GC(15-23)K-LV

Solis Three Phase Grid-Tied Inverters

Efficient

- Max. efficiency 97.8%
- String current up to 16A
- 3 MPPT design, supports multiple orientation system design
- Night time PID recovery function, increases overall system yield (optional)
- Wide voltage range and low startup voltage

Smart

- Supports export power control
- Intelligent string monitoring, smart I-V curve scan
- Supports RS485, WiFi, GPRS
- Scan to register on SolisCloud, supports remote upgrade and control

Safe

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

Economic

- Supports GPRS/WiFi communication with less wiring and reduced installation costs
- > 150% DC/AC ratio
- Supports high power modules for lower installation costs

Models:

S5-GC15K-LV

S5-GC20K-LV

S5-GC23K-LV



360° View

DATASHEET

S5-GC(15-23)K-LV

Models	15K	20K	23K
Input DC			
Recommended max. PV power	22.5 kW	30 kW	34.5 kW
Max. input voltage		1100 V	
Rated voltage		600 V	
Start-up voltage		180 V	
MPPT voltage range		200 - 1000 V	
Max. input current		32 A / 32 A / 32 A	
Max. short circuit current		40 A / 40 A / 40 A	
MPPT number / Max. input strings number		3 / 6	
Output AC			
Rated output power	15 kW	20 kW	23 kW
Max. apparent output power	16.5 kVA	22 kVA	25 kVA
Max. output power	16.5 kW	22 kW	25 kW
Rated grid voltage		3/PE, 220 V	
Rated grid frequency		50 Hz / 60 Hz	
Rated grid output current	39.4 A	52.5 A	60.4 A
Max. output current	43.3 A	57.7 A	65 A
Power factor		> 0.99 (0.8 leading - 0.8 lagging)	
THDi		< 3%	
Efficiency			
Max. efficiency		97.8%	
EU efficiency		97.3%	
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	
Multi peak scan		Yes	
Integrated AFCI 2.0		Optional	
Integrated PID recovery		Optional	
Integrated DC switch		Yes	
General Data			
Dimensions (W × H × D)		647 × 629 × 252 mm	
Weight	38.2 kg		42.1 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)		≤ 60 dB(A)	
Cooling concept		Intelligent fan-cooling	
Max. operation altitude		4000 m	
Grid connection standard	G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC60068, IEC 61683, EN 50530		
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4		
Features			
DC connection		MC4 connector	
AC connection		OT terminal	
Display		LCD	
Communication		RS485, Optional: Wi-Fi, GPRS	