

S5-GC(25-50)K

Solis Three Phase Grid-Tied Inverters

Efficient

- Max. efficiency 98.8%
- String current up to 16A
- 3/4 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 redundant 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-GC25K / S5-GC30K

S5-GC33K / S5-GC36K

S5-GC40K / S5-GC40K-HV

S5-GC50K-HV



360° View

DATASHEET

S5-GC(25-50)K

Models	25K	30K	33K	36K	40K	40K-HV	50K-HV
Input DC							
Recommended max. PV power	37.5 kW	45 kW	49.5 kW	54 kW	60 kW	60 kW	75 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			4 × 32 A			
Max. short circuit current	40 A / 40 A / 40 A			4 × 40 A			
MPPT number / Max. input strings number	3 / 6			4 / 8			
Output AC							
Rated output power	25 kW	30 kW	33 kW	36 kW	40 kW	40 kW	50 kW
Max. apparent output power	27.5 kVA	33 kVA	36.3 kVA	39.6 kVA	44 kVA	44 kVA	55 kVA
Max. output power	27.5 kW	33 kW	36.3 kW	39.6 kW	44 kW	44 kW	55 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	38.0 A / 36.1 A	45.6 A / 43.3 A	50.1 A / 47.6 A	54.7 A / 52.0 A	60.8 A / 57.7 A	48.1 A	60.1 A
Max. output current	41.8 A	50.2 A	55.1 A	60.2 A	66.9 A	53.0 A	66.2 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)						
THDi	< 3%						
Efficiency							
Max. efficiency	98.5%		98.6%	98.7%		98.8%	
EU efficiency	98.1%		98.2%	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			
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			