

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 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-GC40K

S5-GC40K-HV / S5-GC50K-HV



360° View

DATASHEET

S5-GC(25-50)K

Models	25K	30K	33K	40K	40K-HV	50K-HV
Input DC						
Recommended max. PV power	37.5 kW	45 kW	49.5 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	40 kW	40 kW	50 kW
Max. apparent output power	27.5 kVA	33 kVA	36.3 kVA	44 kVA	44 kVA	55 kVA
Max. output power	27.5 kW	33 kW	36.3 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	60.8 A / 57.7 A	48.1 A	60.1 A
Max. output current	41.8 A	50.2 A	55.1 A	66.9 A	53.0 A	66.2 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)					
THDi	< 3%					
DC injection current	< 0.5% I _n					
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					
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					
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	IEC 61683, IEC 60068, IEC 61727, IEC 62116, EN 50530, IS 16169/IS 16221(BIS)					
Safety / EMC standard	IEC 62109-1/-2, IEC 61000-6-1/-2/-3/-4					
Features						
DC connection	MC4 connector					
AC connection	Screw type terminal block					
Display	LCD					
Communication	RS485, Optional: S3-WiFi-ST, S3-GRPS-ST					