

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-GC40K

S5-GC40K-HV / S5-GC50K-HV



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% In							
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							
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 redundant 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							