

S5-GC(25-50)K

Solis Three Phase Grid-Tied Inverters

Features:

- Max. efficiency 98.8%
- 3/4 MPPT design, suitable for multi-facing roof
- AFCI protection, proactively reduces fire risk
- Nighttime PID recovery function(optional)
- Intelligent string monitoring, smart I-V curve scan
- 24-hour load consumption monitoring
- IP66

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% 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		
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		