

Residential Single Phase Inverter



HIGH YIELD

- Higher yield with Max. efficiency 98.2 %, European efficiency 97.7 %
- Flexible PV string configurations, DC/AC ratio up to 1.3

SMART MANAGEMENT

- Easy local and online monitoring via App or Web
- Export power control with smart energy meter

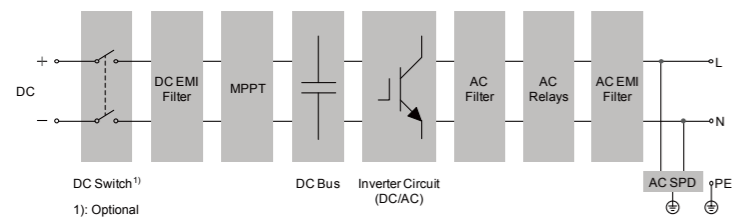
SAFE AND DURABLE

- Built-in surge arresters and residual current protection
- High anti-corrosion with aluminum alloy die casting

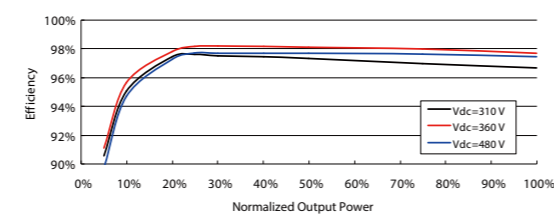
EASY AND USER FRIENDLY

- 8.5 kg compact design, plug and play installation
- Fast commissioning via LCD

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG2K-S	SG2K5-S	SG3K-S
Input (DC)			
Max. PV input voltage		600 V	
Min PV input voltage / Startup voltage		90 / 120 V	
Nominal input voltage		360 V	
MPP voltage range		90 V – 560 V	
MPP voltage range for nominal power	210 V – 480 V	260 V – 480 V	310 V – 480 V
No. of MPPTs		1	
Max. number of PV strings per MPPT		1	
Max. PV input current		10 A	
Max. current for input connector		12 A	
Max. PV short-circuit current		12 A	
Output (AC)			
AC output power	2000 VA	2500 VA	3000 VA
Max. AC output current	9.1 A	11.3 A	13.7 A
Nominal AC voltage		230 Vac	
AC voltage range		180 Vac – 276 Vac	
Nominal grid frequency		50 Hz / 60 Hz	
Grid frequency range		45 Hz – 55 Hz / 55 Hz – 65 Hz	
Total harmonic distortion (THD)		< 3 % (of nominal power)	
DC current injection		< 0.5 % (of nominal current)	
Power factor		> 0.99 / 0.8 leading – 0.8 lagging	
Feed-in phases / Connection phases		1 / 1	
Efficiency			
Max. efficiency / European efficiency	98.2 % / 97.2 %	98.2 % / 97.5 %	98.2 % / 97.7 %
Protection			
PV reverse connection protection		Yes	
AC short circuit protection		Yes	
Leakage current protection		Yes	
Grid monitoring		Yes	
PV string current monitoring		Yes	
DC switch		Optional	
Overvoltage protection		AC Type II	
General Data			
Dimensions (W*H*D)		300*370*125 mm	
Weight		8.5 kg	
Isolation method		Transformerless	
Ingress protection rating		IP65	
Power loss in night mode		< 1 W	
Operating ambient temperature		-25 °C to 60 °C (>45 °C derating)	
Allowable relative humidity (non-condensing)		0 – 100 %	
Cooling method		Natural cooling	
Max. operating altitude		4000 m (> 2000 m derating)	
Display / Communication		LCD / WiFi	
PV connection type		MC4 (Max. 6 mm ²)	
AC connection type		Plug and play connector (Max. 6 mm ²)	
Compliance		IEC62109-1, IEC62109-2, IEC62116, IEC61727, EN 61000-6-2, EN 61000-6-3, AS4777.2	
Grid support		Active & reactive power control, power ramp rate control	
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