

Residential Single Phase Inverter



HIGH YIELD

- Higher yield with Max. efficiency 98.2 %, European efficiency 97.7 %
- Flexible PV string configurations with 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

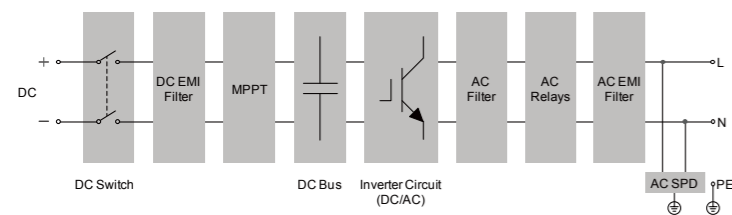
SAFE AND DURABLE

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

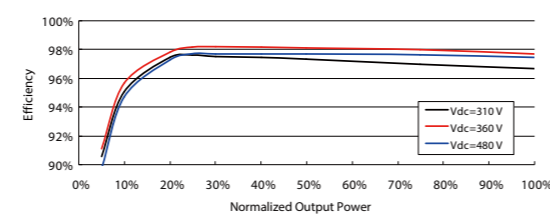
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG2K-S	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	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	3000 VA
Max. AC output current	9.1 A	13.7 A
Nominal AC voltage	220 Vac / 240 Vac	
AC voltage range	176 Vac – 276 Vac (this may vary with grid standards)	
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 % / 97.7 %
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	Yes	
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 / Wi-Fi	
PV connection type	MC4 (Max. 6mm ²)	
AC connection type	Plug and play connector (Max. 6mm ²)	
Compliance	IEC62109-1, IEC62109-2, IEC62116, IEC61727, EN 61000-6-2, EN 61000-6-3, ABNT NBR 16149, ABNT NBR 16150	
Grid support	Active & reactive power control, power ramp rate control	