

SG2K-S-NI/SG2K5-S-NI/ SG3K-S-NI

Residential Single Phase Inverter



HIGH YIELD

- Higher yield with Max. efficiency 98.2 %, European efficiency 97.7 %
- 12.5 A MPPT current, and compatible with bifacial modules
- Flexible PV string configurations, DC/AC ratio up to 1:4



SAFE AND RELIABLE

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



SMART MANAGEMENT

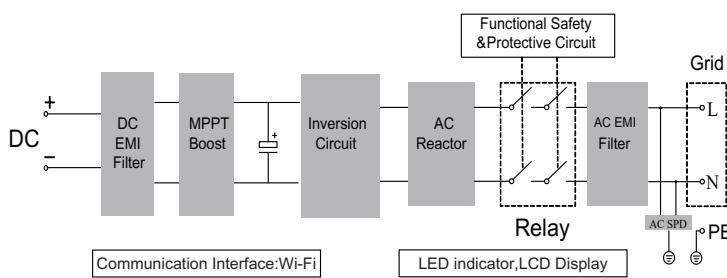
- Easy local and online monitoring via App or Web
- Export power control with smart energy meter



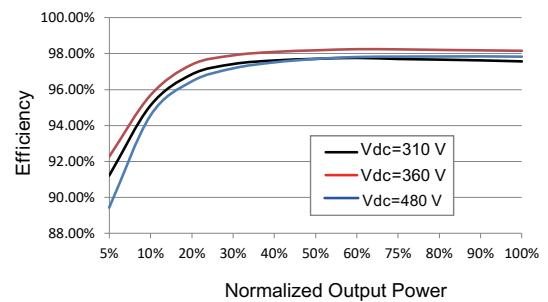
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE (SG3K-S-NI)



Type designation	SG2K-S-NI	SG2K5-S-NI	SG3K-S-NI
Input (DC)			
Recommended max. PV input power	2680 W	3350 W	4000 W
Max. PV input voltage		600 V	
Min. PV input voltage / Startup voltage		90 V / 120 V	
Rated input voltage		360 V	
MPP voltage range		90 V – 560 V	
MPP voltage range for rated 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		12.5 A	
Max. PV short-circuit current		20 A	
Output Side Data			
AC output power	2000 VA	2500 VA	3000 VA
Rated AC output apparent power	2000 VA	2500 VA	3000 VA
Max. AC output current	9.1 A	11.3 A	13.7 A
Rated AC voltage		230 Vac	
AC voltage range		180 Vac – 276 Vac	
Rated grid frequency		50 Hz / 60 Hz	
Grid frequency range		45 Hz – 55 Hz / 55 Hz – 65 Hz	
Total harmonic distortion (THD)		< 3 % (of rated power)	
Power factor		> 0.99 / 0.8 leading – 0.8 lagging	
Feed-in phases / Connection phases		1/1	
Efficiency			
Max. efficiency	98.2%	98.2%	98.2%
European efficiency	97.2%	97.5%	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		No	
AFCI		No	
24H loads monitoring		No	
Oversupply 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		< 1W	
Operating ambient temperature		-25 °C to 60 °C (>45 °C derating)	
Allowable relative humidity		0 – 100 %	
Cooling method		Natural cooling	
Max. operating altitude		4000 m (> 2000 m derating)	
Display / Communication		LCD / WLAN	
PV connection type		MC4 (max. 6 mm ²)	
AC connection type		Plug and play connector (max. 6 mm ²)	
Certification	IEC62109-1, IEC62109-2, IEC62116, IEC61727, EN 61000-6-2, EN 61000-6-3, AS/NZS 4777.2:2020		
Grid support	Active & reactive power control, power ramp rate control		
Country of manufacture	China		

