

SG3K/4K/5K/6K-D

Residential Single Phase Inverter



HIGH YIELD

- Higher yield with Max. efficiency 98.4 %, European efficiency 98.0 %
- 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

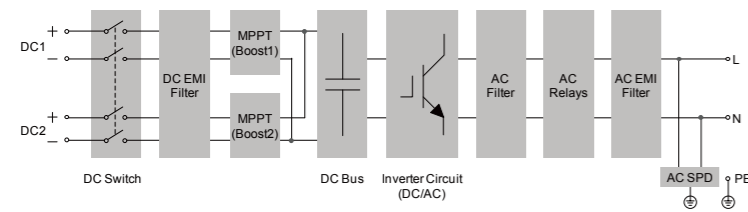
- Built-in surge arresters and residual current protection
- High anti-corrosion with aluminum alloy die casting



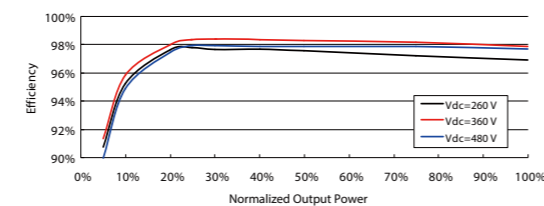
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG3K-D	SG4K-D	SG5K-D	SG6K-D
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	160 V – 480 V	210 V – 480 V	260 V – 480 V	315 V – 480 V
No. of MPPTs			2	
Max. number of PV strings per MPPT			1	
Max. PV input current			20 A (10 A / 10 A)	
Max. current for input connector			24 A (12 A / 12 A)	
Max. PV short-circuit current			24 A (12 A / 12 A)	
Output (AC)				
AC output power	3000 VA	4000 VA	5000 VA	6000 VA
Max. AC output current	13.7 A	18.2 A	22.7 A	27.3 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			98.4 %	
Max. European efficiency	97.7 %	98.0 %	98.0 %	98.0 %
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)			360*390*133 mm	
Weight			11.5 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. 6mm2)	
AC connection type			Plug and play connector (Max. 6mm2)	
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	