

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

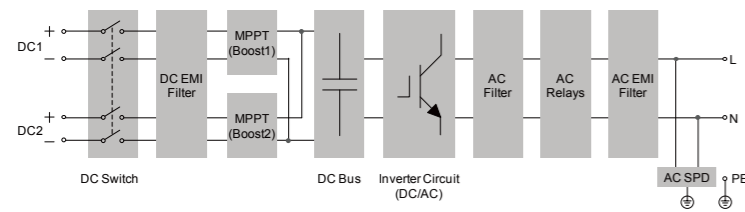
SAFE AND DURABLE

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

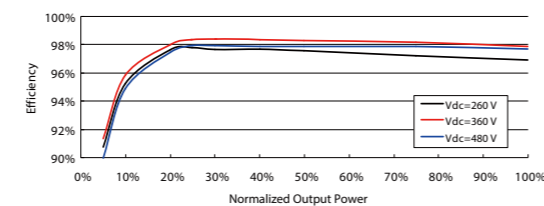
EASY AND USER FRIENDLY

- 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		