

SG3K-D/SG5K-D/SG8K-D

Residential Single Phase Inverter **Premium**



HIGH YIELD

- Higher yield with Max. efficiency 98.5 %
- 12.5 A MPPT current, and compatible with bifacial modules
- Flexible PV string configurations, DC/AC ratio up to 1.4

SMART MANAGEMENT

- 24H real-time loads monitoring
- Easy local and online monitoring via App or Web

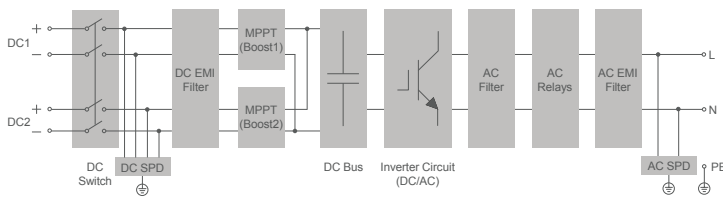
SAFE AND DURABLE

- Quick Arc Fault Circuit Interrupter
- Built-in Type II DC&AC surge protection device
- Built-in certified PV isolator

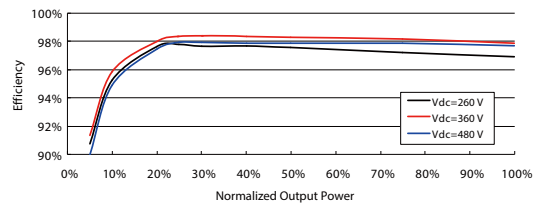
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG3K-D	SG5K-D	SG8K-D
Input (DC)			
Max. PV input voltage		600 V	
Min. PV input voltage / Startup voltage		90 V / 120 V	
Nominal input voltage		360 V	
MPP voltage range		90 V – 560 V	
MPP voltage range for nominal power	160 V – 480 V	260 V – 480 V	275 V – 480 V
No. of MPPTs		2	
Max. number of PV strings per MPPT		1	
Max. PV input current	25 A (12.5 A / 12.5 A)	25 A (12.5 A / 12.5 A)	12.5 A / 25 A
Max. PV short-circuit current	30 A (15 A / 15 A)	30 A (15 A / 15 A)	15 A / 30 A
Output Side Data			
AC output power	3000 VA	4999 VA	8000 VA
Max. AC output current	13.7 A	21.7 A	34.8 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)	
Power factor		> 0.99 / 0.8 leading – 0.8 lagging	
Feed-in phases / Connection phases		1 / 1	
Efficiency			
Max. efficiency	98.4 %	98.4 %	98.5 %
European efficiency	97.7 %	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 (meet AS60947.3:2018)	
AFCI		Yes	
Overvoltage protection		DC Type II / AC Type II	
General Data			
Dimensions (W*H*D)	360*390*133 mm	360*390*133 mm	360*390*148 mm
Weight	11.5 kg	11.5 kg	15.5 kg
Isolation method		Transformerless	
Ingress protection rating		IP65	
Power loss in night mode		< 3 W	
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	IEC62109-1, IEC62109-2, IEC62116, IEC61727, EN 61000-6-2, EN 61000-6-3, AS / NZS 4777.2	IEC62109-1, IEC62109-2, EN 61000-6-2, EN 61000-6-3, AS / NZS 4777.2

