

# SG3K-D/SG4K-D/SG5K-D/SG6K-D

Residential String Inverter



### High Yield

- Higher yield with Max. efficiency 98.4 %, European efficiency 98.0 %
- Wide MPPT voltage range



### Smart Management

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



### Safe and Durable

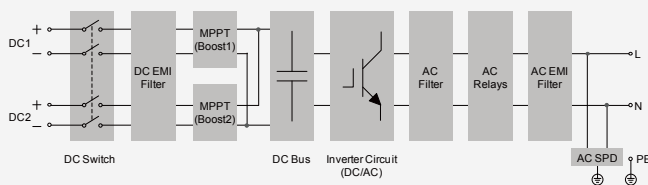
- Built-in surge arresters and residual current protection
- High anti-corrosion with aluminum alloy die casting



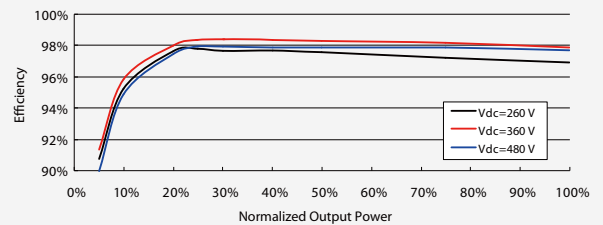
### Easy and User Friendly

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

## Circuit Diagram



## Efficiency Curve



Input (DC)	SG3K-D	SG4K-D	SG5K-D	SG6K-D
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	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	60 Hz			
Grid frequency range	55 Hz – 65 Hz (this may vary with grid standards)			
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. 6mm <sup>2</sup> )
AC connection type	Plug and play connector (Max. 6mm <sup>2</sup> )
Compliance	IEC62109-1, IEC62109-2, IEC62116, IEC61727, EN 61000-6-2, EN 61000-6-3, ABNT NBR 16149, ABNT NBR 16150
Compliance	Active & reactive power control, power ramp rate control
Type designation	SG3K-D-10      SG4K-D-10      SG5K-D-10      SG6K-D-10

