

# SG3K-D/SG5K-D Premium

## Residential Single Phase Inverter



### HIGH YIELD

- Higher yield with Max. efficiency 98.4 %, European efficiency 98.0 %
- 12.5 A MPPT current, and compatible with bifacial modules
- Flexible PV string configurations, DC/AC ratio up to 1.4

### SAFE AND DURABLE

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

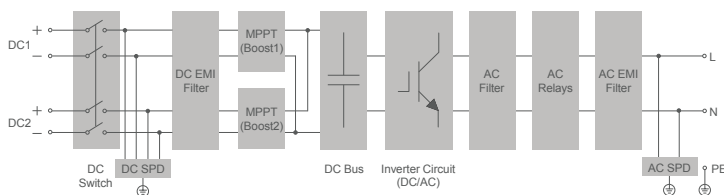
### SMART MANAGEMENT

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

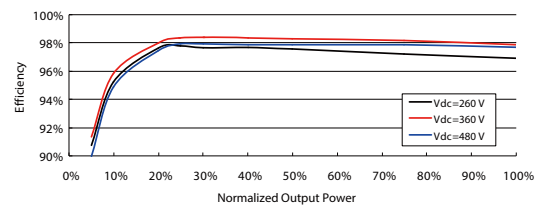
### EASY AND USER FRIENDLY

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

### CIRCUIT DIAGRAM



### EFFICIENCY CURVE



Type designation	SG3K-D	SG5K-D
<b>Input (DC)</b>		
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
No. of MPPTs	2	
Max. number of PV strings per MPPT	1	
Max. PV input current	25 A (12.5 A / 12.5 A)	
Max. PV short-circuit current	30 A (15 A / 15 A)	
<b>Output Side Data</b>		
AC output power	3000 VA	4999 VA
Max. AC output current	13.7 A	21.7 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	
<b>Efficiency</b>		
Max. efficiency	98.4 %	
European efficiency	97.7 %	98.0 %
<b>Protection</b>		
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	
<b>General Data</b>		
Dimensions (W*H*D)	360*390*133 mm	
Weight	11.5 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 <sup>2</sup> )	
AC connection type	Plug and play connector (max. 6 mm <sup>2</sup> )	
Certification	IEC62109-1, IEC62109-2, IEC62116, IEC61727, EN 61000-6-2, EN 61000-6-3, AS / NZS 4777.2	