

## Residential Single Phase Inverter



### HIGH YIELD

- Higher yield with Max. efficiency 98.5 %, 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

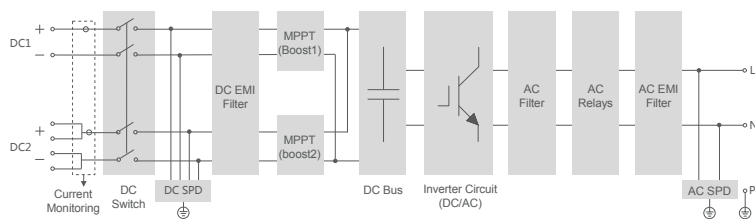
### SMART MANAGEMENT

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

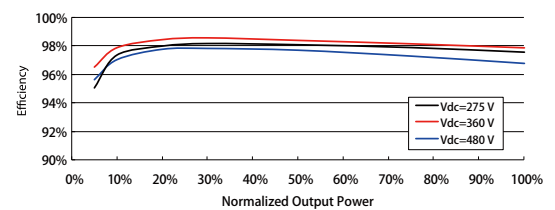
### EASY AND USER FRIENDLY

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

### CIRCUIT DIAGRAM



### EFFICIENCY CURVE



Type designation	SG8K-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 – 540 V
MPP voltage range for nominal power	275 V – 480 V
No. of MPPTs	2
Max. number of PV strings per MPPT	1 / 2
Max. PV input current	12.5 A / 25 A
Max. PV short-circuit current	15 A / 30 A
<b>Output Side Data</b>	
AC output power	8000 VA
Max. AC output current	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
<b>Efficiency</b>	
Max. efficiency	98.5 %
European efficiency	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*148 mm
Weight	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 <sup>2</sup> )
AC connection type	Plug and play connector (max. 6 mm <sup>2</sup> )
Certification	IEC62109-1, IEC62109-2, EN 61000-6-2, EN 61000-6-3, AS / NZS 4777.2