

# SG8K-D Premium

Residential Single Phase Inverter

AU



## 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

## SMART MANAGEMENT

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

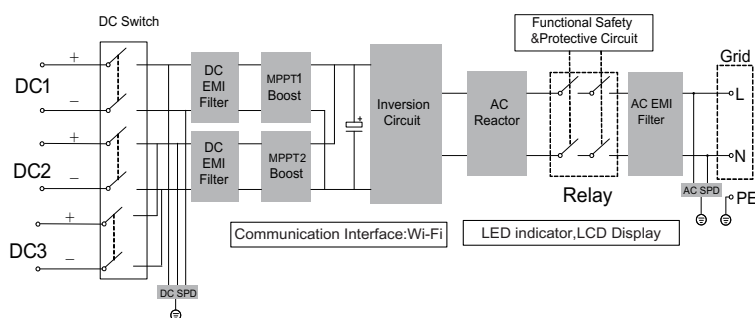
## SAFE AND RELIABLE

- Quick Arc Fault Circuit Interrupter
- Built-in Type II DC&AC Surge Protection Device
- Built-in Certified PV Isolator

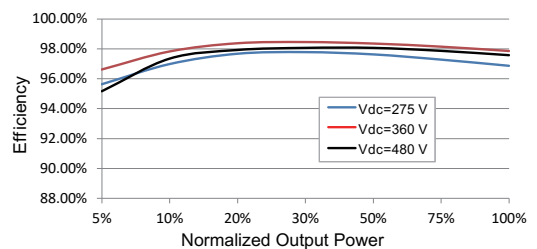
## EASY AND USER FRIENDLY

- 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>	
Recommended max. PV input power	10700 W
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	16 A / 32 A
<b>Output Side Data</b>	
AC output power	8000 VA
Rated AC output apparent 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%
Max. 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
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	< 3W
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 4777.2:2020
Country of manufacture	China

