

Residential Single Phase String Inverter



HIGH YIELD

- Higher yield with Max. efficiency 98.5 %, 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

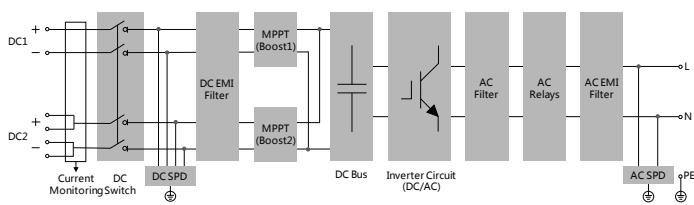
- Built-in surge arresters and residual current protection
- High anti-corrosion with aluminum alloy die casting



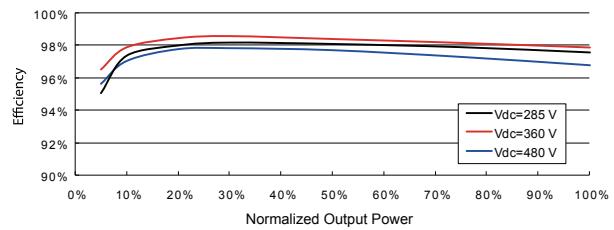
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG8K3-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 – 540 V
MPP voltage range for nominal power	285 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. current for input connector	15 A
Max. PV short-circuit current	15 A / 30 A
Output (AC)	
AC output power	8300 VA
Max. AC output current	36.1 A
Nominal AC voltage	220 Vac / 240 Vac
AC voltage range	176 Vac – 276 Vac (this may vary with grid standards)
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)
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 / European efficiency	98.5 % / 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
Overshoot protection	DC Type II / AC Type II
General Data	
Dimensions (W*H*D)	360*390*148 mm
Weight	15.5 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 ²)
AC connection type	Plug and play connector (Max. 6mm ²)
Compliance	IEC62109-1, IEC62109-2, IEC62116, IEC61727, EN 61000-6-2, EN 61000-6-3, ABNT NBR 16149, ABNT NBR 16150
Grid support	Active & reactive power control, power ramp rate control

