

Residential Single Phase Inverter



HIGH YIELD

- Industry leading efficiency of 98.2%
- Flexible PV string configurations
- High DC/AC ratio up to 1.3

SMART MANAGEMENT

- Feature-rich online monitoring via App or Web
- Firmware updates & new monitoring features
- Gain energy flow with Sungrow smart meter

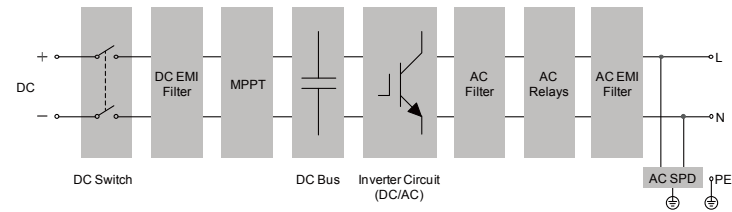
SAFE AND RELIABLE

- Built-in surge arresters & RCD
- Cutting-edge technology ensures long life time
- High anti-corrosion rating at C5

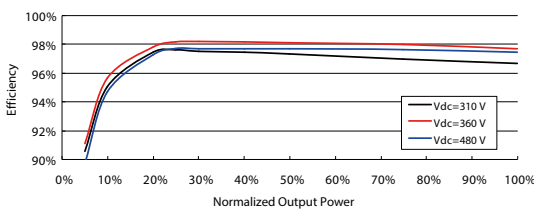
EASY INSTALLATION

- Unique push-in connectors for time-saving installation
- Mounting plate with built-in level
- Fast and easy commissioning via App or LCD

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG3K-S
Input (DC)	
Max. PV input voltage	600 V
Min. PV input voltage / Startup voltage	90 / 120 V
Nominal input voltage	360 V
MPP voltage range	90 V – 560 V
MPP voltage range for nominal power	310 V – 480 V
No. of MPPTs	1
Max. number of PV strings per MPPT	1
Max. PV input current	10 A
Max. current for input connector	12 A
Max. PV short-circuit current	12 A
Output (AC)	
Max. AC output power	3000 VA
Max. AC output current	13.7 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)
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	98.2 % / 97.7 %
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)	300*370*125 mm
Weight	8.5 kg
Isolation method	Transformerless
Ingress protection rating	IP65
Night power consumption	< 1 W
Operating ambient temperature range	-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	LCD
Communication	Wifi / Ethernet (optional)
DC connection type	MC4 (Max. 6 mm²)
AC connection type	Plug and play connector (Max. 6 mm²)
Compliance	IEC62109-1, IEC62109-2, IEC62116, IEC61727, EN 61000-6-2, EN 61000-6-3, VDE-AR-N-4105, CEI 0-21, VDE0126-1-1, UTE C15-712, VFR-2014, EN50438, C10/11, G83/2, G59/3SG2K5-S
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