

SG3K/3K6/4K/4K6/5K/6K-D

Residential String Inverter



HIGH YIELD

- Industry leading efficiency of 98.4%
- 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

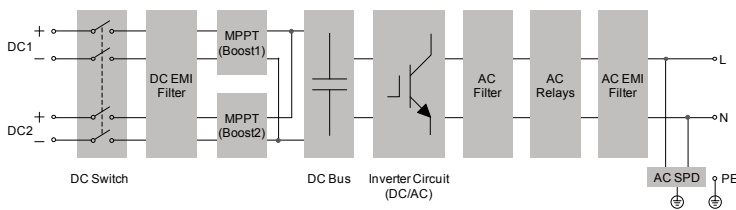
SAFE AND RELIABLE

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

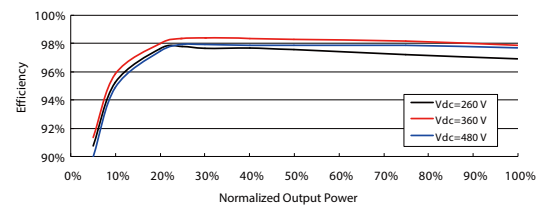
EASY INSTALLATION

- 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-D	SG3K6-D	SG4K-D	SG4K6-D	SG5K-D	SG6K-D
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	160 V – 480 V	190 V – 480 V	210 V – 480 V	240 V – 480 V	260 V – 480 V	315 V – 480 V
No. of MPPTs	2					
Max. number of PV strings per MPPT	1					
Max. PV input current	20 A (10 A / 10 A)					
Max. current for input connector	24 A (12 A / 12 A)					
Max. PV short-circuit current	24 A (12 A / 12 A)					
Output (AC)						
Max. AC output power	3000 VA	3680 VA	4000 VA	4600 VA	5000 VA	6000 VA
Max. AC output current	13.7 A	16 A	18.2 A	21 A	22.7 A	27.3 A
Nominal AC voltage	230 Vac					
AC voltage range	180 – 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	98.4 %					
Max. European efficiency	97.7 %	97.7 %	98.0 %	98.0 %	98.0 %	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*					
Overvoltage protection	AC Type II					
General Data						
Dimensions (W*H*D)	360*390*133 mm					
Weight	11.5 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	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 mm ²)					
AC connection type	Plug and play connector (max. 6 mm ²)					
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, G59/3					

*: Devices for Australia are not equipped with DC switches

**Deluxe Version: < 3W (DC & AC power supply)

