

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

SUNGROW
Clean power for all

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

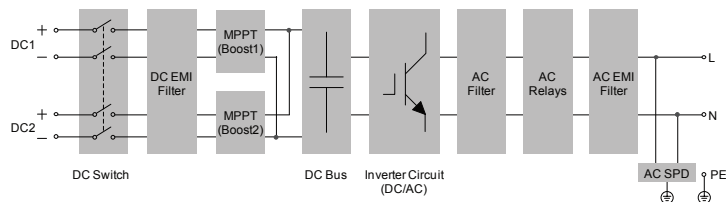
- Built-in surge arresters & RCD
- Cutting-edge technology ensures long life time
- High anti-corrosion rating at C5



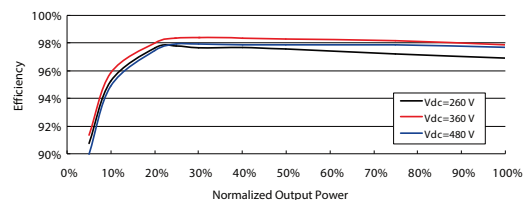
EASY INSTALLATION

- 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	12 A (12 A / 12 A)					
Max. PV short-circuit current	24 A (12 A / 12 A)					
Output (AC)						
Nominal AC output power	3000 W	3680 W	4000 W	4600 W	5000 W	6000 W
Max. apparent 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	< 3 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 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, G59/3					
Compliance	Active & reactive power control, power ramp rate control					
Type designation	SG3K-D	SG3K6-D	SG4K-D	SG4K6-D	SG5K-D	SG6K-D

