

# SG2K-S/SG2K5-S/SG3K-S

Residential String Inverter



### High Yield

- Higher yield with max. efficiency 98.2 %, European efficiency 97.7 %
- Flexible PV string configurations, DC/AC ratio up to 1.3



### Smart Management

- Easy local and online monitoring via App or Web
- Export power control with Sungrow energy meter



### Safe and Durable

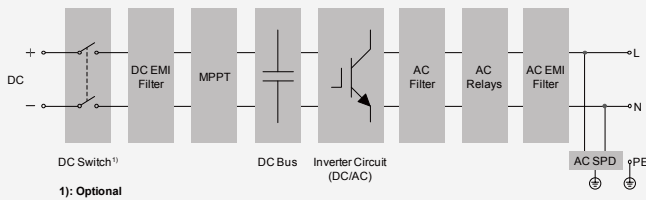
- Built-in surge arresters and residual current protection
- High anti-corrosion with aluminum alloy die casting



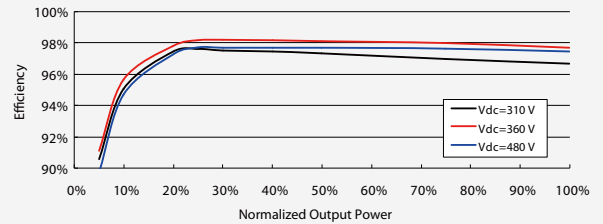
### Easy and User Friendly

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

## Circuit Diagram



## Efficiency Curve



Input (DC)	SG2K-S	SG2K5-S	SG3K-S
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–560 V		
MPP voltage range for nominal power	210 V–480 V	260 V–480 V	310 V–480 V
No. of independent MPP inputs	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)	SG2K-S	SG2K5-S	SG3K-S
AC output power	2000 VA	2500 VA	3000 VA
Max. AC output current	9.1 A	11.3 A	13.7 A
Nominal AC voltage	220 Vac / 230 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 (this may vary with grid standards)		
Total Harmonic Distortion (THD)	< 3 % (of nominal power)		
DC current injection	< 0.5 % (of nominal current)		
Power factor	> 0.99 at default value at nominal power (adj. 0.8 leading to 0.8 lagging)		
Feed-in phases / Connection phases	1 / 1		

Efficiency	SG2K-S	SG2K5-S	SG3K-S
Max. efficiency	98.2 %		
Euro. efficiency	97.2 %	97.5 %	97.7 %

Protection	SG2K-S	SG2K5-S	SG3K-S
PV reverse connection protection	Yes		
AC short-circuit protection	Yes		
Leakage current protection	Yes		
Grid monitoring	Yes		
PV string current monitoring	Yes		
DC switch	Optional		
Overvoltage protection	AC Type II		

General Data	SG2K-S	SG2K5-S	SG3K-S
Dimensions (W*H*D)	300*370*125 mm		
Weight	8.5 kg		
Isolation method	Transformerless		
Degree of protection	IP65		
Power loss in night mode	< 1 W		
Operating ambient temperature range	-25 °C to 60 °C		
Allowable relative humidity range (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. 6 mm <sup>2</sup> )		
AC connection type	Plug and play connector (max. 6 mm <sup>2</sup> )		
Certification	IEC 61000-6-2, IEC 61000-6-3, AS 4777.2, IEC 62109-1, IEC 62109-2, VDE-AR-N-4105, VDE 0126-1-1, EN50438, CE, TUV, SAA, ABNT NBR 16149:2013, ABNT NBR 16150:2013		
Grid support	Active & reactive power control, power ramp rate control		
Type designation	SG2K-S-10	SG2K5-S-10	SG3K-S-10

