

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

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

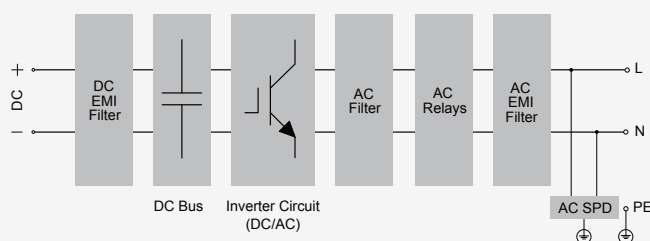
- Build-in surge arresters and residual current protection
- High anti-corrosion with aluminum alloy die casting



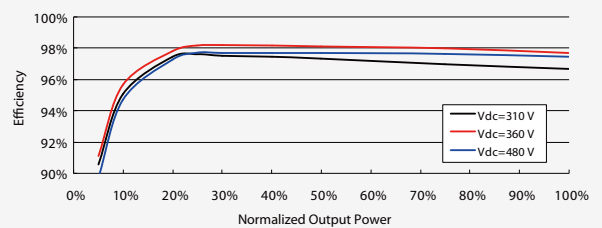
### Easy and User Friendly

- 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		
<b>Output (AC)</b>			
Nominal AC power (at 45 °C)	2000 W	2500 W	3000 W
Max. AC output at PF=1 (at 45 °C)	2000 W	2500 W	3000 W
Max. AC apparent power (at 45 °C)	2000 VA	2500 VA	3000 VA
Max. AC output current	9.1 A	11.3 A	13.7 A
Nominal AC voltage	230 Vac		
AC voltage range	180 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 overexcited/leading to 0.8 underexcited/lagging)		
Feed-in phases / Connection phases	1 / 1		
<b>Efficiency</b>			
Max. efficiency	98.2 %		
Euro. efficiency	97.2 %	97.5 %	97.7 %
<b>Protection</b>			
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 III		
<b>General Data</b>			
Dimensions (W x H x D)	300 mm x 370 mm x 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 (derating when > 45 °C)		
Allowable relative humidity range	0–100 %		
Cooling method	Natural cooling		
Max. operating altitude	4000 m (derating when >2000 m)		
Display / Communication	LCD / Wi-Fi (optional)		
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, NB/T 32004, GB/T29319, CE, CGC, 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

