

## Residential Single Phase Inverter



**TURN ON YOUR SOLAR ENERGY**

**HIGH YIELD**

- Higher yield with Max. efficiency 98.2%, European efficiency 97.7%
- Flexible PV string configurations with DC/AC ratio up to 1.5

**SAFE AND DURABLE**

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

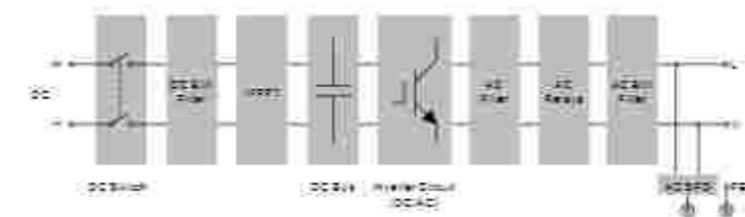
**SMART MANAGEMENT**

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

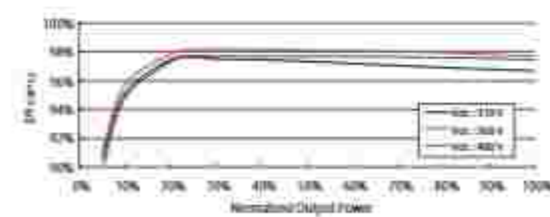
**EASY AND USER FRIENDLY**

- 3.5 kg compact design, easy and easy installation
- Fast commissioning via LCD

### CIRCUIT DIAGRAM



### EFFICIENCY CURVE



Type designation	SG2K-S	SG3K-S
<b>Input (DC)</b>		
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	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	
<b>Output (AC)</b>		
AC output power	2000 VA	3000 VA
Max. AC output current	9.1 A	13.7 A
Nominal AC voltage	220 Vac / 240 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	
Total Harmonic distortion (THD)	< 3% (of nominal power)	
DC current injection	< 0.2% (of nominal current)	
Power factor	> 0.99 / 0.8 leading = 0.8 lagging	
Feed-in phases / Connection phases	1 / 1	
<b>Efficiency</b>		
Max. efficiency / European efficiency	98.2% / 97.7%	98.2% / 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	Yes	
Overvoltage protection	AC Type II	
<b>General Data</b>		
Dimensions (W*H*D)	300*370*125 mm	
Weight	3.5 kg	
Isolation method	Transformerless	
High test protection rating	IP65	
Power loss (nighttime)	1 W	
Operating ambient temperature	-25 °C to 60 °C (>45 °C derating)	
Allowable relative humidity (non-condensing)	0 - 100%	
Cooling method	Natural cooling	
Max. operating altitude	4000 m (>3000 m derating)	
Display / Communication	LCD / Wi-Fi	
PV connection type	MC4 (Max. 6mm <sup>2</sup> )	
AC connection type	Plug and play connector (Max. 6mm <sup>2</sup> )	
Compliance	IEC62109-1, IEC62109-2, IEC62116, IEC61727, EN 61000-6-3, EN 61000-6-3, ABNT NBR 16149, ABNT NBR 16150	
Grid support	Active & reactive power control, power ramp rate control	