

# SG3K/4K/5K/6K-D

Residential Single Phase Inverter

**SUNGROW**  
Clean power for all

SG3K-D/SG4K-D/SG5K-D/SG6K-D



**TURN ON YOUR SOLAR ENERGY**

**HIGH YIELD**

- Higher yield with Max. efficiency 98.4%, European efficiency 98.0%
- Flexible PV string configurations with DC/AC ratio up to 1.3

**SAFE AND DURABLE**

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

**SMART MANAGEMENT**

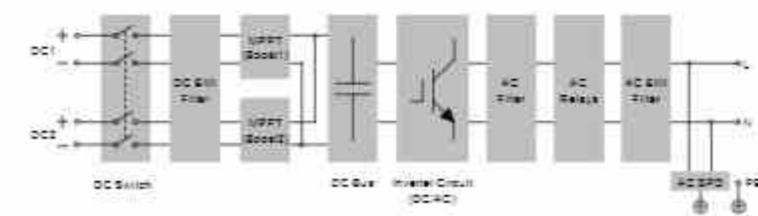
- Easy local and online monitoring via App or Web
- Export power control with smart energy meter

**EASY AND USER FRIENDLY**

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

Type designation	SG3K-D	SG4K-D	SG5K-D	SG6K-D
<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	160 V - 480 V	210 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)			
<b>Output (AC)</b>				
AC output power	3000 VA	4000 VA	5000 VA	6000 VA
Max. AC output current	13.7 A	18.2 A	22.7 A	27.3 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	< 0.5% (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	98.4%			
Max. European efficiency	97.7%	98.0%	98.0%	98.0%
<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)	360*190*113 mm			
Weight	11.5 kg			
Isolation method	Transformerless			
Ingress protection rating	IP65			
Power loss in night mode	< 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 (> 2000 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 61000-6-2, EN 61000-6-3, ABNT NBR 16149, ABNT NBR 16150			
Grid support	Active & reactive power control, power ramp rate control			

## CIRCUIT DIAGRAM



## EFFICIENCY CURVE

