SG3K-D-NI/SG5K-D-NI

Residential Single Phase Inverter

AU

HIGH YIELD

- Higher yield with Max. efficiency 98.4 %, European efficiency 98.0 %
- 12.5 A MPPT current, and compatible with bifacial modules
- Flexible PV string configurations, DC/AC ratio up to 1.4

SMART MANAGEMENT

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

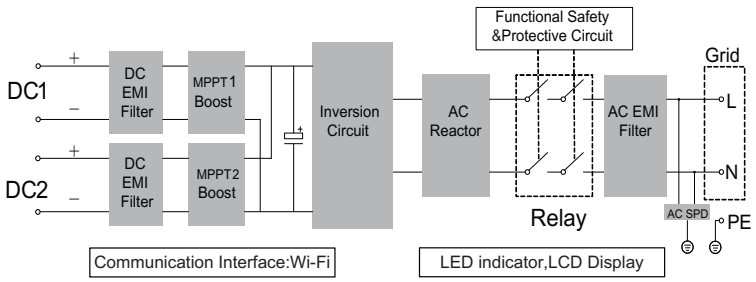
SAFE AND RELIABLE

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

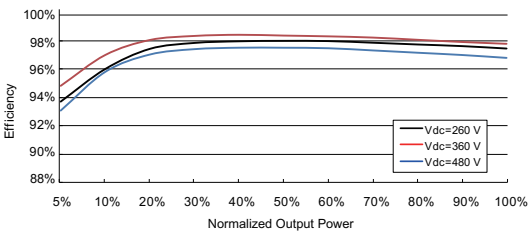
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE (SG5K-D-NI)



SUNGROW
Clean power for all

Type designation	SG3K-D-NI	SG5K-D-NI
Input (DC)		
Recommended max. PV input power	4000 W	6700 W
Max. PV input voltage	600 V	
Min. PV input voltage / Startup voltage	90 V / 120 V	
Rated input voltage	360 V	
MPP voltage range	90 V – 560 V	
MPP voltage range for rated power	160 V – 480 V	260 V – 480 V
No. of MPPTs	2	
Max. number of PV strings per MPPT	1	
Max. PV input current	25 A (12.5 A / 12.5 A)	
Max. PV short-circuit current	40 A (20 A / 20 A)	
Output Side Data		
AC output power	3000 VA	4999 VA
Rated AC output apparent power	3000 VA	4999 VA
Max. AC output current	13.7 A	21.7 A
Rated AC voltage	230 Vac	
AC voltage range	180 Vac – 276 Vac	
Rated grid frequency	50 Hz / 60 Hz	
Grid frequency range	45 Hz – 55 Hz / 55 Hz – 65 Hz	
Total harmonic distortion (THD)	< 3 % (of rated power)	
Power factor	> 0.99 / 0.8 leading – 0.8 lagging	
Feed-in phases / Connection phases	1 / 1	
Efficiency		
Max. efficiency	98.4 %	
European efficiency	97.7 %	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	No	
AFCI	No	
24H loads monitoring	No	
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	
Power loss in night mode	< 1W	
Operating ambient temperature	-25 ℃ to 60 ℃ (>45 ℃ derating)	
Allowable relative humidity	0 – 100 %	
Cooling method	Natural cooling	
Max. operating altitude	4000 m (> 2000 m derating)	
Display / Communication	LCD / WLAN	
PV connection type	MC4 (max. 6 mm²)	
AC connection type	Plug and play connector (max. 6 mm²)	
Certification	IEC62109-1, IEC62109-2, IEC62116, IEC61727, EN 61000-6-2, EN 61000-6-3, AS/NZS 4777.2:2020	
Grid support	Active & reactive power control, power ramp rate control	
Country of manufacture	China	