

SG3K-D/SG5K-D Premium

SUNGROW
Clean power for all

Residential Single Phase Inverter



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

SAFE AND DURABLE

- Quick Arc Fault Circuit Interrupter
- Built-in Type II DC&AC surge protection device
- Built-in certified PV isolator

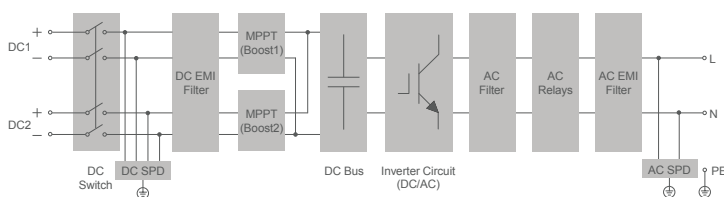
SMART MANAGEMENT

- 24H real-time loads monitoring
- Easy local and online monitoring via App or Web

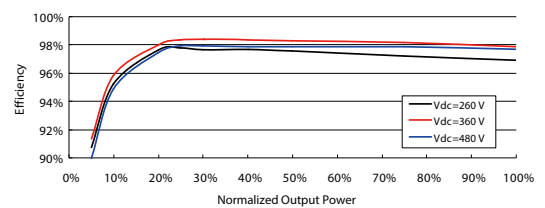
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG3K-D	SG5K-D
Input (DC)		
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	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	30 A (15 A / 15 A)	
Output Side Data		
AC output power	3000 VA	4999 VA
Max. AC output current	13.7 A	21.7 A
Nominal AC voltage	230 Vac	
AC voltage range	180 Vac – 276 Vac	
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)	
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	Yes (meet AS60947.3:2018)	
AFCI	Yes	
Overvoltage protection	DC Type II / 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	< 3 W	
Operating ambient temperature	-25 °C to 60 °C (>45 °C 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 mm ²)	
AC connection type	Plug and play connector (max. 6 mm ²)	
Certification	IEC62109-1, IEC62109-2, IEC62116, IEC61727, EN 61000-6-2, EN 61000-6-3, AS / NZS 4777.2	

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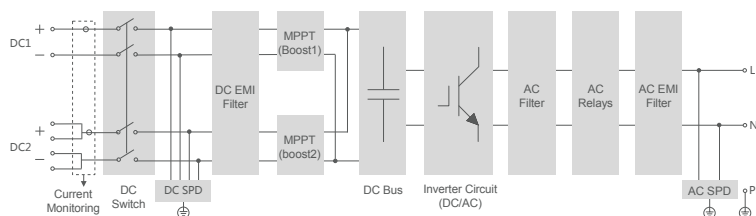
SAFE AND DURABLE

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- Built-in Type II DC&AC surge protection device
- Built-in certified PV isolator

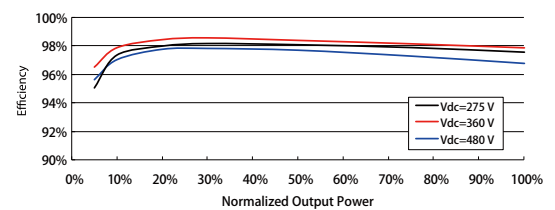
EASY AND USER FRIENDLY

- 15.5 kg compact design, plug and play installation
- Fast commissioning via App

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG8K-D
Input (DC)	
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 – 540 V
MPP voltage range for nominal power	275 V – 480 V
No. of MPPTs	2
Max. number of PV strings per MPPT	1 / 2
Max. PV input current	12.5 A / 25 A
Max. PV short-circuit current	15 A / 30 A
Output Side Data	
AC output power	8000 VA
Max. AC output current	34.8 A
Nominal AC voltage	230 Vac
AC voltage range	180 Vac – 276 Vac
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)
Power factor	> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / Connection phases	1 / 1
Efficiency	
Max. efficiency	98.5 %
European efficiency	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	Yes (meet AS60947.3:2018)
AFCI	Yes
Overvoltage protection	DC Type II/AC Type II
General Data	
Dimensions (W*H*D)	360*390*148 mm
Weight	15.5 kg
Isolation method	Transformerless
Ingress protection rating	IP65
Power loss in night mode	< 3 W
Operating ambient temperature	-25 °C to 60 °C (>45 °C 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 mm ²)
AC connection type	Plug and play connector (max. 6 mm ²)
Certification	IEC62109-1, IEC62109-2, EN 61000-6-2, EN 61000-6-3, AS / NZS 4777.2