

# SG3K-D/SG3K6-D/SG4K6-D/SG5K-D

String Inverter



## High Yield

- Max. efficiency 98.4 %, European efficiency 98.0 %
- 90 - 560 V wide MPP voltage range
- 2 MPP Trackers, compatible with different PV orientation design



## Easy O&M

- 10.5 kg, easy installation by one person
- Plug and play connector design for convenient installation



## Saved Investment

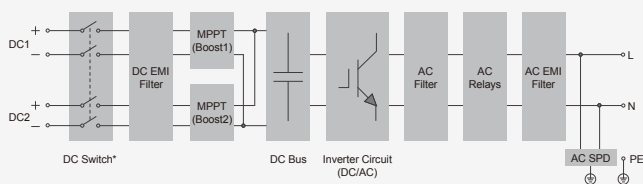
- Max. DC/AC ratio up to 1.3
- Remote monitoring, parameter configuration and firmware update, save O&M investment



## Grid Support

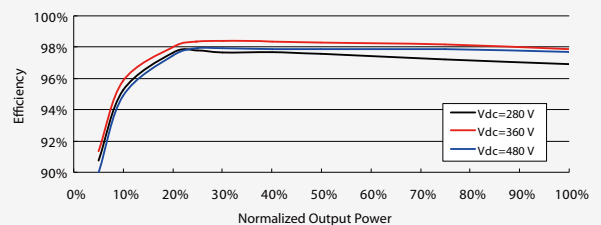
- Compliance with AS/NZS3100, AS4777.2, AS4777.3, VDE-AR-N-4105, VDE0126-1-1,
- Active & reactive power control, power ramp rate control

### Circuit Diagram



\*only for SG3K6-D/SG4K6-D

### Efficiency Curve



Input (DC)	SG3K-D	SG3K6-D	SG4K6-D	SG5K-D
Max. PV input voltage	600 V			
Min. PV input voltage / Startup input voltage	90 V / 120 V			
Nominal input voltage	360 V			
MPP voltage range	90 – 560 V			
MPP voltage range for nominal power	160 – 480 V	190 – 480 V	240 – 480 V	260 – 480 V
No. of independent MPP inputs	2			
Max. number of PV strings per MPPT	1			
Max. PV input current	20 A (10 A / 10 A)			
Max. current for input connector	12 A			
Max. DC short-circuit current	24 A (12 A / 12 A)			
<b>Output (AC)</b>				
Nominal AC power (at 40 °C)	3000 W	3680 W	4600 W	4990 W
Max. AC output power at PF=1 (at 40 °C)	3000 W	3680 W	4600 W	4990 W
Max. AC apparent power (at 40 °C)	3000 VA	3680 VA	4600 VA	4990 VA
Max. AC output current	13.7 A	16.0 A	21 A	21.7 A
Nominal AC voltage	230 V			
AC voltage range	180 – 276 V			
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz			
THD	< 3 % (at nominal power)			
DC current injection	< 0.5 % In			
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging			
Feed-in phases / Connection phases	1 / 1			
<b>Efficiency</b>				
Max. efficiency / Euro. efficiency	98.4 % / 97.7 %	98.4 % / 97.7 %	98.4 % / 98.0 %	98.4 % / 98.0 %
<b>Protection</b>				
DC reverse connection protection	Yes			
AC short-circuit protection	Yes			
Leakage current protection	Yes			
Grid monitoring	Yes			
DC switch / AC switch	No / No	Yes / No	Yes / No	No / No
DC fuse	No			
PV string current monitoring	Yes			
Overvoltage protection	AC Type III			
<b>General Data</b>				
Dimensions (W*H*D)	360*390*133 mm			
Weight	10.5 kg			
Isolation method	Transformerless			
Degree of protection	IP65			
Night power consumption	< 1 W			
Operating ambient temperature range	-25 to 60 °C (> 40 °C derating)			
Allowable relative humidity range (non-condensing)	0 – 100 %			
Cooling method	Natural cooling			
Max. operating altitude	4000 m (> 2000 m derating)			
Display / Communication	LCD / Wi-Fi (optional)			
DC connection type	MC4 (Max. 6 mm <sup>2</sup> )			
AC connection type	Plug and play connector (Max. 6 mm <sup>2</sup> )			
Compliance	IEC61000-6-2, IEC61000-6-3, AS/NZS3100, AS4777.2, AS4777.3, VDE-AR-N-4105, VDE0126-1-1, CE, G83/2, C10/11, EN50438			
Grid support	Active & reactive power control, power ramp rate control			
Type designation	SG3K-D-10	SG3K6-D-10	SG4K6-D-10	SG5K-D-10

