

SG60KU-M

String Inverter For North America



High Yield

- Max. efficiency 98.9 %, CEC efficiency 98.5 %
- Long-term overload at 1.1 Pn
- Up to 4 MPP trackers



Easy O&M

- Integrated string current monitoring function for fast trouble shooting
- Compact design and light weight for easy installation
- Plug-in design of fan and SPD, easy for on-site maintenance



Saved Investment

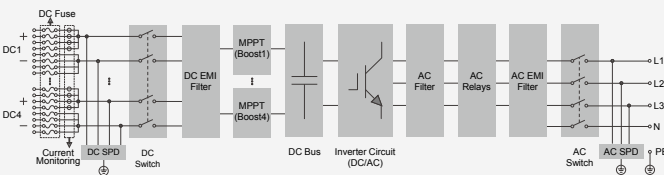
- Max. DC/AC ratio up to 1.5
- Integrated DC combiner box, DC/AC switch and DC/AC overvoltage protection



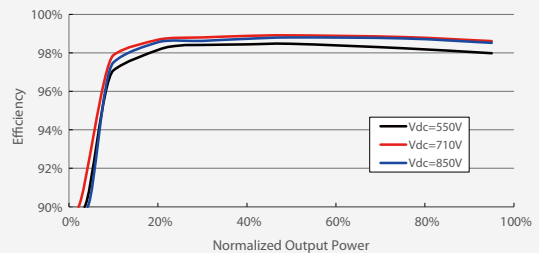
Grid Support

- Compliance with standards: UL1741, UL1741 SA, IEEE 1547, IEEE 1547.1, CSA C22.2 No.107.1-01
- Low/High voltage ride through (L/HVRT)
- Active & reactive power control and power ramp rate control

Circuit Diagram



Efficiency Curve



Input (DC)**SG60KU-M**

Max. PV input voltage	1000 V
Min. PV input voltage / Startup input voltage	300 V / 300 V
Nominal input voltage	710 V
MPP voltage range	300 – 950 V
MPP voltage range for nominal power	550 – 850 V
No. of independent MPP inputs	4
Max. number of PV strings per MPPT	4
Max. PV input current	112 A (28 A / 28 A / 28 A / 28 A)
Max. current for input connector	12 A
Max. DC short-circuit current	200 A (50 A / 50 A / 50 A / 50 A)

Output (AC)

Nominal AC power (at 45 °C)	60000 W
Max. AC output power at PF=1 (at 40 °C)	66000 W
Max. AC apparent power (at 40 °C)	66000 VA
Max. AC output current	80 A
Nominal AC voltage	3 / N / PE or 3 / PE, 277 / 480 V
AC voltage range	422 – 528 V
Nominal grid frequency / Grid frequency range	60 Hz / 55 – 65 Hz
THD	< 3 % (at nominal power)
DC current injection	< 0.5 % I _n
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / Connection phases	3 / 3

Efficiency

Max. efficiency / CEC. efficiency	98.9 % / 98.5 %
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Protection

DC reverse connection protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
DC switch / AC switch	Yes / Yes
DC fuse	Yes (positive and negative, 15 A)
PV string current monitoring	Yes
Arc fault circuit interrupter (AFCI)	Yes
Overvoltage protection	DC Type II / AC Type II

General Data

Dimensions (W*H*D)	665*915*276 mm 26.2**36.0**10.9"
Weight	70 kg 154.3 lb
Isolation method	Transformerless
Degree of protection	NEMA 4X
Night power consumption	< 1 W
Operating ambient temperature range	-25 to 60 °C (> 45 °C derating) -13 to 140 °F (> 113 °F derating)
Allowable relative humidity range (non-condensing)	0 – 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m (> 3000 m derating) 13123 ft (> 9843 ft derating)
Display / Communication	Graphic LCD / RS485, Ethernet
DC connection type	Screw clamp terminal (10 AWG, Cu or Al)
AC connection type	Screw clamp terminal (3/0 AWG, Cu or Al)
Compliance	UL1741, UL1741 SA, IEEE 1547, IEEE1547.1, CSA C22.2 No.107.1-01
Grid support	LVRT, HVRT, active & reactive power control and power ramp rate control
Type designation	SG60KU-M-10