

SG60CX-US New

String Inverter For North America



HIGH YIELD

- 6 MPPTs with max. efficiency 98.8%
- Compatible with bifacial modules
- Built-in PID recovery function

SMART O&M

- Touch-free commissioning and remote firmware upgrade
- Online IV curve scan and diagnosis
- Fuse free design with smart string current monitoring

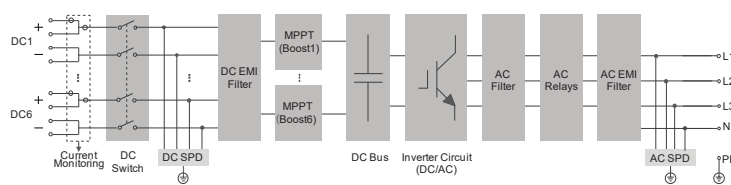
SAVED INVESTMENT

- DC/AC ratio greater than 1.5
- Compatible with Al and Cu AC cables
- Flexible installation from vertical to horizontal

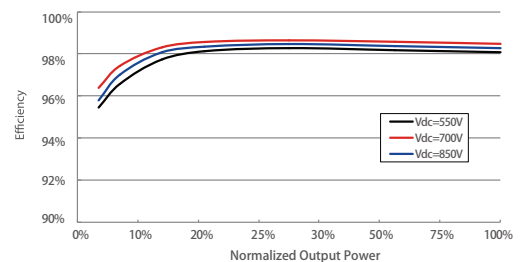
PROVEN SAFETY

- Type 4X and C5 protection rating
- Type II SPD for both DC and AC
- Compliant with UL safety and variety grid codes

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type Designation	SG60CX-US
Input (DC)	
Max. PV input voltage	1000 V
Min. PV input voltage / Start-up input voltage	200 V / 250 V
Nominal PV input voltage	710 V
MPP voltage range	200 – 1000 V
No. of independent MPP inputs	6
No. of PV strings per MPPT	2
Max. PV input current	26 A * 6
Max. PV short-circuit current per MPPT	45 A
Output (AC)	
AC output power	60 kVA @ 45 °C (113 °F) / 50 kVA @ 50 °C (122 °F)
Max. AC output current	72.2 A
Nominal AC voltage	3 / N / PE, 277 / 480 V
AC voltage range	422 – 528 V
Nominal grid frequency / Grid frequency range	60 Hz / 55 – 65 Hz
Harmonic (THD)	< 3 % (at nominal power)
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	98.80 %
CEC efficiency	98.00 %
Protection	
DC reverse polarity protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
DC switch	Yes
AC switch	Yes
PV string monitoring	Yes
Arc fault circuit interrupter (AFCI)	Yes
PID Recovery function	Yes*
Overvoltage protection	DC Type II / AC Type II
Rapid Shutdown	Yes
General Data	
Dimensions (W*H*D)	Inverter: 782*645*310 mm (30.7"*25.4"*12.2") Wire-Box: 231*645*310mm (9.1"*11.6"*9.2")
Weight	65 kg (143.3 lbs)
Topology	Transformerless
Ingress protection rating	Type 4X (NEMA 4X, IP66)
Night power consumption	< 2 W*
Operating ambient temperature range	-30 to 60 °C (> 45 °C derating) -22 to 140 °F (> 113°F derating)
Allowable relative humidity range	0 – 100%
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m / 13123.4 ft (> 3000 m / 9842.5 ft derating)
Display	LED, Bluetooth + APP
Communication	RS485 / optional: WiFi and Ethernet
Third-Party communication protocol	SunSpec Modbus
DC connection type	MC4 (#12 - #10AWG)
AC connection type	OT (#6 - 2/0AWG, Cu or Al)
Compliance	UL1741, UL 1741 SA, CA Rule 21, IEEE 1547, IEEE 1547.1, CSA C22.2, No.107.1-01, UL 1699B and FCC Part 15, UL1998, Rule 14, NEC 2019, Sunspec Rapid Shutdown
Grid Support	LVRT, HVRT, active & reactive power control and power ramp rate control

* : Night power consumption excludes the optional power from PID recovery function.

