

# SG60CX-US

Suitable for 50Hz / 60Hz grid, could be used in North American.  
Available for hand installation, no need for lifting machinery assistance.



## HIGH YIELD

- 4 MPPTs with max. efficiency 98.6%
- 6 MPPTs with max. efficiency 98.8%
- Compatible with bifacial modules
- Built-in PID recovery function

## SMART O&M

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

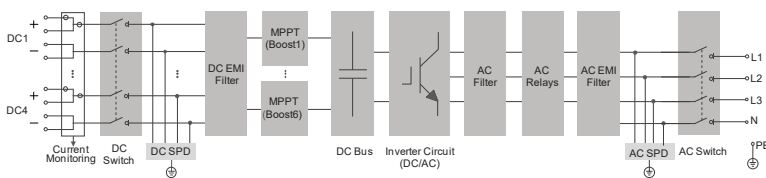
## SAVED INVESTMENT

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

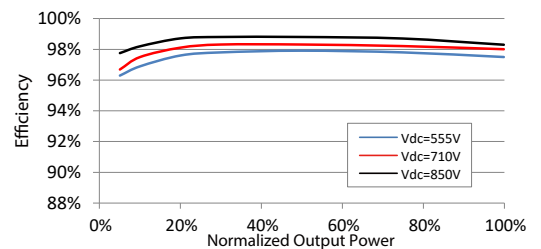
## PROVEN SAFETY

- 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
<b>Input ( DC )</b>	
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 V – 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
<b>Output ( AC )</b>	
AC output power	60 kVA @ 113°F ( 45 °C ) / 50 kVA @ 122°F ( 50 °C )
Max. AC output current	72.2 A
Nominal AC voltage	3 / N / PE, 277 / 480 V
AC voltage range	422 V – 528 V
Nominal grid frequency / Grid frequency	60 Hz / 55 – 65 Hz
Harmonic ( THD )	< 3 % ( at nominal power )
DC current injection	< 0.5 % I <sub>n</sub>
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / Connection phases	3 / 3
<b>Efficiency</b>	
Max. efficiency	98.80 %
CEC efficiency	98.00 %
<b>Protection</b>	
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
<b>General Data</b>	
Dimensions ( W * H * D )	Inverter: 782 mm * 645 mm * 310 mm ( 30.7" * 25.4" * 12.2" ) Wire-Box: 231 mm * 295 mm * 234 mm ( 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	< 2W *
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 ( #5 - 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 2023, Sunspec Rapid Shutdown
Grid Support	LVRT, HVRT, active & reactive power control and power ramp rate control

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