

# SG36/60CX-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

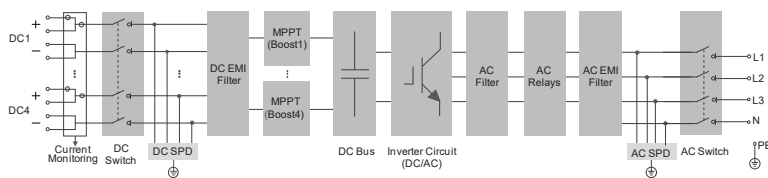
## SAVED INVESTMENT

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

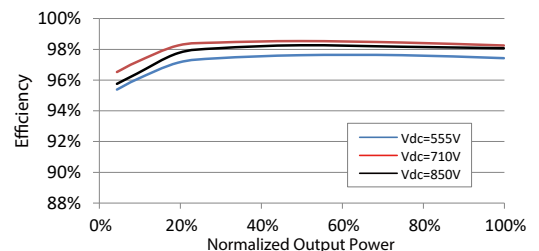
## PROVEN SAFETY

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

CIRCUIT DIAGRAM ( SG36CX-US )



EFFICIENCY CURVE ( SG36CX-US )



Type designation	SG36CX-US	SG60CX-US
<b>Input ( DC )</b>		
Max. PV input voltage *	1000 V	
Min. PV input voltage / Start-up input voltage	200 V / 250 V	
Rated PV input voltage	710 V	
MPPT operating voltage range **	200 V – 1000 V	
No. of independent MPP inputs	4	6
No. of PV strings per MPPT	2	
Max. PV input current	26 A * 4	26 A * 6
Max. DC short-circuit current	45 A	
<b>Output ( AC )</b>		
Rated AC output power	36kVA @ 113°F (45°C)/30kVA @ 122°F(50°C)	60kVA @ 113°F (45°C)/50kVA @ 122°F(50°C)
Max. AC output apparent power	43.3 A	72.2 A
Rated AC voltage	3 / N / PE, 277 V / 480 V	
AC voltage range	422 V – 528 V	
Rated grid frequency / Grid frequency range	60 Hz / 55 Hz – 65 Hz	
Harmonic ( THD )	< 3 % ( at nominal power )	
DC current injection	< 0.5 % I <sub>n</sub>	
Power factor at rated power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging	
Feed-in phases / AC connection	3 / 3	
<b>Efficiency</b>		
Max. efficiency	98.60 %	98.80 %
CEC efficiency	98.00 %	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: 702 mm * 595 mm * 310 mm ( 27.6" * 23.4" * 12.2" )	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" )	Wire-Box: 231 mm * 295 mm * 234 mm ( 9.1" * 11.6" * 9.2" )
Weight	54 kg ( 119.0 lbs )	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 °C - 60 °C ( > 45 °C derating ) - 22 °F - 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 - #10 AWG )	
AC connection type	OT ( #6 - 2/0 AWG, Cu or Al )	OT ( #5 - 2/0 AWG, Cu or Al )
Compliance	UL1741, UL1741 SA/SB, 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	

\* Input voltage exceeding the MPPT operating voltage range triggers inverter protection

\*\* Please refer to the user manual for the full load MPPT voltage range

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