

## String Inverter For North America



### HIGH YIELD

- Up to 6 MPPTs with max. efficiency 98.9%
- Compatible with bifacial module
- 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



### LOW COST

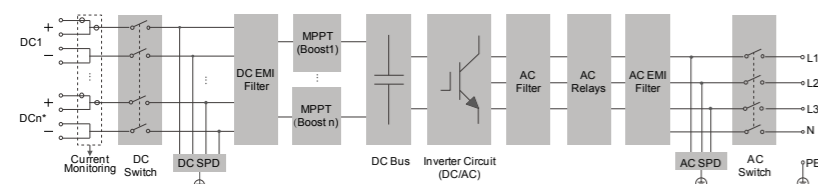
- DC/AC ratio more than 1.5
- Compatible with Al and Cu AC cables
- Flexible installation from vertical to horizontal



### PROVEN SAFETY

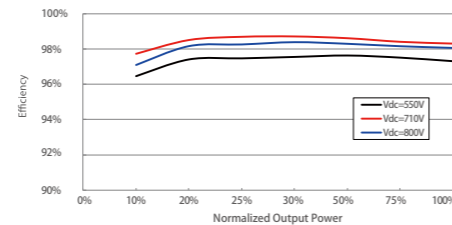
- NEMA 4X and C5 anti-corrosion grade
- Type II SPD for both DC and AC
- Compliant with UL safety and grid code

### CIRCUIT DIAGRAM



\*: n=4 (SG33CX-US) / 6 (SG55CX-US)

### EFFICIENCY CURVE



Type designation	SG33CX-US	SG55CX-US
<b>Input (DC)</b>		
Max. PV input voltage	1000 V	
Min. PV input voltage / Start-up input voltage	200 V / 200 V	
Nominal PV input voltage	710 V	
MPP voltage range	200 – 1000 V	
MPP voltage range for nominal power	500 – 850 V	
No. of independent MPP inputs	4	6
Max. number of PV strings per MPPT	2 / 2 / 2 / 2	2 / 2 / 2 / 2 / 2 / 2
Max. PV input current	26 A * 4	26 A * 6
Max. current for input connector	15 A	
Max. DC short-circuit current	40 A * 4	40 A * 6
<b>Output (AC)</b>		
AC output power	33 kVA @ 45 °C (113 °F) / 30 kVA @ 50 °C (122 °F)	55 kVA @ 45 °C (113 °F) / 50 kVA @ 50 °C (122 °F)
Max. AC output current	39.7A	
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	
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	3 / 3	
<b>Efficiency</b>		
Max. efficiency / CEC efficiency	98.7% / 98.5%	98.9% / 98.5%
<b>Protection</b>		
DC reverse connection protection	Yes	
AC short-circuit protection	Yes	
Leakage current protection	Yes	
Grid monitoring	Yes	
DC switch	Yes	
AC switch	Yes	
PV string current monitoring	Yes	
Anti-PID function	Yes	
Arc fault circuit interrupter (AFCI)	Yes	
Overvoltage protection	DC Type II / AC Type II	
<b>General Data</b>		
Dimensions (W*H*D)	780*930*310 mm (30.7"*36.6"*12.2")	
Weight	62 kg (136.7 lbs)	68 kg (149.9 lbs)
Isolation method	Transformerless	
Degree of protection	NEMA 4X	
Night power consumption	< 2 W	
Operating ambient temperature range	-30 to 60 °C (> 50 °C derating)	
Allowable relative humidity range (non-condensing)	0 – 100%	
Cooling method	Smart forced air cooling	
Max. operating altitude	4000 m (> 3000 m derating)	
Display	LED, Bluetooth + APP	
Communication	RS485 / optional: WiFi, Ethernet	
Third-Party communication protocol	SunSpec Modbus	
DC connection type	Screw clamp terminal (10AWG, Cu or Al )	
AC connection type	OT (max. 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	
Grid support	LVRT, HVRT, active & reactive power control and power ramp rate control	

\*: Only compatible with Sungrow logger and iSolarCloud

