

# SG110CX-NI

Multi-MPPT String Inverter for 1000 Vdc System



## HIGH YIELD

- 9 MPPTs with max. efficiency 98.7%
- Compatible with bifacial module
- Built-in PID recovery function

## SMART O&M

- Touch free commissioning and remote firmware upgrade
- Smart IV Curve Diagnosis \*
- Fuse free design with smart string current monitoring

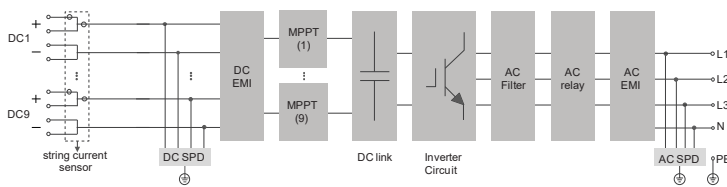
## SAVED INVESTMENT

- Compatible with Al and Cu AC cables
- DC 2 in 1 connection enabled
- Q at night function

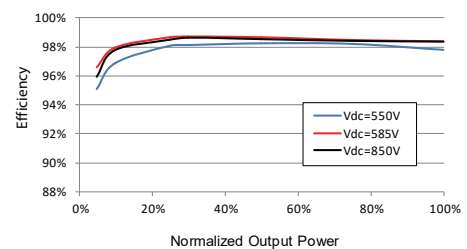
## PROVEN SAFETY

- IP66 and C5 protection
- Type II SPD for both DC and AC
- Compliant with global safety and grid code

## CIRCUIT DIAGRAM



## EFFICIENCY CURVE



Type designation	SG110CX-NI
<b>Input (DC)</b>	
Recommended max. PV input power	147 kW
Max. PV input voltage	1100 V **
Min. PV input voltage / Start-up input voltage	200 V / 250 V
Rated PV input voltage	585 V
MPP voltage range	200 – 1000 V
No. of independent MPP inputs	9
No. of PV strings per MPPT	2
Max. PV input current	234 A (26 A / 26 A / 26 A / 26 A / 26 A / 26 A / 26 A / 26 A / 26 A)
Max. DC short-circuit current	360 A (40 A / 40 A / 40 A / 40 A / 40 A / 40 A / 40 A / 40 A / 40 A)
<b>Output (AC)</b>	
Max. AC Output power	110 kVA
Rated AC output apparent power	110 kVA
Max. AC output current	158.8 A
Rated AC voltage	3 / N / PE, 400 V
AC voltage range	320 – 460V
Rated grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz
Harmonic (THD)	< 3 % (at rated power)
Power factor at rated power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / AC connection	3 / 3-PE
<b>Efficiency</b>	
Max. efficiency / European efficiency	98.7 % / 98.5 %
<b>Protection and Function</b>	
DC reverse polarity protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
Ground fault monitoring	Yes
DC switch	No
AC switch	No
PV string monitoring	Yes
Q at night function	Yes
PID recovery function	Yes
DC terminal protective cover	Yes
Communication dongle (EyeM4)	Yes
Surge protection	DC Type II / AC Type II
<b>General Data</b>	
Dimensions (W*H*D)	1051*660*362.5 mm
Weight	89 kg
Topology	Transformerless
Degree of protection	IP66
Night power consumption	< 2 W
Operating ambient temperature range	-30 to 60 °C (> 50 °C derating)
Allowable relative humidity range	0 – 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m (> 3000 m derating)
Display	LED, Bluetooth+APP
Communication	RS485 / Optional: WLAN, Ethernet
DC connection type	MC4 (Max. 6 mm <sup>2</sup> )
AC connection type	OT / DT terminal (Max. 240 mm <sup>2</sup> )
Compliance	IEC 62109, AS/NZS 4777.2:2020
Grid Support	Q at night function, LVVRT, HVVRT, active & reactive power control and power ramp rate control
Country of manufacture	China

\* Only compatible with Sungrow Logger, EyeM4 and iSolarCloud

\*\* The inverter enters the standby state when the input voltage ranges between 1,000V and 1,100V. If the maximum DC voltage in the system can exceed 1000V, the MC4 connectors included in the scope of delivery must not be used. In this case MC4 Evo2 connectors must be used.