

# SG110CX-P2

Multi-MPPT String Inverter for 1000 Vdc System



## HIGH YIELD

- 12 MPPTs with max. efficiency 98.5%
- DC 15A current input, compatible with over 500W+ PV module
- Dynamic shading optimization mode



## SMART O&M

- Key component diagnosis and protection
- Smart IV Curve Diagnosis
- Grid fault record function, easy for remote O&M



## LOWER INVESTMENT

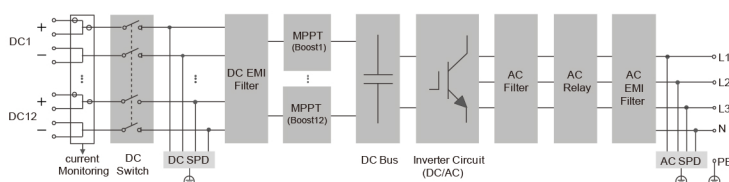
- Compatible max. 240mm<sup>2</sup> Al AC cables
- Drawer-style cable sealing plate support AC cable pre-assembly



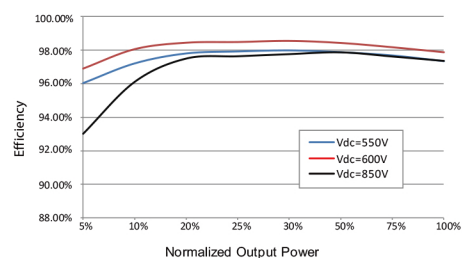
## PROVEN SAFETY

- IP66 protection and C5 Anti-corrosion
- DC Type I+II SPD, AC Type II SPD
- Support AFCI 2.0 function

## CIRCUIT DIAGRAM



## EFFICIENCY CURVE



Type designation	SG110CX-P2
<b>Input (DC)</b>	
Recommended max. PV input power	154 kW
Max. PV input voltage	1100 V
Min. PV input voltage / Startup input voltage	180 V / 200 V
Rated PV input voltage	600 V
MPP voltage range	180 – 1000 V
No. of independent MPP inputs	12
No. of PV strings per MPPT	2
Max. PV input current	360 A (30 A *12)
Max. DC short-circuit current	480 A (40 A *12)
Max. current for DC connector	30A
<b>Output (AC)</b>	
Max. AC Output power	110 kVA
Rated AC output apparent power	110 kVA
Max. AC output current	167.1 A
Rated AC output current(at 230V)	159.4 A
Rated AC voltage	3 / N / PE, 220 / 380 V, 230 / 400 V
AC voltage range	304 - 456V (380V) / 320 - 480 V (400V)
Rated grid frequency	50 Hz / 60 Hz
Grid frequency range	45 – 55 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 / connection phases	3 / 3-N-PE
<b>Efficiency</b>	
Max. efficiency / European efficiency	98.6% / 98.3%
<b>Protection</b>	
Grid monitoring	Yes
DC reverse polarity protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
Surge protection	DC Type I + II / AC Type II
Ground fault monitoring	Yes
DC switch	Yes
PV string monitoring	Yes
Q at night function	Yes
Arc fault circuit interrupter (AFCI)	Yes
<b>General Data</b>	
Dimensions (W*H*D)	1020 *795 * 360mm
Mounting Method	Wall-mounting bracket
Weight	87 kg
Topology	Transformerless
Degree of protection	IP66
Corrosion	C5
Night power consumption	< 5 W
Operating ambient temperature range	-30 to 60 °C
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: WLAN, Ethernet
DC connection type	Evo2 (Max. 6 mm² )
AC connection type	OT / DT terminal (Max. 240 mm²)
Grid Compliance	IEC 62109-1, EN/IEC 61000-6-1/2/3/4, IEC 61727, IEC 62116, EN 50549-1/2, UTE C15-712-1, VDE V 0126-1-1, VDE-AR-N 4105:2018, VFR 2019, NC RfG, G99, UNE 217002, NTS, CEI 0-21 2019,CEI0-16 2019, NRS-097-2-1
Grid Support	Q at night function, LVRT, HVRT,active & reactive power control and power ramp rate control