SG110CX-P2

Multi-MPPT String Inverter for 1000 Vdc System

AU



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

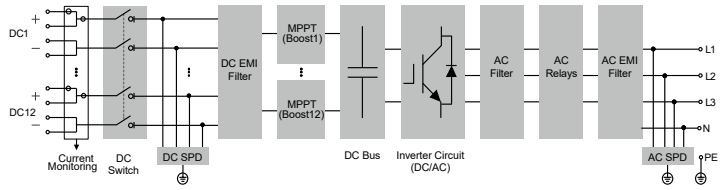
LOWER INVESTMENT

- Compatible max. 240mm2 Al AC cables
- Drawer-style cable sealing plate support AC cable pre-assembly

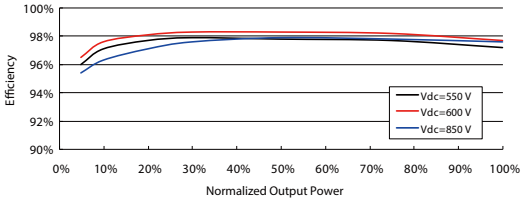
PROVEN SAFETY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



© 2024 Sungrow Power Supply Co., Ltd. All rights reserved. Subject to change without notice. Version 1.2

Type designation	SG110CX-P2
Input (DC)	
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
MPPT voltage range **	180 V - 1000 V
No. of independent MPP inputs	12
No. of PV strings per MPPT	2
Max. PV input current	360 A (30 A / 30A / 30 A / 30 A / 30 A / 30 A / 30 A / 30 A / 30 A / 30 A / 30 A / 30 A)
Max. DC short-circuit current	480 A (40 A / 40A / 40 A / 40 A / 40 A / 40 A / 40 A / 40 A / 40 A / 40 A / 40 A / 40 A)
Max. current for DC connector	30 A
Output (AC)	
Rated AC output power	110 kW
Max. AC output apparent power	110 kVA
Max. AC output current	158.8 A
Rated AC voltage	3 / N / PE, 230 V / 400 V
AC voltage range	320 V - 480 V
Rated grid frequency	50 Hz
Grid frequency range	45 Hz – 55 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-N-PE
Efficiency	
Max. efficiency	98.5 % / 98.3 %
Protection & function	
Grid monitoring	Yes
DC reverse polarity protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Surge protection	DC type II / AC type II
Ground fault monitoring	Yes
DC switch	Yes
PV string current monitoring	Yes
Arc fault circuit interrupter (AFCI)	Yes
PID recovery function	Yes
General data	
Dimensions (W * H * D)	1020 mm * 795 mm * 360 mm
Weight	93 kg
Mounting method	Wall-mounting bracket
Topology	Transformerless
Degree of protection	IP66
Night power consumption	< 5 W
Corrosion	C5
Operating ambient temperature range	-30 ℃ to 60 ℃
Allowable relative humidity range (non-condensing)	0 % - 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m
Display	LED, Bluetooth+APP
Communication	RS485 / WLAN (optional) / Ethernet (optional)
DC connection type	Evo2 (Max. 6 mm^2)
AC connection type	OT / DT terminal (Max. 240 mm^2)
AC cable specification	Outside diameter 30~60mm
Grid compliance	IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, IEC 61000-6-3, AS/NZS 4777.2:2020, IEC 63027
Grid support	Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control
Country of manufacture	China

* Input voltage exceeding the MPPT operating voltage range triggers inverter protection
** Please refer to the user manual for the full load MPPT voltage range

© 2024 Sungrow Power Supply Co., Ltd. All rights reserved. Subject to change without notice. Version 1.2