

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

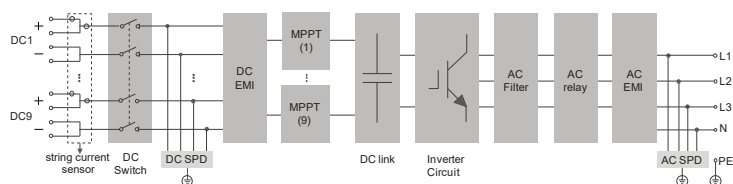
SAVED INVESTMENT

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

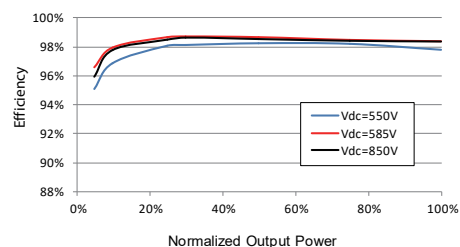
PROVEN SAFETY

- IP66 and C5 anti-corrosion
- DC Type I+II SPD, AC Type II SPD
- AFCI function protects system safety

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG110CX
Input (DC)	
Max. PV input voltage	1100 V **
Min. PV input voltage / Start-up input voltage	200 V / 250 V
Nominal 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	26 A * 9
Max. DC short-circuit current	40 A * 9
Output (AC)	
AC output power	110 kVA @ 45 °C / 100 kVA @ 50 °C
Max. AC output current	158.8 A
Nominal AC voltage	3 / N / PE, 400 V
AC voltage range	320 – 460V
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz
Harmonic (THD)	< 3 % (at nominal power)
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / AC connection	3 / 3-PE
Efficiency	
Max. efficiency	98.7 %
European efficiency	98.5 %
Protection and Function	
DC reverse polarity protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
Ground fault monitoring	Yes
DC switch	Yes
AC switch	No
PV string monitoring	Yes
Q at night function	Yes
PID recovery function	Yes
Arc fault circuit interrupter (AFCI)	Yes
Surge protection	DC Type I + II / AC Type II
General Data	
Dimensions (W*H*D)	1051*660*362.5 mm
Weight	89 kg
Topology	Transformerless
Ingress protection rating	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. 10 mm ² optional)
AC connection type	OT / DT terminal (Max. 240 mm ²)
Compliance	IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE-AR-N 4110:2018, VDE-AR-N 4120:2018, IEC 61000-6-3, EN 50549-1/2, AS/NZS 4777.2:2015, CEI 0-16 2019, VDE 0126-1-1/A1 VFR 2019, UTE C15-712-1:2013, DEWA, UNE 206007-1/RD 1699, UNE 217001, P.O. 12.3, Israel certificate, G99
Grid Support	Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control

*: Only compatible with Sungrow logger, EyeM4 and iSolarCloud

**:: 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.