

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

LOW COST

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

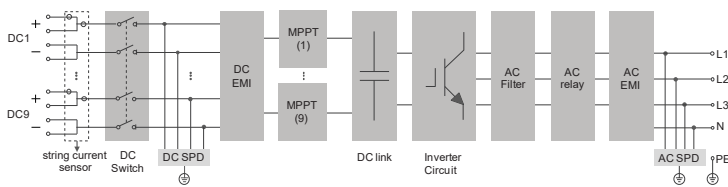
SMART O&M

- Touch free commissioning and remote firmware upgrade
- Online IV curve scan and diagnosis*
- Fuse free design with smart string current monitoring

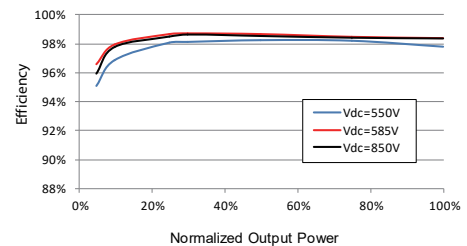
PROVEN SAFETY

- 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
Input (DC)	
Max. PV input voltage	1100 V
Min. PV input voltage / Startup input voltage	200 V / 250 V
Nominal PV input voltage	585 V
MPP voltage range	200 – 1000 V
MPP voltage range for nominal power	550V – 850 V
No. of independent MPP inputs	9
Max. number 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 – 460 V
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz
THD	< 3 % (at nominal power)
DC current injection	< 0.5 % I _n
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / connection phases	3 / 3
Efficiency	
Max. efficiency	98.7 %
Euro. efficiency	98.5 %
Protection	
DC reverse connection protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
Ground fault monitoring	Yes
DC switch	Yes (not available for Australia)
AC switch	No
PV String current monitoring	Yes
PID recovery function	Yes
Overvoltage protection	DC Type II / AC Type II
General Data	
Dimensions (W*H*D)	1051*660*362.5 mm
Weight	89 kg
Isolation method	Transformerless
Ingress protection rating	IP66
Night power consumption	< 2W
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: Wi-Fi, Ethernet
DC connection type	MC4 (Max. 6 mm ²)
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, AS/NZS 4777.2:2015, CEI 0-21, VDE 0126-1-1/A1 VFR 2014, UTE C15-712-1:2013, DEWA
Grid Support	Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control

*: Only compatible with Sungrow logger and iSolarCloud



SG125CX-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

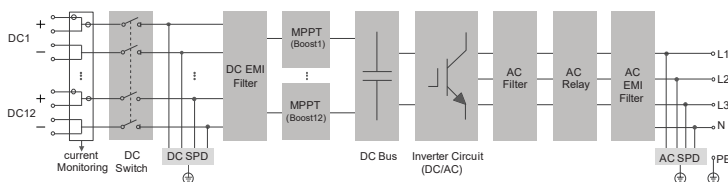
LOWER INVESTMENT

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

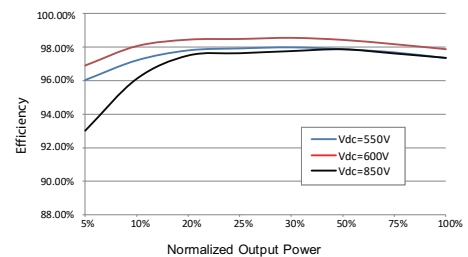
PROVEN SAFETY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG125CX-P2
Input (DC)	
Recommended max. PV input power	175 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	20A
Output (AC)	
Max. AC Output power	125 kVA
Rated AC output apparent power	125 kVA
Max. AC output current	181.1 A
Rated AC output current(at 230V)	181.1 A
Rated AC voltage	3 / N / PE, 230 / 400 V
AC voltage range	320 – 480V
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
Efficiency	
Max. efficiency / European efficiency	98.5% / 98.3%
Protection	
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
PID recovery function	Yes
General Data	
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 mm ²)
AC connection type	OT / DT terminal (Max. 240 mm ²)
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