# SG110CX

## 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

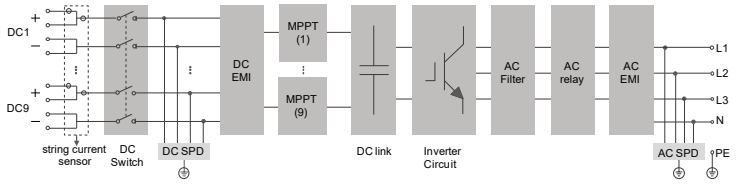
### SAVED INVESTMENT

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

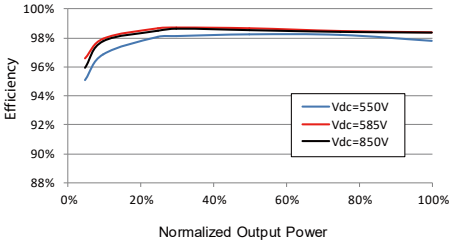
### PROVEN SAFETY

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

### CIRCUIT DIAGRAM




### EFFICIENCY CURVE



SUNGROW
Clean power for all

| 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 ℃ / 100 kVA @ 50 ℃ |
| 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) | Optional |
| Surge protection | DC Type II (optional: Type I + II) / AC Type II |
| **General Data** | |
| 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 ℃ (> 50 ℃ 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 mm² ) |
| AC connection type | OT / DT terminal (Max. 240 mm²) |
| 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, 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.