

# SG125CX-P2

Multi-MPPT String Inverter for 1000 Vdc System

Preliminary



## 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

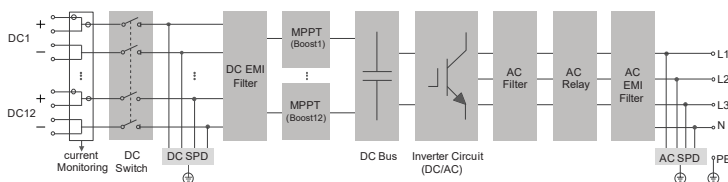
## LOWER INVESTMENT

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

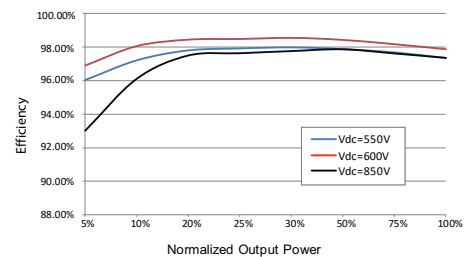
## PROVEN SAFETY

- 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  | SG125CX-P2  |
|---|---|
| <b>Input (DC)</b>                                       |   |
| Recommended max. PV input power                         | 175 kW  |
| Max. PV input voltage                                   | 1100 V  |
| Min. operating PV voltage / Start-up 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 / 30 A / 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 / 40 A / 40 A / 40 A / 40 A / 40 A / 40 A / 40 A / 40 A / 40 A / 40 A / 40 A )                                   |
| <b>Output (AC)</b>                                      |   |
| Max. AC Output power                                    | 125 kVA   |
| Rated AC output apparent power                          | 125 kVA   |
| Max. AC output current                                  | 181.1 A   |
| Rated AC voltage  | 3 / N / PE, 230 / 400 V   |
| AC voltage range  | 320 – 480V  |
| Rated grid frequency / Grid frequency range             | 50 Hz / 45 - 55 Hz<br>60 Hz / 55 - 65 Hz  |
| Harmonic (THD)  | < 3 % (at rated 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  |
| <b>Efficiency</b>                                       |   |
| Max. efficiency   | 98.50%  |
| European efficiency                                     | 98.30%  |
| <b>Protection and Function</b>                          |   |
| DC reverse polarity protection                          | Yes   |
| AC short-circuit protection                             | Yes   |
| Leakage current protection                              | Yes   |
| Grid monitoring   | Yes   |
| Ground fault monitoring                                 | Yes   |
| DC switch   | Yes   |
| 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   |
| <b>General Data</b>                                     |   |
| Dimensions (W*H*D)                                      | 1019*793*360mm  |
| Weight  | 87 kg   |
| Topology  | Transformerless   |
| Degree of protection                                    | IP66  |
| Night power consumption                                 | < 4 W   |
| Operating ambient temperature range                     | -30 to 60 °C (> 45 °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                                      | Evo2 (Max. 6 mm <sup>2</sup> )  |
| AC connection type                                      | OT / DT terminal (Max. 240 mm <sup>2</sup> )  |
| 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, VFR 2019, NC RfG, G99 |
| Grid Support  | Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control                                  |
| Country of manufacture                                  | China   |

