

SG125CX-P2

Multi-MPPT String Inverter for 1000 Vdc System



HIGH YIELD

- 12 MPPTs with max. efficiency 98.5%
- DC 30A 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

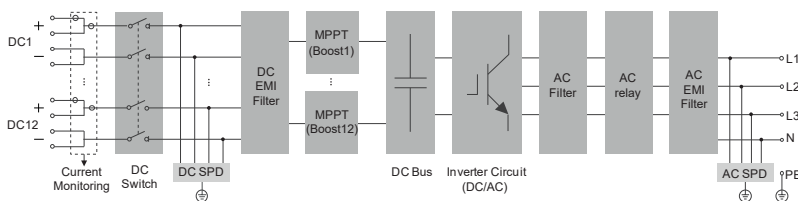
- Compatible max. 240mm² Al AC cables
- Drawer-style cable sealing plate support AC cable pre-assembly



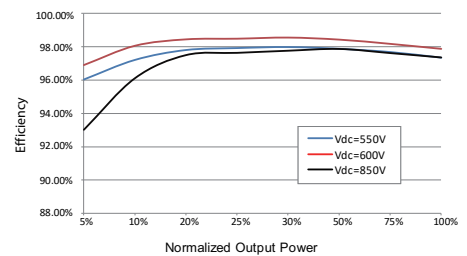
PROVEN SAFETY

- 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 – 480 V |
| 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*360 mm |
| 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, CEI10-16 2019, NRS-097-2-1 |
| Grid Support | Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control |