

SG125CX-P3



HIGH YIELD

- Higher current input, adaptable to all PV modules for more design flexibility
- Global MPPT scanning, increasing generation yield by over 2%
- Intelligent PID recovery function



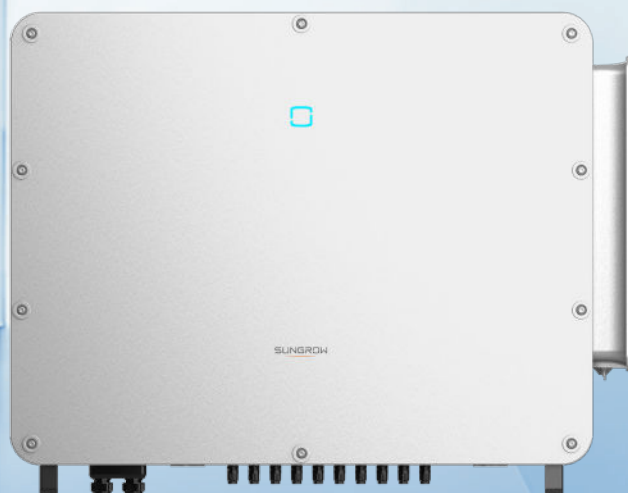
SMART MANAGEMENT

- Air duct self-cleaning, reduced maintenance and increased O&M efficiency
- IP66 protection and C5 Anti-corrosion, suitable for various harsh environments
- High-precision string detection and I-V diagnosis, Module-Level Insulation Positioning



SAFE AND DURABLE

- AFCI 3.0+, intelligent DC arc interrupter, with a detection range of 600m
- Active fault identification, intelligent string-level protection switch, ensuring equipment safety
- PV- Ground Fault Protection



Type designation		SG125CX-P3
Input (DC)		
Recommended max. PV input power		198 kWp
Max. PV input voltage*		1100 V
Min. PV input voltage / Startup input voltage		180 V / 200 V
Rated PV input voltage		600 V
MPPT voltage range**		180 V – 1000 V
No. of independent MPP inputs		10
No. of PV strings per MPPT		2
Max. PV input current		400 A (40 A * 10)
Max. DC short-circuit current		500 A (50 A * 10)
Max. current for DC connector		30 A
Output (AC)		
Rated AC output power		125 kW
Max. AC output apparent power		125 kVA
Max. AC output current (at 220V)		189.9 A
Rated AC output current (at 230V)		181.1 A
Rated AC voltage		3 / N / PE, 220 V / 380 V; 230 V / 400 V
AC voltage range		320 V – 480 V
Rated grid frequency		50 Hz / 60 Hz
Grid frequency range		45 Hz – 55 Hz / 55 Hz – 65 Hz
Harmonic (THD)		< 2 % (at rated power)
Power factor at rated power / Adjustable power factor		> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / AC connection		3 / 3-N-PE
Efficiency		
Max. efficiency		98.5 %
European efficiency		98.3 %
Protection & function		
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 current monitoring		Yes
Arc fault circuit interrupter (AFCI)		Yes
PID recovery function		Yes
General data		
Dimensions (W * H * D)		1025 mm * 795 mm * 360 mm
Weight		≤ 88 kg
Mounting method		Wall-mounting bracket
Topology		Transformerless
Degree of protection		IP66
Night power consumption		< 5 W
Corrosion		C5
Operating ambient temperature range		- 30 °C – 60 °C
Allowable relative humidity range (non-condensing)		0 – 95 %
Cooling method		Smart forced air cooling
Max. operating altitud		3000 m
Display		LED, Bluetooth + APP
Communication		RS485 / WLAN (optional) / Ethernet (optional)
DC connection type		MC4 (4 - 6 mm ²)
AC connection type		OT / DT terminal (Max. 240 mm ²)
AC cable specification		Outside diameter 30 ~ 60 mm
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, IEC 63027
Grid support		Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control

* Input voltage exceeding the MPPT operating voltage range triggers inverter protection

**Please refer to the user manual for the full load MPPT voltage range