

SG50CX-P3-CN

Multi-MPPT String Inverter for 1000 Vdc System



HIGH YIELD

- DC 15A current input, compatible with over 500W+ PV module
- Dynamic shading optimization mode
- Built-in PID recovery function



SMART O&M

- Key component diagnosis and protection
- Smart IV Curve Diagnosis
- Grid fault record function, easy for remote O&M



LOWER INVESTMENT

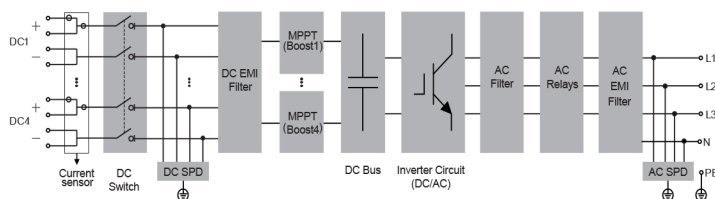
- Easy to handle thanks to 34% weight reduced
- Plug and Play with Buckle Design



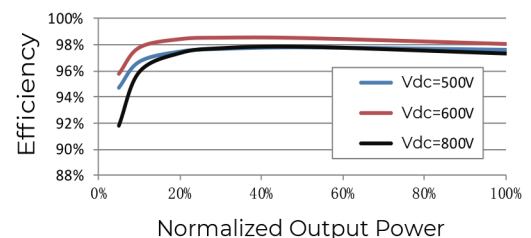
PROVEN SAFETY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE (SG50CX-P3)



Type designation	SG50CX-P3-CN
Input (DC)	
Max. PV input voltage*	1100 V
Min. PV input voltage / Startup input voltage	160 V / 200 V
Rated PV input voltage	600 V
MPPT voltage range**	160 V - 1000 V
No. of independent MPP inputs	4
No. of PV strings per MPPT	2
Max. PV input current	144 A (40 A / 40 A / 32 A / 32 A)
Max. DC short-circuit current	180 A (50 A / 50 A / 40 A / 40 A)
Max. current for DC connector	30 A
Output (AC)	
Rated AC output power	50 kW
Max. AC output apparent power	55 kVA
Max. AC output current	83.6 A
Rated AC output current(at 230V)	72.5 A
Rated AC voltage	3 / N / PE, 220 / 380 V
AC voltage range	156 V 300 V (phase voltage)
Rated grid frequency	50 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 / AC connection	3 / 3-N-PE
Efficiency	
Max. efficiency / China efficiency	98.6 % / 98.2 %
Protection	
Grid monitoring	Yes
DC reverse polarity protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Surge protection	DC Type 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)	645 mm * 595 mm * 245 mm
Weight	40 kg
Mounting method	Wall-mounting bracket
Degree of protection	IP66
Night power consumption	< 1 W
Operating ambient temperature range	-30 °C to 60 °C
Allowable relative humidity range (non-condensing)	0 % - 100 %
Cooling method	Intelligent air cooling
Max. operating altitude	4000 m
Display	LED, APP
Communication	4G+ RS485
DC connection type	MC4
AC connection type	OT or DT terminal