

SG36/40/50CX-P2

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

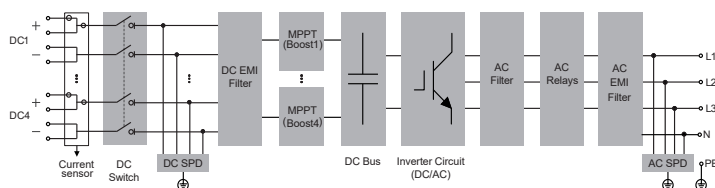
- Easy to handle thanks to 34% weight reduced
- Plug and Play with Buckle Design



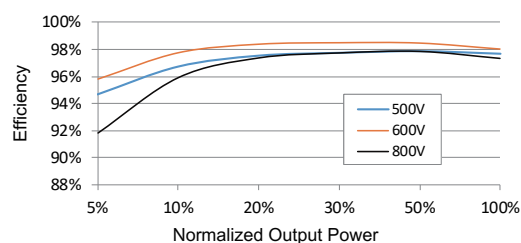
PROVEN SAFETY

- 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-P2)



Type designation	SG36CX-P2		SG40CX-P2	SG50CX-P2
Input (DC)				
Recommended max. PV input power	50.4 kWp		56 kWp	70 kWp
Max. PV input voltage			1100 V	
Min. PV input voltage / Startup input voltage			160 V / 200 V	
Rated PV input voltage			600 V	
MPP voltage range			160 V - 1000 V	
No. of independent MPP inputs			4	
No. of PV strings per MPPT			2	
Max. PV input current			120 A (30 A * 4)	
Max. DC short-circuit current			160 A (40 A * 4)	
Max. current for DC connector			30 A	
Output (AC)				
Rated AC output power	36 kW (415 V @50°C) *	40 kW (415 V @50°C) *	50 kW (415 V @50°C) *	
Max. AC output apparent power	40 kVA (415 V @40°C) *	44 kVA (415 V @40°C) *	55 kVA (415 V @40°C) *	
Max. AC output current	60.2 A	66.9 A	83.6 A	
Rated AC output current(at 230V)	52.17 A	58 A	72.5 A	
Rated AC voltage	3 / N / PE, 220 V / 380 V, 230 V / 400 V			
AC voltage range	312 V - 480 V			
Rated grid frequency	50 Hz / 60 Hz			
Grid frequency range	45 Hz – 55 Hz / 55 Hz – 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 / AC connection	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 current monitoring	Yes			
Arc fault circuit interrupter (AFCI)	Yes			
PID recovery function	Yes			
Optimizer compatibility *	Optional			
General Data				
Dimensions (W*H*D)	645 mm * 575 mm * 245 mm			
Weight	40 kg			41 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 % - 100 %			
Cooling method	Smart forced air cooling			
Max. operating altitude	4000 m			
Display	LED, Bluetooth+APP			
Communication	RS485 / Optional: WLAN, Ethernet			
DC connection type	Evo2 (Max. 6 mm²)			
AC connection type	OT terminal (16 - 35 mm²)			OT or DT terminal (35 - 50
AC Cable specification	Outside diameter 18 mm - 38 mm mm²)			
Grid Compliance	IEC 62109, IEC 61727, IEC 62116, VDE-AR-N 4105:2018, IEC 61000-6-3, EN 50549-1, CEI 0-21 2019,CEI0-16 2019, VDE 0126-1-1/A1 VFR 2019, UTE C15-712-1:2013, UNE 206007-1/RD 1699, UNE 217002, G99IEC 63027			
Grid Support	Q at night function, LVRT, HVRT,active & reactive power control and power ramp rate control			

* PV input voltage need over 630VDC

** For optimizer compatibility, please consult Sungrow before placing an order

