

# 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

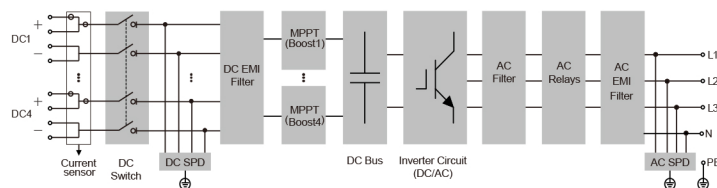
- Easy to handle thanks to 34% weight reduced
- Plug and Play with Buckle Design



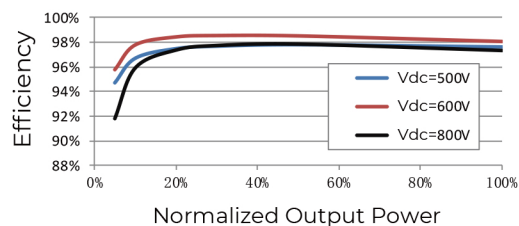
## PROVEN SAFETY

- 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
<b>Input (DC)</b>			
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	
MPPT 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	
<b>Output (AC)</b>			
Rated AC output power	36 kW	40 kW	50 kW
Max. AC output apparent power	40 kVA	44 kVA	55 kVA
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	
<b>Efficiency</b>			
Max. efficiency / European efficiency		98.5 % / 98.3 %	
<b>Protection</b>			
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	
RSD compatibility ****		Optional	
<b>General data</b>			
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		< 7 W	
Corrosion		C5	
Operating ambient temperature range		-30 °C to 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 mm <sup>2</sup> )	
AC connection type		OT terminal (16-35 mm <sup>2</sup> )	OT or DT terminal (35-50 mm <sup>2</sup> )
AC cable specification		Outside diameter 18 mm - 38 mm	
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, G99	
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

\*\*\* 30kVA for Germany, Belgium, Austria, Ukraine and Denmark, 33kVA for others

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

