

# 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

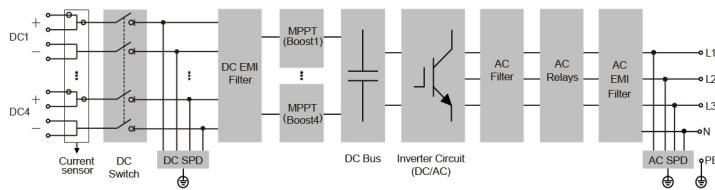
- Easy to handle thanks to 34% weight reduced
- Plug and Play with Buckle Design



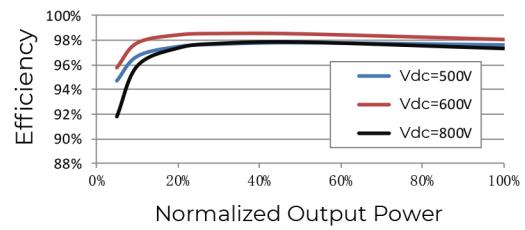
## PROVEN SAFETY

- 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, CEI 0-16 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

