

# SG36/40/50CX-P2

Multi-MPPT String Inverter for 1000 Vdc System

Preliminary



## 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

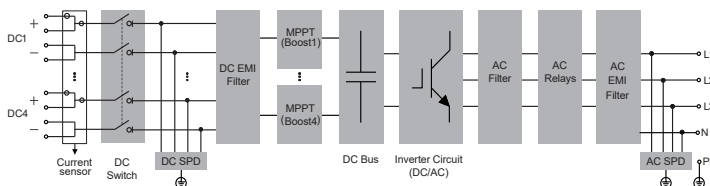
## LOWER INVESTMENT

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

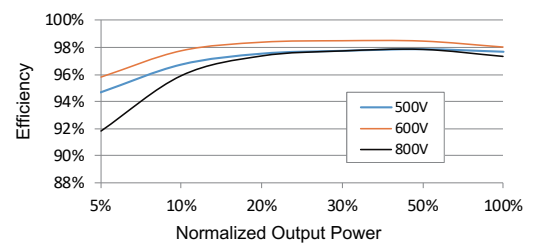
## PROVEN SAFETY

- 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		
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	20A		
<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 / 380 V, 230 / 400 V		
AC voltage range	312 - 480 V		
Rated grid frequency	50 Hz / 60 Hz		
Grid frequency range	45 – 55 Hz / 55 – 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 / connection phases	3 / 3-N-PE		
<b>Efficiency</b>			
Max. efficiency / European efficiencyEuro. Efficiency	98.5% / 98.3%		
<b>Protection</b>			
Grid monitoring	Yes		
DC reverse connection 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		
<b>General Data</b>			
Dimensions (W*H*D)	645*575*245 mm		
Mounting Method	Wall-mounting bracket		
Weight	40 kg	40 kg	41 kg
Topology	Transformerless		
Degree of protection	IP66		
Corrosion	C5		
Night power consumption	< 5W		
Operating ambient temperature range	-30 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 18~38mm		
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, C99		
Grid Support	Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control		

