

# SG30/50CX-P2

Multi-MPPT String Inverter for 1000 Vdc System

AU



## 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

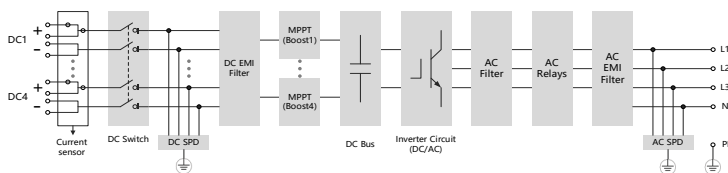
## LOWER INVESTMENT

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

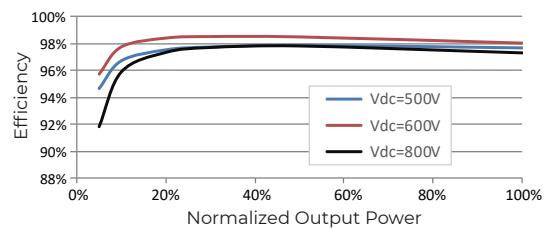
## PROVEN SAFETY

- 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	SG30CX-P2	SG50CX-P2
<b>Input (DC)</b>		
Recommended max. PV input power	42 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	3	4
No. of PV strings per MPPT	2	
Max. PV input current	90 A ( 30 A / 30 A / 30 A )	120 A ( 30 A / 30 A / 30 A / 30 A )
Max. DC short-circuit current	120 A ( 40 A / 40 A / 40 A )	160 A ( 40 A / 40 A / 40 A / 40 A )
Max. current for DC connector	30 A	
<b>Output (AC)</b>		
Rated AC output power	29.9 kW	50 kW
Max. AC output apparent power	29.9 kVA	50 kVA
Rated AC output apparent power	29.9 A	50 A
Max. AC output current	48.15 A	80.5 A
Rated AC voltage	3 / N / PE, 230 / 400 V	
AC voltage range	312 V - 480 V	
Rated grid frequency	50 Hz	
Grid frequency range	45 Hz - 55 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	98.5 % / 98.3 %	
<b>Protection &amp; function</b>		
Grid monitoring	Yes	
DC reverse polarity protection	Yes	
AC short-circuit protection	Yes	
Leakage current protection	Yes	
Surge protection	DC Typell / 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 mm * 575 mm * 245 mm	
Weight	38 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 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 mm <sup>2</sup> - 35 mm <sup>2</sup> )	OT or DT terminal ( 35 mm <sup>2</sup> - 50 mm <sup>2</sup> )
AC cable specification	Outside diameter 18 mm - 38 mm	
Grid compliance	IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, IEC 61000-6-3, AS/NZS 4777.2:2020, IIEC 63027	
Grid support	Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control	
Country of manufacture	China	

\* Input voltage exceeding the MPPT operating voltage range triggers inverter protection

\*\* Please refer to the user manual for the full load MPPT voltage range

