

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

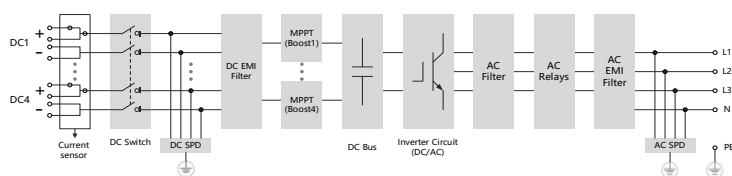
- Easy to handle thanks to 34% weight reduced
- Plug and Play with Buckle Design



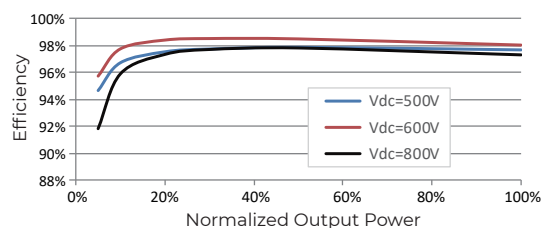
PROVEN SAFETY

- 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	
Input (DC)				
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			
Output (AC)				
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			
Efficiency				
Max. efficiency	98.5 % / 98.3 %			
Protection & function				
Grid monitoring	Yes			
DC reverse polarity protection	Yes			
AC short-circuit protection	Yes			
Leakage current protection	Yes			
Surge protection	DC TypeII / 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			
General data				
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 mm²)			
AC connection type	OT terminal (16 mm² - 35 mm²)		OT or DT terminal (35 mm² - 50 mm²)	
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

