

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

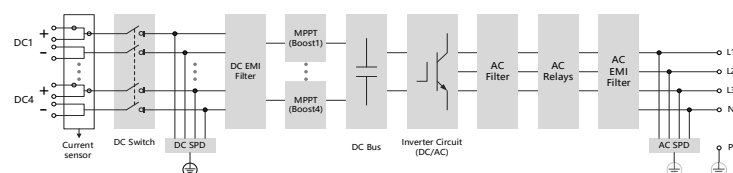


Type designation	SG30CX-P2	SG50CX-P2
Input (DC)		
Recommended max. PV input power	46.2 kWp	70 kWp
Max. PV input voltage *	1100 V	
Min. PV input voltage / Startup input voltage	160 V / 200 V	
Rated PV input voltage	600 V	
MPPT voltage range **	160 V – 1000 V	
No. of independent MPP inputs	3	4
No. of PV strings per MPPT	2	2
Max. PV input current	90 A (30 A * 3)	120 A (30 A * 4)
Max. DC short-circuit current	120 A (40 A * 3)	160 A (40 A * 4)
Max. current for DC connector	30 A	
Output (AC)		
Rated AC output power	29.999 kW	50 kW
Max. AC output apparent power	29.9 kVA	50 kVA
Rated AC output apparent power	29.9 kVA	50 kVA
Max. AC output current	48.15 A	80.5 A
Rated AC voltage	3 / N / PE, 230 V / 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 / European efficiency	98.5 % / 98.3 %	
Protection		
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	
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 mm ²)	
AC connection type	OT terminal (16 ~ 35 mm ²)	OT or DT terminal (35 ~ 50 mm ²)
AC cable specification	Outside diameter 18 mm – 38 mm	
Grid compliance	IEC 61219, IEC 62116, IEC 60068, IEC 61683, IEC 61000-6-3, AS/NZS 4777.2:2020, IEC 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

CIRCUIT DIAGRAM



EFFICIENCY CURVE (SG50CX-P2)

