

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

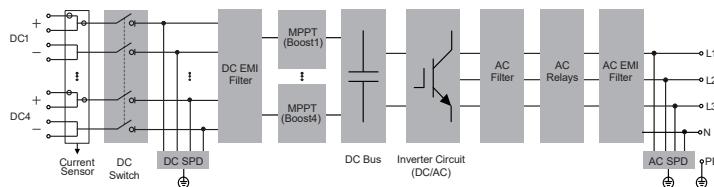
- Easy to handle thanks to 34% weight reduced
- Plug and Play with Buckle Design



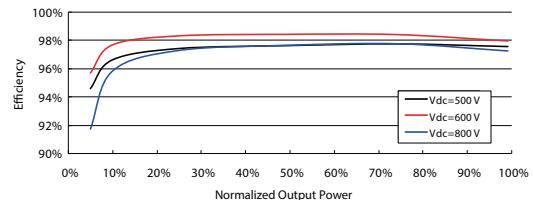
PROVEN SAFETY

- IP66 protection and C5 Anti-corrosion
- DC Type I+II SPD, AC Type II SPD
- Support AFCI 2.0 function

CIRCUIT DIAGRAM



EFFICIENCY CURVE



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	
MPP voltage range	160 – 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)
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 kVA	50 kVA
Max. AC output current	48.15 A	80.5 A
Rated AC voltage	3 / N / PE, AC 230 / 400 V	
AC voltage range	312 – 480 V	
Rated grid frequency / Grid frequency range	50 Hz / 45 – 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 / connection phases	3 / 3-N-PE	
Efficiency		
Max. efficiency / European 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 Type I+II / AC Type II	
Ground fault monitoring	Yes	
DC switch	Yes	
PV String current monitoring	Yes	
PID recovery function	Yes	
DC Terminal Protective Cover	Yes	
Arc fault circuit interrupter (AFCI)	Yes	
Communication dongle (EyeM4)	Yes	
General Data		
Dimensions (W*H*D)	600*625*240 mm	
Weight	35 kg	36 kg
Topology	Transformerless	
Degree of protection	IP66	
Corrosion	C5	
Night power consumption	≤5 W	
Operating ambient temperature range	-30 to 60 °C (> 45 °C derating)	
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 / WLAN / Ethernet, Optional: 4G	
DC connection type	MC4 -Evo2 (Max. 6 mm ²)	
AC connection type	OT terminal (16~35 mm ²)	OT or DT terminal (35~50 mm ²)
Compliance	IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, IEC 61000-6-3, AS/NZS 4777.2:2020	
Grid Support	Q at night function, LVRT, HVRT,active & reactive power control and power ramp rate control	
Country of manufacture	China	