

SG30/50CX-P2

Multi-MPPT String Inverter for 1000 Vdc System AU



HIGH YIELD

- 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

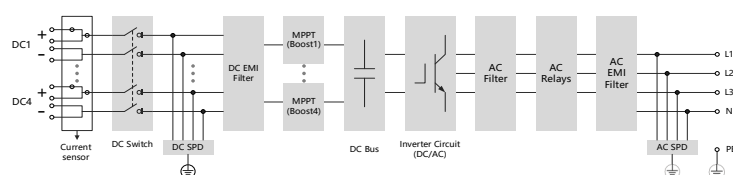


Type designation	SG30CX-P2	SG50CX-P2
Input (DC)		
Recommended max. PV input power	46.2 kWp	70 kWp
Max. PV input voltage *		1100 V
Min. PV input voltage / Startup input voltage		160 V / 200 V
Rated PV input voltage		600 V
MPPT voltage range **		160 V – 1000 V
No. of independent MPP inputs	3	4
No. of PV strings per MPPT	2	2
Max. PV input current	30 A * 3	30 A * 4
Max. DC short-circuit current	50 A * 3	50 A * 4
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 kVA	50 kVA
Max. AC output current	48.15 A	80.5 A
Rated AC output current	43.5 A	72.5 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
Protective class		Protective class I
Overvoltage category		III[AC]; II[PV]
Active anti-islanding method		Frequency shift]
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 62109, IEC 61727, 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)

