

# SG30/50CX

Premium

Multi-MPPT String Inverter for 1000 Vdc System

AU



## HIGH YIELD

- Up to 5 MPPTs with max. efficiency 98.7% (SG50CX)
- 3 MPPTs with max. efficiency 98.6% (SG30CX)

## SMART O&M

- Touch free commissioning and remote firmware upgrade
- Smart IV Curve Scanning \*
- Fuse free design with smart string current monitoring

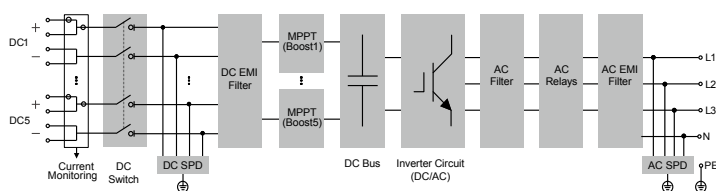
## SAVED INVESTMENT

- Compatible with Al and Cu AC cables
- DC 2 in 1 connection enabled
- Cable free communication with optional WLAN

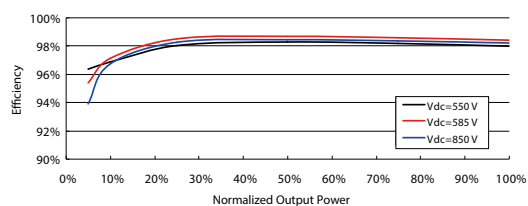
## PROVEN SAFETY

- IP66 and C5 anti-corrosion grade
- Quick Arc-Fault Circuit Interrupter
- Satisfied global safety and grid code

## CIRCUIT DIAGRAM



## EFFICIENCY CURVE



Type designation	SG30CX	SG50CX
<b>Input (DC)</b>		
Max. PV input voltage		1100 V **
Min. PV input voltage / Start-up input voltage		200 V / 250 V
Nominal PV input voltage		585V
MPP voltage range		200 – 1000 V
No. of independent MPP inputs	3	5
No. of PV strings per MPPT		2
Max. PV input current	78 A	130 A
Max. DC short-circuit current	120 A	200 A
<b>Output (AC)</b>		
AC output power	29.9KVA	50kVA
Max. AC output current	48.15A	80.5 A
Nominal AC voltage		3 / N / PE, 230 / 400 V
AC voltage range		312 – 528 V
Nominal grid frequency / Grid frequency range		50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz
Harmonic (THD)		< 3 % (at nominal power)
Power factor at nominal power / Adjustable power factor		> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / connection phases		3 / 3
<b>Efficiency</b>		
Max. efficiency / European efficiency	98.6 % / 98.3 %	98.7 % / 98.4 %
<b>Protection</b>		
DC reverse polarity protection		Yes
AC short circuit protection		Yes
Leakage current protection		Yes
Grid monitoring		Yes
Ground fault monitoring		Yes
DC switch		Yes
AC switch		No
PV string monitoring		Yes
Q at night function		Yes
PID recovery function		Yes
Arc fault circuit interrupter (AFCI)		Yes
DC Terminal Protective Cover		Yes
Overvoltage protection		DC Type I+II / AC Type II
<b>General Data</b>		
Dimensions (W*H*D)	702*595*310 mm	782*645*310 mm
Weight	50 kg	62 kg
Topology		Transformerless
Degree of protection		IP66
Night power consumption		≤2 W
Operating ambient temperature range		-30 to 60 °C (> 45 °C derating)
Allowable relative humidity range		0 – 100 %
Cooling method		Smart forced air cooling
Max. operating altitude		4000 m (> 3000 m derating)
Display		LED, Bluetooth+APP
Communication		RS485 / WLAN / Optional: Ethernet
DC connection type		MC4 (Max. 6 mm <sup>2</sup> )
AC connection type		OT or DT terminal (Max.70 mm <sup>2</sup> )
Compliance		IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, IEC 61000-6-3, AS/ NYS 4777.2:2015
Grid Support		Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control

\*: Only compatible with Sungrow Logger, EyeM4 and iSolarCloud

\*\*: The inverter enters the standby state when the input voltage ranges between 1,000 V and 1,100 V. If the maximum DC voltage in the system can exceed 1000 V, the MC4 connectors included in the scope of delivery must not be used. In this case MC4 Evo2 connectors must be used.