

## Multi-MPPT String Inverter for 1000 Vdc System



### HIGH YIELD

- 3 MPPTs with max. efficiency 98.6%
- Compatible with bifacial module
- Built-in PID recovery function



### SMART O&M

- Touch free commissioning and remote firmware upgrade
- Online IV curve scan and diagnosis\*
- Fuse free design with smart string current monitoring



### LOW COST

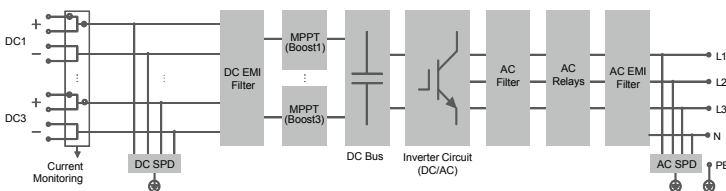
- Compatible with Al and Cu AC cables
- DC 2 in 1 connection enabled
- Cable free communication with optional Wi-Fi



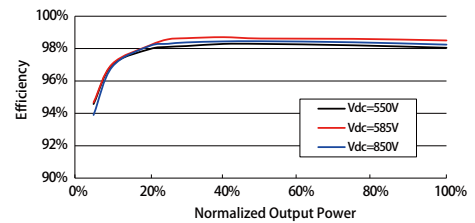
### PROVEN SAFETY

- IP66 and C5 anti-corrosion grade
- Type II SPD for both DC and AC
- Satisfied global safety and grid code

## CIRCUIT DIAGRAM



## EFFICIENCY CURVE



Type designation	SG30CX
<b>Input (DC)</b>	
Max. PV input voltage	1100 V
Min. PV input voltage / Start-up input voltage	200V / 250 V
Nominal PV input voltage	585 V
MPP voltage range	200 – 1000 V
MPP voltage range for nominal power	550 – 850 V
No. of independent MPP inputs	3
Max. number of PV strings per MPPT	2
Max. PV input current	78 A
Max. current for input connector	30 A
Max. DC short-circuit current	120 A
<b>Output (AC)</b>	
AC output power	29.9 KVA
Max. AC output current	43.15 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
THD	< 3 % (at nominal power)
DC current injection	< 0.5 % I <sub>n</sub>
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	98.6 %
European efficiency	98.3 %
<b>Protection</b>	
DC reverse connection protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
DC switch	No
AC switch	No
PV String current monitoring	Yes
Q at night	Yes
PID recovery function	Yes
Overvoltage protection	DC Type II / AC Type II
<b>General Data</b>	
Dimensions (W*H*D)	702*595*310mm
Weight	50 kg
Isolation method	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 (non-condensing)	0 – 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m (> 3000 m derating)
Display	LED, Bluetooth+APP
Communication	RS485 / Optional: Wi-Fi, 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 / NZS 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 and iSolarCloud



# SG50CX Premium

Multi-MPPT String Inverter for 1000 Vdc System

AU



## HIGH YIELD

- Up to 5 MPPTs with max. efficiency 98.7%
- Compatible with bifacial module
- Built-in PID recovery function

## SMART O&M

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

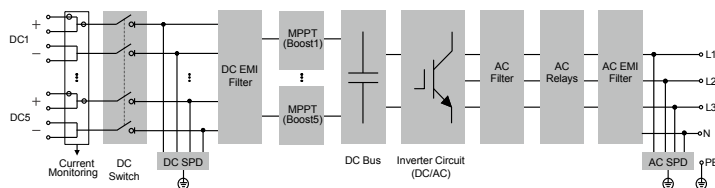
## SAVED INVESTMENT

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

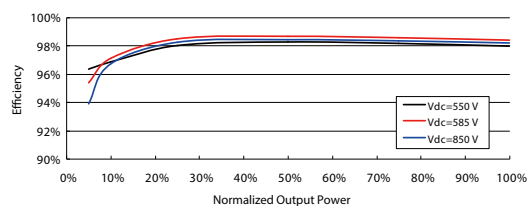
## PROVEN SAFETY

- IP66 and C5 anti-corrosion grade
- Quick arc-fault circuit interrupter
- Satisfied global safety and grid code

## CIRCUIT DIAGRAM



## EFFICIENCY CURVE



Type designation	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	585 V
MPP voltage range	200 – 1000 V
No. of independent MPP inputs	5
No. of PV strings per MPPT	2
Max. PV input current	130 A
Max. DC short-circuit current	200 A
<b>Output (AC)</b>	
AC output power	50 kVA
Max. AC output current	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 / AC connection	3 / 3-PE
<b>Efficiency</b>	
Max. efficiency / European efficiency	98.7 % / 98.4 %
<b>Protection and function</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)	Optional
DC terminal protective cover	Yes
Surge protection	DC Type I+II / AC Type II
<b>General Data</b>	
Dimensions (W * H * D)	782 * 645 * 310 mm
Weight	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/NZS 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

\*\* Max. operating DC voltage is 1000V, max. withstanding DC voltage is 1100 V



# SG110CX Premium

Multi-MPPT String Inverter for 1000 Vdc System

AU



### HIGH YIELD

- 9 MPPTs with max. efficiency 98.7%
- Compatible with bifacial module
- Built-in PID recovery function

### SMART O&M

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

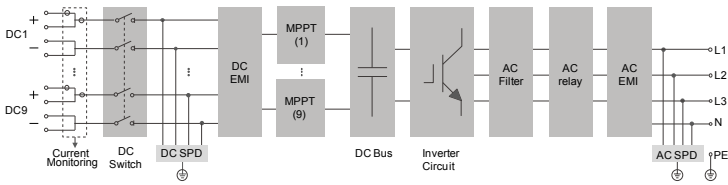
### SAVED INVESTMENT

- Compatible with Al and Cu AC cables
- DC 2 in 1 connection enabled
- Q at night function

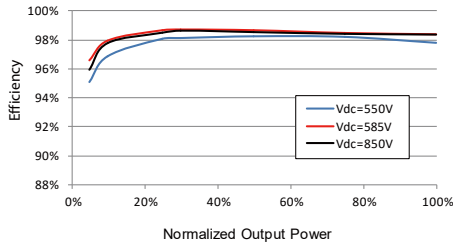
### PROVEN SAFETY

- IP66 and C5 protection
- Quick arc-fault circuit interrupter
- Compliant with global safety and grid code

### CIRCUIT DIAGRAM



### EFFICIENCY CURVE



Type designation	SG110CX
<b>Input (DC)</b>	
Max. PV input voltage	1100 V **
Min. PV input voltage / Startup input voltage	200 V / 250 V
Nominal PV input voltage	585 V
MPP voltage range	200 – 1000 V
No. of independent MPP inputs	9
No. of PV strings per MPPT	2
Max. PV input current	26 A * 9
Max. DC short-circuit current	40 A * 9
<b>Output (AC)</b>	
AC output power	110 kVA @ 45 °C / 100 kVA @ 50 °C
Max. AC output current	158.8 A
Nominal AC voltage	3 / N / PE, 400 V
AC voltage range	320 – 460V
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 / AC connection	3 / 3-PE
<b>Efficiency</b>	
Max. efficiency / European efficiency	98.7 % / 98.5 %
<b>Protection and function</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)	Optional
DC terminal protective cover	Yes
Surge protection	DC Type II / AC Type II
<b>General Data</b>	
Dimensions (W * H * D)	1051 * 660 * 362.5 mm
Weight	89 kg
Topology	Transformerless
Ingress protection rating	IP66
Night power consumption	< 2 W
Operating ambient temperature range	-30 to 60 °C (> 50 °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 / DT terminal (Max. 240 mm <sup>2</sup> )
Compliance	IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, IEC 61000-6-3, AS / NZS 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

\*\* Max. operating DC voltage is 1000V, max. withstanding DC voltage is 1100V

