

# SG30CX Premium

Multi-MPPT String Inverter for 1000 Vdc System

AU



## 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
- Smart IV curve scanning \*
- Fuse free design with smart string current monitoring

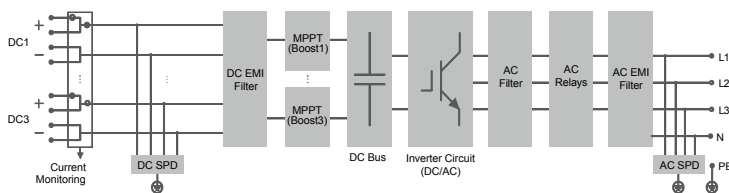
## SAVED INVESTMENT

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

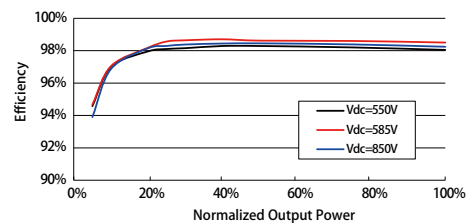
## PROVEN SAFETY

- IP66 and C5 anti-corrosion
- Type II SPD for DC and AC

## 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          | 200 V / 250 V  |
| Nominal PV input voltage                                | 585 V  |
| MPP voltage range                                       | 200 – 1000 V   |
| No. of independent MPP inputs                           | 3  |
| No. of PV strings per MPPT                              | 2  |
| Max. PV input current                                   | 78 A   |
| Max. DC short-circuit current                           | 120 A  |
| <b>Output (AC)</b>                                      |  |
| AC output power   | 29.9 kVA   |
| Max. AC output current                                  | 48.15 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   |
| 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                   | 98.6 % / 98.3 %  |
| <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  |
| DC terminal protective cover                            | Yes  |
| Surge protection  | DC Type II / AC Type II  |
| <b>General Data</b>                                     |  |
| Dimensions (W * H * D)                                  | 702 * 595 * 310 mm   |
| Weight  | 50 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