

SG30CX New

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 optional



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

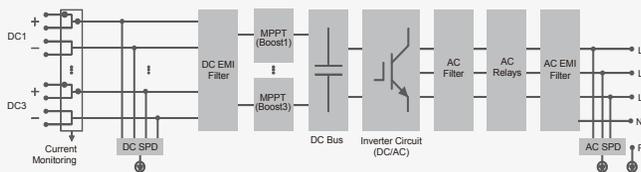
- Compatible with Al and Cu AC cables
- Enable DC 2 in 1 connection
- Cable free communication with optional Wi-Fi



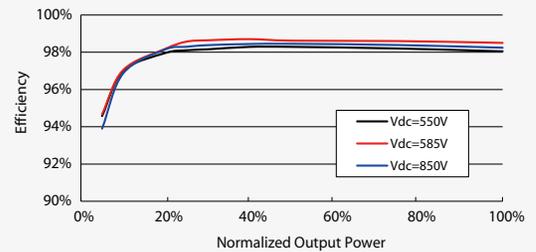
Proven Safety

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

Circuit Diagram



Efficiency Curve



Input (DC)**SG30CX**

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
MPP voltage range for nominal power	550 – 850V
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

Output (AC)

AC output power	29.9 kVA @ 45 °C
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 _n
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / connection phases	3 / 3

Efficiency

Max. efficiency / European efficiency	98.6% / 98.3%
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Protection

DC reverse connection protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
DC switch / AC switch	No / No
PV String current monitoring	Yes
Q at night	Yes
PID recovery function	optional
Overvoltage protection	DC Type II / AC Type II

General Data

Dimensions (W * H * D)	702 * 595 * 310 mm
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 / Standard: Wi-Fi, Ethernet
DC connection type	MC4 (Max. 6 mm ²)
AC connection type	OT or DT terminal (Max.70 mm ²)
Compliance	IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE-AR-N 4105:2018, VDE-AR-N 4110:2018, IEC 61000-6-3, EN 50438, AS/NZS 4777.2:2015
Grid Support	Q at night function, LVVRT, HVVRT, active & reactive power control and power ramp rate control

