

# SG250HX New

Multi-MPPT String Inverter for 1500 Vdc System



## High Yield

- 12 MPPTs with max. efficiency 99%
- Compatible with bifacial module
- Built-in An-ti PID and 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

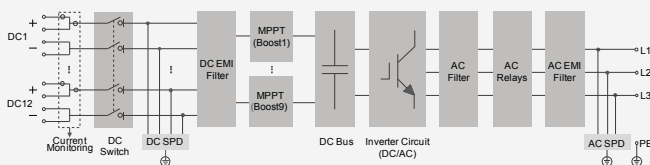
- Compatible with Al and Cu AC cables
- DC 2 in 1 connection enabled
- Power line communication (PLC) optional
- Q at night function



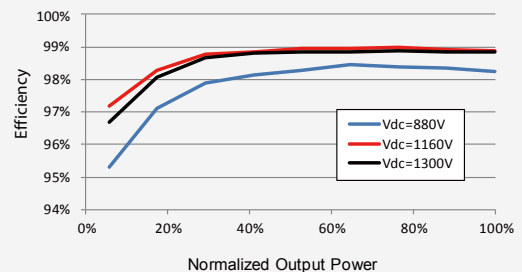
## Proven Safety

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

### Circuit Diagram



### Efficiency Curve



## Input (DC)

	SG250HX
Max. PV input voltage	1500 V
Min. PV input voltage / Startup input voltage	600 V / 600 V
Nominal PV input voltage	1080 V
MPP voltage range	600 V – 1500 V
MPP voltage range for nominal power	860 V – 1300 V
No. of independent MPP inputs	12
Max. number of PV strings per MPPT	2
Max. PV input current	26 A * 12
Max. current for input connector	30 A
Max. DC short-circuit current	40 A * 12

## Output (AC)

AC output power	250 kVA @ 30 °C / 220 kVA @ 45 °C / 200 kVA @ 50 °C
Max. AC output current	182.5 A
Nominal AC voltage	3 / PE, 800 V
AC voltage range	680 – 880V
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 % In
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 / Euro. efficiency	99.0 % / 98.7 %
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## Protection

DC reverse connection protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
Ground fault monitoring	Yes
DC switch/ AC switch	Yes / No
PV String current monitoring	Yes
Q at night function	Yes
An-ti PID and PID recovery function	Optional
Overvoltage protection	DC Type II / AC Type II

## General Data

Dimensions (W*H*D)	1051*660*363 mm
Weight	95kg
Isolation method	Transformerless
Ingress protection rating	IP66
Night power consumption	< 2 W
Operating ambient temperature range	-30 to 60 °C
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: PLC
DC connection type	Amphenol UTX (Max. 6 mm <sup>2</sup> )
AC connection type	OT terminal (Max. 300 mm <sup>2</sup> )
Compliance	IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE-AR-N 4110:2018, VDE-AR-N 4120:2018, IEC 61000-6-3, EN 50438, UNE 206007-1:2013, P.O.12.3, UTE C15-712-1:2013, UL1741, UL1741SA, IEEE1547, IEEE1547.1, CSA C22.2 107.1-01-2001, FCC Part15 Sub-part B Class A Limits, California Rule 21
Grid Support	Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control

