

SG250HX-IN/ SG250HX-IN-20

Multi-MPPT String Inverter for 1500 Vdc System



HIGH YIELD

- 12 MPPTs with max. efficiency 99%
- 30A MPPT compatible with 500Wp+ module
- Built-in Anti-PID and PID recovery function

SMART O&M

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

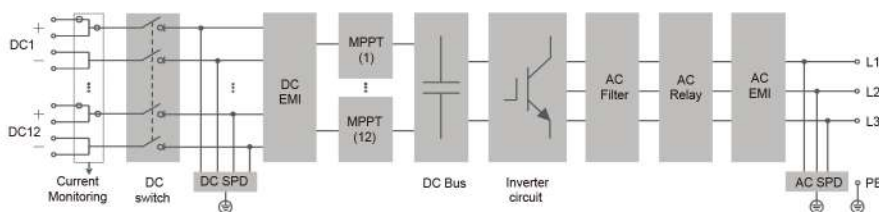
LOW COST

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

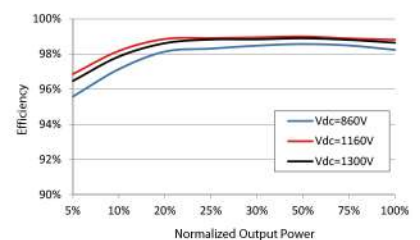
PROVEN SAFETY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG250HX-IN	SG250HX-IN-20
Input (DC)		
Max. PV input voltage	1500 V	
Min. PV input voltage / Startup input voltage	500 V / 500 V	
Nominal PV input voltage	1160 V	
MPP voltage range	500 V – 1500 V	
MPP voltage range for nominal power	860 V – 1300 V	
No. of independent MPP inputs	12	
Max. number of input connector per MPPT	2	
Max. PV input current	30 A * 12	
Max. DC short-circuit current	50 A * 12	
Output (AC)		
AC output power	250 kVA @ 30 °C / 200 kVA @50 °C	250 kVA @ 30 °C / 237.5kVA@40 °C / 220 kVA @50 °C
Nominal AC output current	144.3 A	158.8 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 % 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	99.0 % / 98.8 %	
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	
Anti-PID and PID recovery function	Yes	
Overvoltage protection	DC Type II / AC Type II	
General Data		
Dimensions (W*H*D)	1051 * 660 * 363 mm	
Weight	99kg	
Isolation method	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 (non-condensing)	0 – 100 %	
Cooling method	Smart forced air cooling	
Max. operating altitude	5000 m (> 4000 m derating)	
Display	LED, Bluetooth+APP	
Communication	RS485 / PLC	
DC connection type	MC-Evo2 (Max. 6 mm ² , optional 10mm ²)	
AC connection type	OT / DT terminal (Max. 300 mm ²)	
Compliance	IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683	
Grid Support	Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control	

*: Only compatible with Sungrow logger and iSolarCloud