

# SG125HX Preliminary

## Multi-MPPT String Inverter for 1500 Vdc System



### HIGH YIELD

- 6 MPPTs with max. efficiency 99%
- Compatible with bifacial module
- Built-in anti-PID and 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

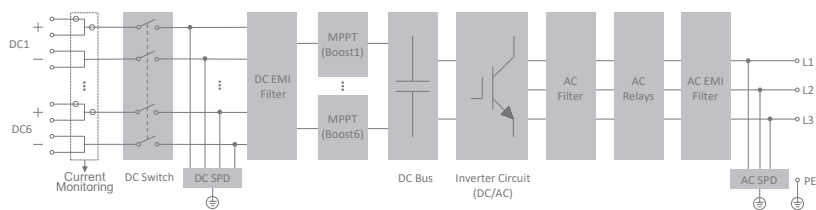
### LOW COST

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

### PROVEN SAFETY

- IP66 and C5 protection
- DC type II SPD and AC type I + II SPD
- Compliant with global safety and grid code

## CIRCUIT DIAGRAM



Type designation	SG125HX
<b>Input (DC)</b>	
Max. PV input voltage	1500 V
Min. PV input voltage / Start-up input voltage	500 V / 550 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	6
Max. number of input connector per MPPT	2
Max. PV input current	30 A * 6
Max. DC short-circuit current	50 A * 6
<b>Output (AC)</b>	
AC output power	125kVA @ 40 °C / 113.6kVA @ 50 °C
Max. AC output current	90.2 A
Nominal AC voltage	3 / PE, 800 V
AC voltage range	680 – 880 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 % In
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 / European efficiency	99.0 % / 98.7 %
<b>Protection</b>	
DC reverse connection protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
DC switch	Yes
AC switch	No
PV String current monitoring	Yes
Q at night	Yes
PID protection	Anti-PID and PID recovery
Overvoltage protection	DC Type II / AC Type I + II
<b>General Data</b>	
Dimensions (W*H*D)	916*690*340mm
Weight	70 kg
Isolation method	Transformerless
Degree of protection	IP66
Night power consumption	< 7 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	5000 m (> 4000 m derating)
Display	LED, Bluetooth+APP
Communication	RS485 / PLC
DC connection type	MC4-Evo2 (Max. 6 mm <sup>2</sup> , optional 10 mm <sup>2</sup> )
AC connection type	OT/DT terminal (Max. 120 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 61000-6-2, IEC 61000-6-4, EN 50549-2, P.O.12.2, G99, VDE 0126-1-1/A1:VFR2019
Grid Support	Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control