

# SG200HX-US

Multi-MPPT String Inverter for 1500 Vdc System



## HIGH YIELD

- Up to 12 MPPTs with max. efficiency 98.8%
- 20A per string, compatible with 500Wp+ module
- Data exchange with tracker system, improving yield



## GRID SUPPORT

- SCR  $\geq 1.15$  stable operation in extremely weak grid
- Reactive power response time  $< 30$  ms



## LOW COST

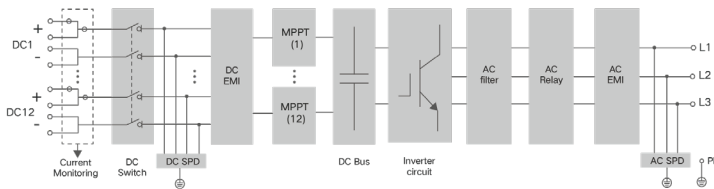
- Q at night function, save investment
- Power line communication (PLC)
- Smart IV Curve diagnosis, active O&M



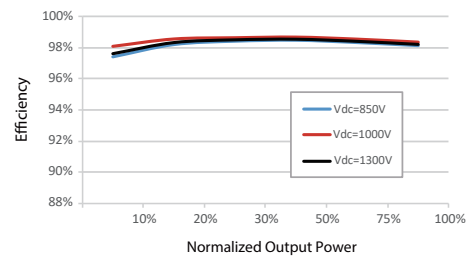
## PROVEN SAFETY

- 2 strings per MPPT, no fear of string reverse connection
- 24h real-time AC and DC insulation monitoring

## CIRCUIT DIAGRAM



## EFFICIENCY CURVE



Type designation	SG200HX-US
<b>Input (DC)</b>	
Max. PV input voltage	1500 V
Min. PV input voltage / Startup input voltage	500 V / 550 V
Nominal PV input voltage	1000 V
MPP voltage range	500 V – 1500 V
Full Power MPP Voltage Range @ 40 °C	850 V – 1300 V*
No. of independent MPP inputs	12
Max. number of input connector per MPPT	2
Max. PV input current	12 * 40 A
Max. DC short-circuit current per MPPT	60 A
<b>Output (AC)</b>	
AC output power	200 KVA @ 40 °C
Max. AC output current	193 A
Nominal AC voltage	3 / PE, 600 V
AC voltage range	528 V – 660 V
Nominal grid frequency / Grid frequency range	60 Hz / 55 Hz – 65 Hz
THD	< 3 % (at nominal power)
DC current injection	< 0.5 % I <sub>n</sub>
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 / CEC efficiency	98.8 % / 98.5 %
<b>Protection</b>	
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	Optional ( EMU200A )
Surge protection	DC Type II / AC Type II
<b>General data</b>	
Dimensions (W*H*D)	1166 mm * 870 mm * 361 mm ( 45.9" * 34.3" * 14.2" )
Weight	≤ 120 kg ( ≤ 265 lbs )
Isolation method	Transformerless
Degree of protection	IP66 ( NEMA 4X )
Power consumption at night	< 6 W
Operating ambient temperature range	- 30 °C to 60 °C ( - 22 °F to 140 °F )
Allowable relative humidity range	0 % – 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m ( > 3000 m derating ) / 13123 ft ( > 9843 ft derating )
Display	LED, Bluetooth+APP
Communication	RS485, SunSpec, Modbus
DC connection type	MC4 ( Max. 10AWG, Optional 8AWG )
AC connection type	Support OT / DT terminal ( Max. 750Kcmil )
Compliance	UL 1741, UL 62109-1, CSA C22.2 No.107.1-16, IEEE 1547-2018, IEEE 1547.1-2020, UL 1741 SA/SB, California Rule21,and FCC Part 15 Class A Limit
Grid Support	Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control, Q-U control, P-f control

\* Full power MPP range is temperature dependent, check the characteristic curve of the inverter for more information.