

SG350HX-US

Multi-MPPT String Inverter for 1500 Vdc System



HIGH YIELD

- Up to 16 MPPTs with max. efficiency 99%
- 20A per string, compatible with 500Wp+ module
- Data exchange with tracker system, improving yield

LOW COST

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

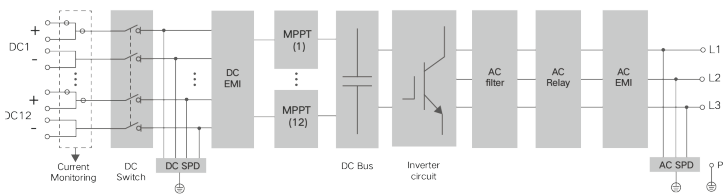
GRID SUPPORT

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

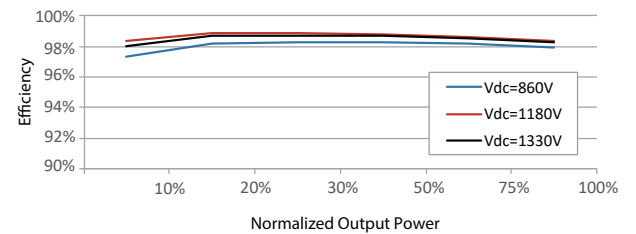
PROVEN SAFETY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG350HX-US
Input (DC)	
Max. PV input voltage	1500 V
Min. PV input voltage / Startup input voltage	500 V / 550 V
Nominal PV input voltage	1180 V
MPP voltage range	500 V – 1500 V
Full Power MPP Voltage Range @ 40 °C	860 V – 1330 V *
No. of independent MPP inputs	12 (optional : 16)
Max. number of input connector per MPPT	2
Max. PV input current	12 * 40 A (Optional: 16 * 30 A)
Max. DC short-circuit current per MPPT	60 A
Output (AC)	
AC output power	352 kVA @ 30°C / 320 kVA @ 40 °C
Max. AC output current	254 A
Nominal AC voltage	3 / PE, 800 V
AC voltage range	704 V – 880 V
Nominal grid frequency / Grid frequency range	60 Hz / 55 Hz – 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 / CEC efficiency	99.02 % / 98.5 %
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	Optional (EMU200A)
Surge protection	DC Type II / AC Type II
General data	
Dimensions (W * H * D)	1165 mm * 870 mm * 361 mm (45.9" * 34.3" * 14.2")
Weight	≤ 123 kg (≤ 272 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 / PLC
DC connection type	MC4 (Max. 10AWG, optional 8AWG)
AC connection type	Support OT / DT terminal (Max. 750 Kcmil)
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, HECO SRD V2.0
Grid Support	Q at night function, LVVRT, HVVRT, 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.