

SG2500U NEW

Turnkey Station for 1500Vdc System



Cost Effective

- No need inverter house on site
- Integrated ventilation duct and auxiliary power supply
- 8 m² area easy for deployment and fast installation
- 10 foot standard shipping container



Secured Yield

- Efficient three-level topology, maximum efficiency up to 99%
- Wide MPP voltage range
- No derating up to 50 °C
- One inverter fails, the other unit maintain safety operation



Easy Maintenance

- Integrated current monitoring function for fast trouble shooting
- Modular design easy for maintenance



Flexible

- Complete grid support:LVRT, HVRT, ZVRT
- NEMA 3R protection degree suitable for outdoor installation



Input (DC)

SG2500U

Max. input voltage	1500V
Start voltage	840V
Min. working voltage	800V
Max. input current	3508A
MPP voltage range	800 - 1300V
No. of MPPTs	1
Max. No. of DC inputs	28
PV array configuration	Negative Grounding

Output (AC)

Nominal AC output power	2500kW
Max. AC output apparent power	2750kVA
Max. inverter output current	2886A
Rated grid voltage	550V
Grid voltage range	495 - 605V
Nominal grid frequency	50 / 60Hz
Grid frequency range	45 - 55Hz / 55 - 65Hz
THD	<3% (at nominal power)
DC current injection	<0.5% of rated inverter output current
Power factor range	0.8 leading - 0.8 lagging

Efficiency

Max. efficiency	99.00%
CEC efficiency	98.50%

Mechanical Data

Dimensions(W*H*D)	117.76"*102.01"*95.98" 2991*2591*2438 mm
Weight	13007.27lb 5.9T

General Data

Operating temperature range	-22 to 140 °F(>122 °F derating) -30 to 60 °C (>50 °C derating)
Auxiliary power supply	5kVA - Standard/15kVA - Optional
Cooling method	Temperature controlled air-forced cooling
Protection Class	NEMA3R
Max. relative humidity	0 - 95%, non-condensing
Max. altitude	13123 ft (>6561 ft derating) 4000 m(>2000 m derating)
Communication port	Standard: RS485, Ethernet; Optional: Optical fiber
Certification	UL1741, IEEE 1547

Protections & Functions

Night SVG Function	Optional
Grid Support Functions	LVRT, HVRT, ZVRT, Anti-Islanding, Active & reactive power regulation, PF control, Soft start/stop
DC input protection	Load switch+fuse
AC output protection	Circuit breaker
DC overvoltage protection	Yes
Grid monitoring	Yes
Ground fault monitoring	Yes
Overheat protection	Yes
Insulation monitoring	Yes