

# SG2500U-MV NEW

Turnkey Station for 1500Vdc System - MV Transformer Integrated



## Cost Effective

- Integrated inverter and pad-mounted transformer
- Lower transportation cost due to 20 foot container
- Max. inverter efficiency up to 99%



## Reliable

- Proven and intelligent cooling system
- NEMA 3R protection degree suitable for outdoor installation
- Compliance with UL 1741, IEEE 1547 and NEC code



## Easy Maintenance

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



## Flexible

- Applied to medium voltage grid from 10 kV to 35 kV
- Suitable for most environments and local standards
- Integrated optional auxiliary power supply up to 15 kVA



**Input (DC)**

**SG2500U-MV**

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

**Output (AC)**

Nominal AC output power	2500 kW
Max. AC output apparent power	2750 kVA
Max. inverter output current	2886 A
THD	<3 % (Nominal power)
AC voltage range	10 - 35kV
Nominal grid frequency	50 Hz/60Hz
Grid frequency range	45 - 55 Hz/55 - 65 Hz
Power factor	0.8 leading - 0.8 lagging
DC current injection	<0.5 % In

**Efficiency**

Inverter max. efficiency	99.00%
Inverter CEC efficiency	98.50%

**Transformer**

Transformer rated power	2500 kVA
Transformer Max. power	2750 kVA
LV/MV Voltage	0.55/10 - 35 KV
Transformer Vector	Dy11
Transformer cooling type	ONAN (Oil Natural, Air Natural)
Oil type	Mineral oil(PCB free), or Degradable oil on request

**General Data**

Dimensions (W*H*D)	238.5"*114.0"*96.0" <b>6058*2896*2438 mm</b>
Weight	34612.6 lb <b>15.7 T</b>
Operating ambient temperature range	-22 to 140 °F (>122 °F derating) <b>-30 to 60 °C (&gt;50 °C derating)</b>
External auxiliary supply voltage	5 kVA - Standard/15kVA - Optional
Cooling method	Temperature controlled air-cooling
Ingress protection rating	NEMA3R
Allowable relative humidity range	0 - 95%, no condensing
Max. operating altitude	13123ft (>6561ft derating) <b>4000m(&gt;2000m derating)</b>
Display	Touch screen LCD
Communication	Standard: RS485, Ethernet; Optional: Optical fiber
Certification	UL1741, IEEE 1547

**Protection**

Input side disconnection device	Load switch+fuse
Output side disconnection device	MV load switch +fuse
DC overvoltage protection	Yes
AC overvoltage protection	Yes
Grid monitoring	Yes
Ground fault monitoring	Yes
Over temperature protection	Yes
Insulation monitoring	Yes