

# SG2500HV-MV/SG3000HV-MV **NEW**

Turnkey Station for 1500 Vdc System - MV Pad-mounted Transformer or Separate Transformer + RMU



### Cost Effective

- Integrated inverter, transformer and switchgear
- Lower transportation cost due to 20-foot container
- Efficient three-level topology, inverter efficiency up to 99 %



### Reliable

- Proven and intelligent cooling system
- IP54 protection degree suitable for harsh environment condition



### 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 environment conditions and local standards
- Integrated optional auxiliary power supply up to 15 kVA



Input (DC)	SG2500HV-MV	SG3000HV-MV
Max. input voltage	1500 V	
Start voltage	840 V	940 V
Min. working voltage	800 V	900 V
Max. input current	3508 A	
MPP voltage range	800 - 1300 V	900 - 1300 V
No. of MPPTs	1 or 2	
No. of DC inputs	20 - 24	
<b>Output (AC)</b>		
Nominal AC output power	2500 kW	3000 kW
Max. AC output apparent power	2750 kVA	3000 kVA
Max. inverter output current	2886 A	
THD	< 3 % (at nominal power)	
AC voltage range	10 - 35 kV	
Nominal grid frequency	50 Hz / 60 Hz	
Grid frequency range	45 - 55 Hz / 55 - 65 Hz	
Power factor range	0.8 leading - 0.8 lagging	
Isolated transformer	Yes	
DC current injection	< 0.5 % I <sub>n</sub>	
<b>Efficiency</b>		
Inverter max. efficiency	99.00 %	
Inverter Euro. efficiency	98.70 %	
<b>Transformer</b>		
Transformer rated power	2500 kVA	3000 kVA
Transformer max. power	2750 kVA	3000 kVA
Input/Output voltage	0.55 kV / 10 - 35 kV	0.6 kV / 10 - 35 kV
Transformer vector	Dy11	
Oil type	Mineral oil (PCB free), or degradable oil on request	
<b>General Data</b>		
Dimensions (W*H*D)	6058*2896*2438 mm 238.5"*114.0"*96.0"	
Weight	15.7 T 34612.6 lb	
Operating ambient temperature range	-35 to 60 °C (> 50 °C derating) -31 to 140 °F(> 122 °Fderating)	
External auxiliary supply voltage	230 Vac, 2 kVA / Optional: 400 Vac, up to 15 kVA	
Cooling method	Temperature controlled air-cooling	
Ingress protection rating	IP54 NEMA3R	
Allowable relative humidity range	0 - 95 %, no condensing	
Max. operating altitude	2000 m (standard) / > 2000 m (optional) 6561 ft (standard) / > 6561 ft (optional)	
Display	Touch screen LCD	
Communication	Standard: RS485, Ethernet; Optional: Optical fiber	
<b>Protections &amp; Functions</b>		
Anti-PID function	Optional	
Grid support functions	LVRT, HVRT, ZVRT, anti-islanding, active & reactive power regulation, PF control, soft start/stop	
DC input protection	Circuit breaker	
Inverter output protection	Circuit breaker	
AC MV output protection	Load switch + fuse or circuit breaker	
DC overvoltage protection	Type II	
AC overvoltage protection	Type II	
Grid monitoring	Yes	
Ground fault monitoring	Yes	
Overheat protection	Yes	
Insulation monitoring	Yes	