

SG2000/SG2500

Turnkey Station for 1000 Vdc System



High Yield

- Efficient three-level topology, max. system efficiency up to 99 %
- 1 or 4 MPPT, wide MPP voltage range
- Full power operation without derating at 50 °C
- One inverter unit fails, the other units continue operation



Easy O&M

- Integrated zone current monitoring function for fast trouble shooting
- Module design and front service, easy for maintenance
- DC circuit breaker design for convenient maintenance



Saved Investment

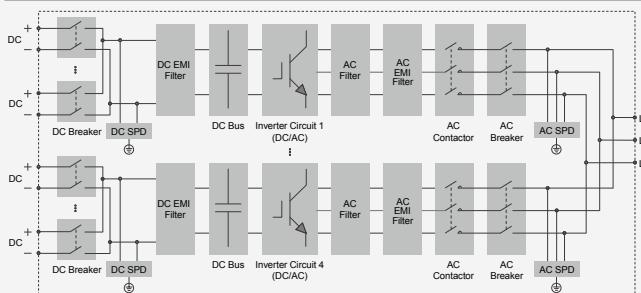
- 10-foot container design, no need to build extra inverter house
- Integrated LV auxiliary power supply



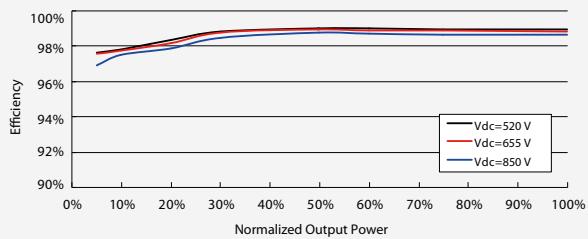
Grid Support

- Compliance with standards: CE, IEC 62109, IEC 61727, IEC 62116, G59/3
- Low/High voltage ride through (L/HVRT)
- Active & reactive power control and power ramp rate control

Circuit Diagram



Efficiency Curve



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Input (DC)	SG2000	SG2500
Max. PV input voltage	1000 V	
Min. PV input voltage / Startup input voltage	460 V / 500 V	520 V / 540 V
MPP voltage range for nominal power	460 – 850 V	520 – 850 V
No. of independent MPP inputs	1 or 4	
No. of DC inputs	24 – 32	
Max. PV input current	4880 A	5424 A
Max. DC short-circuit current	5840 A	6780 A
Output (AC)		
AC output power	2200 kVA @ 45 °C / 2000 kVA @ 50 °C	2772 kVA @ 45 °C / 2520 kVA @ 50 °C
Max. AC output current	4032 A	4444 A
Nominal AC voltage	315 V	360 V
AC voltage range	252 – 362 V	288 – 414 V
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 55 – 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 / Euro. efficiency	99.0 % / 98.7 %	
Protection		
DC input protection	Circuit breaker	
AC output protection	Circuit breaker	
Oversupply protection	DC Type II / AC Type II	
Grid monitoring / Ground fault monitoring	Yes / Yes	
Insulation monitoring	Yes	
Overheat protection	Yes	
Anti-PID function	Optional	
General Data		
Dimensions (W*H*D)	2991*2591*2438 mm	
Weight	6 T	
Isolation method	Transformerless	
Degree of protection	IP54	
Auxiliary power supply	220 Vac, 2 kVA / Optional: 415 Vac, up to 40 kVA	
Operating ambient temperature range	-35 to 60 °C (> 50 °C derating)	
Allowable relative humidity range (non-condensing)	0 – 95 %	
Cooling method	Temperature controlled forced air cooling	
Max. operating altitude	5000 m (> 3000 m derating)	
Display	Touch screen	
Communication	Standard: RS485, Ethernet; Optional: optical fiber	
Compliance	IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, CE, G59/3, CEA	
Grid Support	VRT, HVRT, active & reactive power control and power ramp rate control	
Type designation	SG2000-10	SG2500-10

