

SG2000/SG2500

Turnkey Station



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

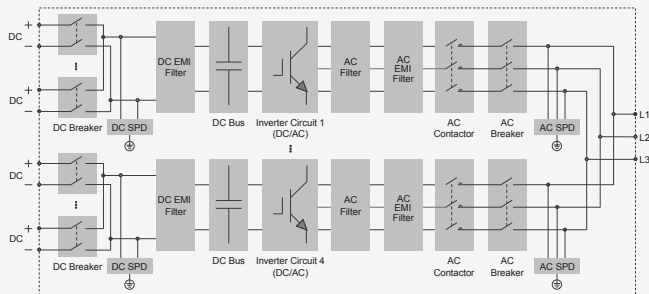
- 10-foot container design, no need to build extra inverter house
- Integrated LV auxiliary power supply



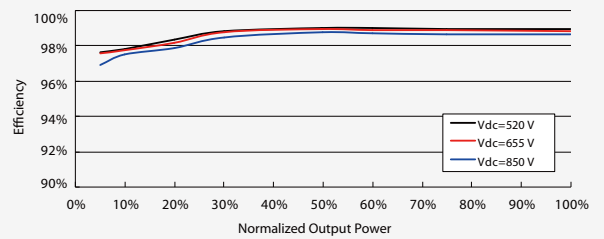
Grid Support

- 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



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	16 – 32	
Max. PV input current	4880 A	5424 A
Max. DC short-circuit current	5840 A	6780 A

Output (AC)

Nominal AC power (at 50 °C)	2000 kW	2520 kW
Max. AC output power at PF=1 (at 45 °C)	2200 kW	2772 kW
Max. AC apparent power (at 45 °C)	2200 kVA	2772 kVA
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 % I _n	
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 %
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Protection

DC input protection	Circuit breaker
AC output protection	Circuit breaker
Overvoltage 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: 380 Vac, up to 15 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	CEA, IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, CE, G59/3
Grid Support	LVRT, HVRT, active & reactive power control and power ramp rate control
Type designation	SG2000-10 SG2500-10

