

# SG2500HV/SG3000HV

Turnkey Station for 1500 Vdc System



## High Yield

- Efficient three-level topology, max. system efficiency up to 99 %
- 1 or 2 MPPT, wide MPP voltage range
- Full power operation without derating at 50 °C
- One inverter unit fails, the other unit continues 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

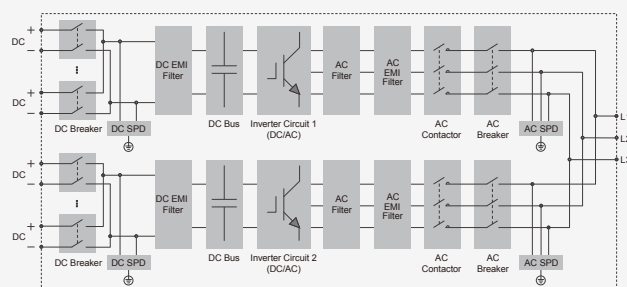
- DC 1500 V system, low system initial investment
- 10-foot container design, no need to build extra inverter house
- Integrated LV auxiliary power supply



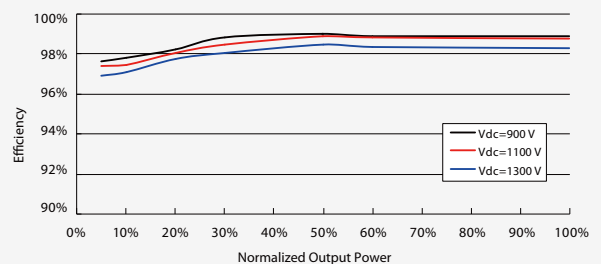
## Grid Support

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

### Circuit Diagram



### Efficiency Curve



Input (DC)	SG2500HV	SG3000HV
Max. PV input voltage	1500V	
Min. PV input voltage / Startup input voltage	800 V / 840 V	900 V / 940 V
MPP voltage range for nominal power	800 – 1300 V	900 – 1300 V
No. of independent MPP inputs	1 or 2	
No. of DC inputs	16 – 24	
Max. PV input current	3508 A	
Max. DC short-circuit current	4210 A	
<b>Output (AC)</b>		
Nominal AC power	2500 kW (at 50 °C)	3000 kW (at 50 °C)
Max. AC output power at PF=1	2750 kW (at 45 °C)	3000 kW (at 50 °C)
Max. AC apparent power	2750 kVA (at 45 °C)	3000 kVA (at 50 °C)
Max. AC output current	2886 A	
Nominal AC voltage	550 V	600 V
AC voltage range	440 – 632 V	480 – 690 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	
<b>Efficiency</b>		
Max. efficiency / Euro. efficiency	99.0 % / 98.7 %	
<b>Protection</b>		
DC reverse connection protection	Yes	
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	
<b>General Data</b>		
Dimensions (W*H*D)	2991*2591*2438 mm	
Weight	5.9 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	4500 m (> 3500 m derating)	4000 m (> 2000 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	SG2500HV-10	SG3000HV-10

