

## SG3125HV Preliminary

Turnkey Station for 1500 Vdc System



### High Yield

- Advanced three-level technology, max.inverter efficiency 99%
- Effective cooling, full power operation at 50 °C
- Max. DC/AC ratio up to 1.5



### Easy O&M

- Integrated current and voltage monitoring function for online analysis and fast trouble shooting
- Modular design, easy for maintenance
- Convenient external LCD



### Saved Investment

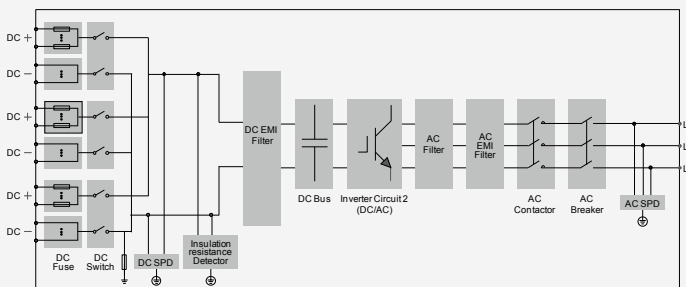
- Low transportation and installation cost due to 10-foot container design
- DC 1500 V system, low system cost
- Integrated LV auxiliary power supply
- Night Static Var Generator (SVG) function



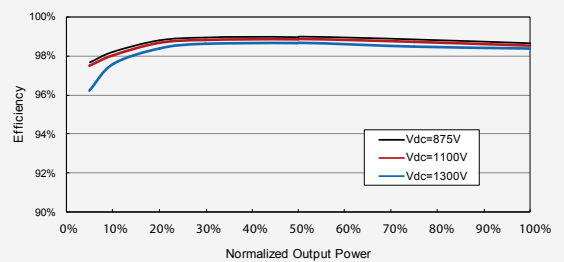
### Grid Support

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

### Circuit Diagram



### Inverter CEC Efficiency Curve



**Input (DC)****SG3125HV**

Max. PV input voltage	1500V
Min. PV input voltage / Startup input voltage	875 V / 915 V
MPP voltage range for nominal power	875 – 1300 V
No. of independent MPP inputs	1
No. of DC inputs	21 (optional: 24 negative grounding or floating; 28 negative grounding)
Max. PV input current	4178 A

**Output (AC)**

AC output power	3593 kVA@ 25°C / 3437 kVA@ 45°C / 3125 kVA@ 50°C
Max. AC output current	3458 A
Nominal AC voltage	600 V
AC voltage range	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 % I <sub>n</sub>
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 and Function**

DC input protection	Load break switch + fuse
AC output protection	Circuit breaker
Overvoltage protection	DC Type I + II / AC Type II
Grid monitoring / Ground fault monitoring	Yes / Yes
Insulation monitoring	Yes
Overheat protection	Yes
Night SVG function	Yes
Anti-PID function	Optional

**General Data**

Dimensions (W*H*D)	2991*2591*2438 mm
Weight	6.5 T
Isolation method	Transformerless
Degree of protection	IP54
Auxiliary power supply	415 V, 15 kVA (Optional: max. 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	4000 m (> 3000 m derating)
Display	Touch screen
Communication	Standard: RS485, Ethernet; Optional: optical fiber
Compliance	CE, IEC 62109, IEC 62116, IEC 61727
Grid support	Night SVG function, L/HVRT, active & reactive power control and power ramp rate control
Type designation	SG3125HV-10

