

NEW

# SG 1000HV



## Grid-friendly

- Full grid support, including LVRT, OVRT, FRT, and power curtailment
- Overload capability, maintaining real power output while satisfying power factor requirement
- Adjustable active power (0-110%)
- Auto adjust reactive power according to the grid voltage
- Auto adjust active power according to the grid frequency
- Reactive power control with power factor adjustment from 0.8 overexcited to 0.8 underexcited
- Nighttime reactive power compensation capability
- Intelligent control, compliance with multiple regional utility standards



## Efficient

- Max. Efficiency at 98.7%
- Efficient MPPT control design for higher yield
- Efficient control algorithm, low consumption on switch device
- Temperature controlled air-cooling, energy saving



## Adaptable

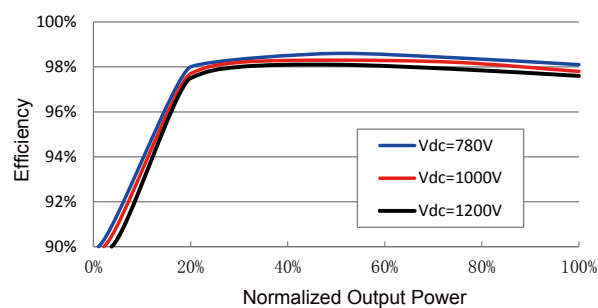
- -30°C~+55°C continuously operating at rated power
- Continuously and stably working in high altitude environment



## Qualified

- TÜV, CGC, compliance with BDEW

## Efficiency Curve



### Input Side Data (DC)

Max. PV input voltage	1500V
Max. input current	1435A
MPP voltage range	780~1200V
No. of DC inputs	8
PV array configuration	Floating, Negative or Positive Ground (optional)

### Output Side Data (AC)

Nominal AC output power	1000kW
Max. AC output apparent power	1100kVA
Max. AC output current	1176A
THD	< 3% (Nominal power)
Nominal AC voltage	540V
AC voltage range	432~621Vac
Nominal grid frequency	50Hz/60Hz
Grid frequency range	47~52Hz/57~63Hz
Power factor	0.8 overexcited ~0.8 underexcited
Isolated transformer	No
DC current injection	<0.5 % I <sub>n</sub>

### Efficiency

Max. efficiency	98.70%
European efficiency	98.50%

### Protection

Input side disconnection device	DC load switch; Breaker (Optional)
Output side disconnection device	Breaker
DC overvoltage protection	Yes
AC overvoltage protection	Yes
Grid monitoring	Yes
Ground fault monitoring	Yes
Over temperature protection	Yes
Insulation monitoring	Yes

### General Data

Dimensions (W*H*D)	1600*2065*900mm
Weight	1100kg
Operating ambient temperature range	-30~+60°C (>55°C derating)
Night power consumption	<20W
External auxiliary supply voltage	380V/3A
Cooling method	Temperature controlled air-cooling
Ingress protection rating	IP21
Allowable relative humidity range	0~95%, no condensing
Max. operating altitude	6000m (>3000m derating)
Fresh air consumption	5000m <sup>3</sup> /h
Display	Colored touch screen
Communication	RS485/Modbus, Ethernet

### Circuit Diagram

