

# SG 1000MX



## 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%)
- Adjust automatically adjust reactive power according to the grid voltage
- Adjust automatically adjust active power according to the grid frequency
- Reactive power control with power factor adjustment from 0.8 leading / 0.8 lagging
- Nighttime reactive power compensation capability
- Intelligent control, compliance with multiple regional utility standards



## Efficient

- Max. Efficiency at 98.8%
- Efficient MPPT control design for higher yield
- Efficient control algorithm, low consumption on switch device
- Temperature controlled air-cooling, energy saving



## Qualified

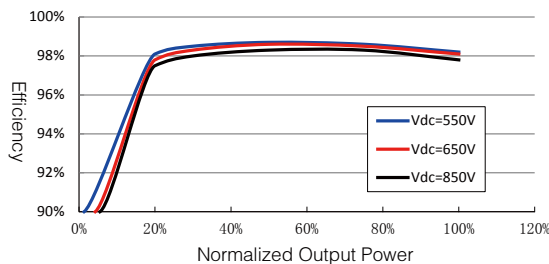
- TÜV, cCSAus, compliance with BDEW



## Adaptable

- -30°C ~ +55°C continuously operating at rated power
- NEMA 3R(IP54) for easy outdoor installation
- Continuously and stably working in high altitude environment
- Auxiliary heater (Optional)

## Efficiency Curve



### Input (DC)

Max. PV input voltage	1000V
Max. PV input current	2000A
MPP voltage range	550~850V
No. of DC inputs	1, 8-14
PV array configuration	Negative ground (standard), floating or positive ground (optional)

### Output (AC)

Nominal AC output power	1000kW
Max. AC output apparent power	1100kVA
Max. AC output current	1650A
THD	<3% (Nominal power)
Nominal AC voltage	385V
AC voltage range	338~424V
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	98.80%
European efficiency	98.40%
CEC 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	Optional
Over temperature protection	Yes
Insulation monitoring	Optional

### General Data

Dimensions (W*H*D)	2598*2164*1000mm
Weight	2050kg
Operating ambient temperature range	-30~+60°C (>55°C derating)
Night power consumption	<20W
External auxiliary supply voltage	400/480V (3/N/PE)
Cooling method	Temperature controlled air-cooling
Ingress protection rating	NEMA 3R (IP54)
Allowable relative humidity range	0~95%, no condensing
Max. operating altitude	4000m (>2000m derating)
Fresh air consumption	4425m <sup>3</sup> /h
Display	LCD
Communication	RS485/Modbus, Ethernet

### Circuit Diagram

