

# SG 500MX



### Grid-friendly

- LVRT
- Overload capacity enhanced 10%, max. output power up to 550kW
- Active power continuously adjustable (0~100%)
- Reactive power control with power factor adjustment from 0.9 overexcited to 0.9 underexcited
- Intelligent control, meet all requirements of the grid



### Efficient

- Max. efficiency at 98.7%
- Efficient MPPT control design, more power yields
- Redundant power solution of dual power improving system reliability
- Efficient PWM algorithm, low consumption on power 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
- Auxiliary heater (opt.)



### Qualified

- TÜV, CGC certified, compliance with BDEW

### Input (DC)

Max. PV input power	560kW
Max. PV input voltage	1000V
Start voltage	500V
Min. operation voltage	460V
Max. PV input current	1220A
MPP voltage range	460~850V
No. of DC inputs	8/16

### Protection

Input side disconnection device	DC load switch
Output side disconnection device	AC load switch
DC overvoltage protection	Yes
AC overvoltage protection	Yes
Grid monitoring	Yes
Ground fault monitoring	Yes
Over temperature protection	Yes
Insulation monitoring	Yes

### Output (AC)

Nominal AC output power	500kW
Max. AC output apparent power	550kVA
Max. AC output current	1008A
THD	<3% (nominal power)
Nominal AC voltage	315V
AC voltage range	252~362V
Nominal grid frequency	50/60Hz
Grid frequency range	47~52/57~62Hz
Power factor	>0.99@default value at nominal power, adj. 0.9 leading ~ 0.9 lagging
Isolated transformer	No
DC current injection	<0.5% In

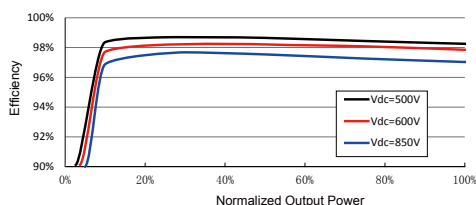
### General Data

Dimensions (W*H*D)	1606*2034*860mm
Weight	1250kg
Operating ambient temperature range	-30~+55°C
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	4500 m³/h
Display	Colored touch screen
Communication	RS485/Modbus, Ethernet (opt.)

### Efficiency

Max. efficiency	98.70%
European efficiency	98.50%

### Efficiency Curve



### Circuit Diagram

