



MEGAStation™ PV 1MW Solution

SPS-1000

Grid-friendly

- LVRT (Low-voltage Ride-through)
- Active power continuously adjustable (0~100%)
- Reactive power control with power factor from 0.9 lagging to 0.9 leading
- Give reactive power compensation to the grid at night according to directive
- SCADA monitoring system integrated, smart grid interface fully compliant
- Intelligent control, meet all requirements of the grid

Efficient

- Max. Efficiency at 98.7%
- Efficient MPPT control design, more power yield
- Redundant power solution of dual power improving system reliability
- Efficient PWM algorithm, low consumption on switch
- 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 (Optional)
- IP54 protection

Qualified

- Turn-key solution, standard container enclose, easy for transportation and installation
- Integrated design for ventilation, anti-corrosion, anti-low temperature and other application requirement.
- CGC certification, compliance with BDEW

Input (DC)	
Max. DC power (@ cos φ =1)	1120kW
Max. input voltage	1000V
Start voltage	420V
Min. working voltage	400V
Max. input current	2490A
MPPT voltage range	450~820V
Number of DC inputs	32
Output (AC)	
Rated power	1000kW
Max. output AC power	1100kVA(25°C)
Max. output current	2352A/2016A
Max. THD	<3%(at nominal power)
Rated grid voltage	270V/315V
Grid voltage range	230~297V / 268~346V
Rated grid frequency	50/60Hz
Grid frequency range	47~52Hz/57~62Hz (adjustable)
Power factor at rated power	>0.99
Isolation transformer	No
DC current injection	<0.5% of rated inverter output current
Adjustable displacement factor	0.9 (lagging) ~0.9 (leading)
Efficiency	
Max. efficiency	98.7%
European efficiency	98.5%
Protection	
Input side disconnection device	Breaker
Output side disconnection device	Breaker
DC overvoltage protection	Yes
AC overvoltage protection	Yes
Grid monitoring	Yes
Ground fault monitoring	Yes
Overheat protection	Yes
Insulation monitoring	Option
General Data	
Dimensions (W/H/D)	6800x2800x2800mm
Weight	8T
Operating temperature range	-35~+55°C
Self-consumption at night	<200W
External auxiliary supply voltage	230V
Cooling concept	Temperature controlled air-cooling
Degree of protection	IP54
Max. permissible value for relative humidity (non-condensing)	0~95%, non -condensing
Max. altitude	3000m (up to 2000m derating)
Fresh air consumption	15768m ³ /h
Display	Touch screen LCD
Communication port/protocols	Modbus / RS485

Circuit Diagram:

