

1000W wind turbine system (off-grid)

1. Wind turbine



Rated voltage	48V
Rated output power	1000W
Blade material & quantity	Aluminum alloy *3
Rotor blade diameter	2.5m
Start-up wind speed	2.5m/s
Cut-in wind speed	3m/s
Rated wind speed	10m/s
Safety wind speed	35m/s
Controlling	Electromagnetic controll, automatic headwind, dump load
Rated rotating speed	450rpm
Turbine weight	42kg
Generator type	3-phase AC synchronous permanent magnet
Working temperature	-40-+60 °C

2. Wind turbine controller



Model	WWS10-48
Wind Turbine Input	
Rated input power	1kW
Rated input voltage	48Vdc
Input voltage range	0~64Vdc
Rated input current	21A
Brake by hand	Keep press the button for 5s to unload completely, and then recover by hand.
	Switch "ON" the brake switch
Brake by over current	21A (factory default, 0~21A settable) unload completely when reached the set current, and recover automatically after working 10mins.
Brake by overvoltage	Refer to "output overvoltage" control
Brake by over wind speed (optional)	18m/s (0-30m/s settable), unload completely when reached the set wind speed, and recover automatically after working 10mins.
Brake by over rotational Speed (optional)	500r/min (factory default, 0~1000r/min settable) Unload completely when reached the set rotational speed, and recover automatically after working 10mins.
PV Input	
Rated input power	300W
Max. Open circuit voltage	96Vdc
Rated input current	7A
Reversed connection protection	YES
Charge Parameters	
Rated battery voltage	48Vdc

Temperature compensation function (optional)	-3mV/°C/2V
Output Parameters	
Rated output voltage	48Vdc
Output overvoltage point	58Vdc
output overvoltage recovery point	it will recover automatically once it is lower than output overvoltage point.
Max. Output current	21A
General Parameters	
Rectifier mode	Uncontrolled rectifier
Display mode	LCD
Display information	DC output voltage, wind voltage/current/power, battery voltage, PV voltage/current/power.
Monitoring mode (optional)	RS232/RS485/RJ45/GPRS/Bluetooth/Zigbee
Monitoring Contents	DC output voltage, wind voltage/current/power, battery voltage, PV voltage/current/power.
	parameter setting: output overvoltage point, wind overcurrent point and manual brake
Lightning protection	YES
Conversion efficiency	≥95%
Static loss	<1W
Ambient temperature	-20°C~+40°C
Humidity	0~90%, No condensing
Noise	≤65dB
Cooling mode	Natural cooling
Installation mode	Wall-mounted
Cover protection class	IP20
Product dimension (W*H*D)	420×440×175 mm
Product net weight	10kG

3. Win turbine pole (optional)

Height	Thickness	Diameter	Remarks
4m	3.75mm	90-140mm	Hot dip galvanized Q235 steel; with basement parts. For roof installation.
6m	4.0mm	90-156mm	Hot dip galvanized Q235 steel; with basement parts.
7m	4.0mm	90-167mm	Hot dip galvanized Q235 steel; with basement parts.
8m	4.0mm	90-180mm	Hot dip galvanized Q235 steel; with basement parts.