

High Efficiency Micro Wind Turbine:

YWS-500 Wind Luce

Easy Set-up

The YWS-500 Wind turbine can be assembled in mere minutes and can be easily set up even by a novice.

High Quality Manufacturing

Through an OEM agreement, the YWS-500 is manufactured by Yuyang Telecom Co., Ltd, a Korean KOSDAQ Petrochemical company with both ISO 9001 and ISO 14000 certification.

Simple and durable low-maintenance design

As our turbines were originally designed with an application in developing countries in mind, our design is simplistic and durable.

Extremely quiet operation

The YWS-500 operates extremely quietly, and is barely audible at only 19dB (3-4 m/s).



- Start-Up Speed of 1 m/s (Industry's lowest unassisted Start-Up Speed)
- Efficient energy production even in areas with slow or highly variable wind speeds
- No reduction in output efficiency at sustained high wind speeds due to our innovative heat dissipation technology
- The simplicity of our structural design makes the Wind Luce ideal for low cost mass production
- The YWS-500 has been designed with the combined knowledge gained from nearly 1300 installed A-Wing International first generation wind turbines (300W).
- Due to its compact size and light weight, the YWS-500 can be installed virtually anywhere.

Average Annual Wind Speed in m/s (measured at hub height)	3.5	4	5	6	7	7.5
Estimated Operating time % per yr	87%	90%	93%	95%	96%	97%
Average yearly Output in kWh	189	310	644	1,035	1,389	1,531

Predictions based on Controller Output/ Battery Charging Wattage. Wind Speed measured at hub height.

USA DOE Wind Class	1	2	3	4	5	6
Average wind speed at 10m	~4.0 m/s	~4.8 m/s	~5.4 m/s	~5.8 m/s	~6.2 m/s	~6.7 m/s
15m Tower (kWh per yr.)	411	723	979	1,145	1,299	1,468
25m Tower (kWh per yr.)	571	944	1,217	1,378	1,517	1,655

Predictions based on Controller Output curve. Department of Energy (DOE)

Predictions based on: Inland site, Weibull k=2, Wind Sheer=0.200, at sea level. **Actual performance will vary.**

Hybrid Controller Unit

Our turbine is matched with a hybrid controller which can accommodate a photovoltaic system of up to 500W in addition to the YWS-500.

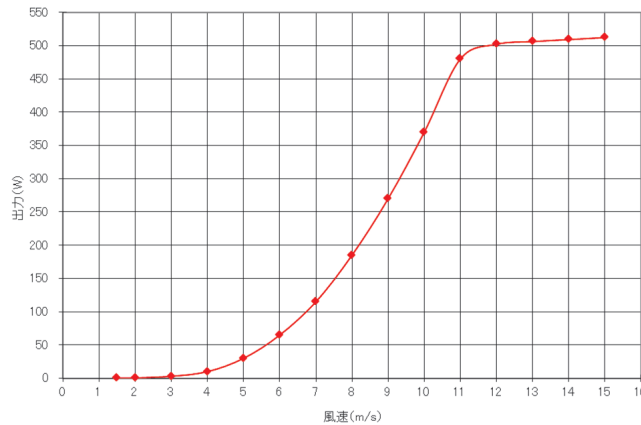
Features:

- Step up DC to DC boost converter
- LCD display can be linked to a proximity sensor
- RS-232C/RS-485 data ports
- Day/Night detection
- Weight: 2 kg

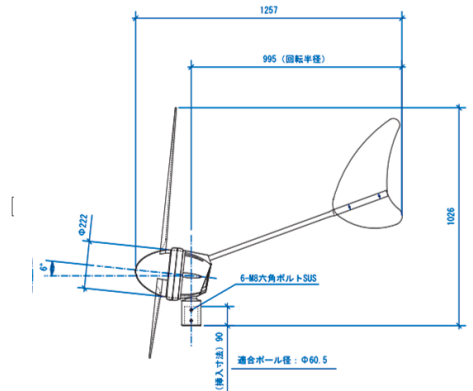


For more information on any of our products please visit us on the Web at: www.awing-i.com.

Power Curve and Control Features



*The above curve shows Turbine Output with controller (turbine only product code is YWL-500)



System Specifications

Start-up Wind Speed	1 m/s
Cut-in Wind Speed	1. 0-1.5m/s
Charging Wind Speed	1.5 –2.5m/s
Rated Power	500W
Rated Wind Speed	12.5 m/s
Survival Wind Speed	60 m/s
Maximum Output	800W at 16 m/s (generator without controller)
Braking System	Electromagnetic Braking System
Weight	17.5 kg
Rotor Diameter	1558mm
Generator	Three Phase permanent magnet inner rotor core-less generator
Output	24V Battery Charging
Controller	Hybrid controller (PV 500W + Wind 500W)
Blades	3 wooden blades. Polyurethane coating
Main Body	Aluminum, Acrylic Resin Paint
Wind Vane	Polycarbonate t=6



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