

# Vertical axis wind turbine generator

# EN-500W-Q4 Technical Datasheet

Part No: EN-500W-Q4

**Description:** The permanent magnetic EN-500W-Q4 wind turbine is combined by savonius and darrieus

turbines, has high-efficient energy output, is the most compact, quiet, rugged and reliable vertical axis small wind turbine. The EN-500W-Q4 wind turbine is widely used in LED lighting system, signal & camera security, telecommunication field for off-grid residence. The EN-500W-Q4 wind turbine is extremely easy to integrate with solar panels to create off-grid power systems that require modest amounts of energy. Available in 24V, 48V for battery



# Design

- 1) The EN-500W-Q4 is the best & reasonnable combination of savonius and darrieus wind turbine generator.
- 2) The EN-500W-Q4 is designed on a unique low inertia axial flux generator which utilizes Neodymium permanent magnetic material.
- The EN-500W-Q4 has zero cogging with its highly efficient, allow the turbine to generate power at very low wind speeds and deliver
  - a high output in working wind speeds.
- 4) The EN-500W-Q4 can survive from winds up to 40m/s by a passive aero-dynamic design that reduces turbine RPM and power output at a certain threshold.
- 5) The robust aluminum alloy chassis and stainless steel components are protected by the aerospace grade coatings and anodizing.



#### **Self Start**

Savonius blades, breeze start, low cogging torque at 1.5m/s

## Quiet

Low noise, < 40dB above background

# Reliable

Precision Aerodynamic design from aircraft-engineering

#### Rugged

Durable, withstands storm force winds up to 40m/s

#### **High output**

Darrieus blades, high efficiency.

# **Features**

#### EN-500W-Q4 wind turbine

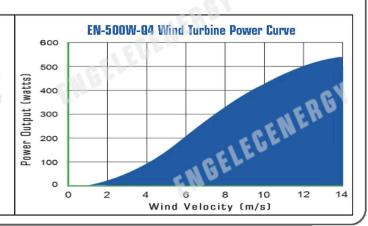
**Turbine volume** : 1.4 meter diameter, 1.0 meter height.

Rotor Type : Vertical savonius & darrieus combination

Blade Material : Aluminum alloy, weather resisted coating

Rated output : 500w at 12m/s

Peak output : 510W
Cut-in speed : 1.5m/s
Weight : 27Kg
Rated voltage : 24V,48V



<sup>\*</sup> Wind turbine performance is subject to many factors. All output data contained in this document is indicative and actual turbine outputs will depend on the prevailing site and installation conditions.

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