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## Vertical Wind Turbine

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### Features

- Wind Turbine startup wind speed of 2.1m/s (4.5mph)
- Smooth and quiet running maintenance free sealed turbine
- Sealed die cast aluminum housing for protection from harsh environments
- Very light and compact
- Easy Installation and Maintenance Free Operation
- Electronic over-speed protection
- Charges batteries from flat

### Applications

- Battery Charging Applications
- Wireless Base Stations
- Street Lamps and Signs
- Boats, RV's and static caravans
- Surveillance Cameras
- Electric Gate Openers, Electric Fences
- Remote Cabins and buildings
- Security Systems

### Description

The TPW Series Wind Turbines from Tycon Power Systems are lightweight at less than 10.5kg and are designed for ease of installation and long service life. The generator is a very low cogging force design for better performance in light winds and is packaged in a fully sealed die cast anodized aluminum enclosure. There are no brushes to wear out or cause electrical noise and the bearings are sealed so the system is maintenance free. The blades are glass reinforced polypropylene for high strength, UV resistance and fatigue resistance. The 200W turbines are available in a 12V or 24V model. The 400W turbines are available in a 24V model.

The permanent magnets used are Neodymium Iron Boron (NdFeB) for higher power output.

The mounting is to the top of a 48 to 51mm (2") OD standard pole. The mount system is a vibration isolation type to minimize vibrations being carried down the mounting pole. The hardware used is stainless steel for corrosion protection.



*TPW-200  
200W Vertical Wind Turbine*



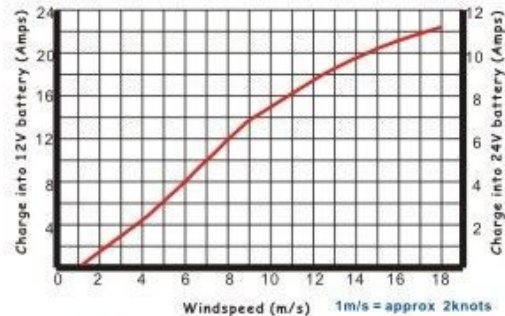
## Specifications

	TPW-200-12	TPW-200-24	TPW-400-24
<b>Startup Wind Speed</b>	2.1m/s (4.5mph)	2.1m/s (4.5mph)	2.1m/s (4.5mph)
<b>Power Rating (12.5m/s)</b>	150W	150W	250W
<b>Max Power Output</b>	200W	200W	400W
<b>Voltage Output</b>	12V	24V	24V
<b>Rotor Diameter</b>	0.92m (3ft)	0.92m (3ft)	1.12m (3.7ft)
<b>Blade Material</b>	Glass reinforced polypropylene	Glass reinforced polypropylene	Glass reinforced polypropylene
<b>Body</b>	Anodized Die Cast Aluminum	Anodized Die Cast Aluminum	Anodized Die Cast Aluminum
<b>Weatherproofing</b>	IP65 and Salt Mist Corrosion Protected	IP65 and Salt Mist Corrosion Protected	IP65 and Salt Mist Corrosion Protected
<b>Over-speed Protection</b>	Electronic	Electronic	Electronic
<b>Survival Wind Speed</b>	35m/s (78mph)	35m/s (78mph)	35m/s (78mph)
<b>Protection</b>	Open Circuit, Short Circuit, Reverse Battery, High Wind	Open Circuit, Short Circuit, Reverse Battery, High Wind	Open Circuit, Short Circuit, Reverse Battery, High Wind
<b>Mounting Pole Required</b>	48mm to 51mm (2") OD	48mm to 51mm (2") OD	48mm to 51mm (2") OD
<b>Weight</b>	8.5kg (19lb)	8.5kg (19lb)	10.5kg (23lb)
<b>Monthly Energy Production</b>	78kWh @5.4m/s (12mph)	78kWh @5.4m/s (12mph)	155kWh @5.4m/s (12mph)

TPW-200 Wind Speed vs Current



TPW-400 Wind Speed vs Current



### Notes:

- All shipments F.O.B. Draper, UT 84020
- TPW Series Wind Turbines carry a 1 year warranty

## System Ordering:

**TPW-200-12** 200W 12V Vertical Wind Turbine with controller

**TPW-200-24** 200W 24V Vertical Wind Turbine with controller

**TPW-400-24** 400W 24V Vertical Wind Turbine with controller



Battery Charge Controller

## For further information contact:

[Tyconpower.com](http://Tyconpower.com)



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