Honeywell Wind Turbine (HWT)

May 21, 2009

Blade Tip Power System (BTPS)

Frequently Asked Questions (FAQ)

*What is the retail price?

The Honeywell Wind Turbine has an MSRP of $4,500

* What application is the Honeywell Wind Turbine best suited for?

The Honeywell Wind Turbine (HWT) is designed for residential, small business and commercial applications, generating energy where we consume it, even in low wind speeds.

* What wind do I have?

80% of our actual wind resources in North America are well below 10mph, 90% of the time. Almost all traditional wind turbines require 8mph winds to cut in and start turning. Unfortunately, to date small wind turbines have failed to impress in terms of energy creation, sound quality and the installation expense (expensive towers which cities resist) to have any chance of generating reasonable output.

When we state "we turned wind turbines inside out"…. **we had to do just that….**

By removing the mechanics and gears from the center core, the **Honeywell Wind Turbine, patented Blade Tip Power System (BTPS)** starts turning at 1mph, begins generating energy at 2mph, and turns 50% more of the time than conventional systems. The HWT generates 1500 kWh in low class 4 winds (our true wind). The HWT offers the lowest cost per kWh installed output in the industry.

True www.personalhomeenergy.com , supplementing 15% of an average household's energy requirements, based on Department of Energy average household usage.

Classes of wind power density for two standard wind measurement height listed in the table below. Wind speed generally increases with height above ground.

Classes of Wind Power Density at 10 m and 50 m[a]

	10 m (33 ft)		50 m (164 ft)	
Wind Power Class	Wind Power Density (W/m^2)	Speed[b] m/s (mph)	Wind Power Density (W/m^2)	Speed[b] m/s (mph)
1	<100	<4.4 (9.8)	<200	<5.6 (12.5)
2	100 - 150	4.4 (9.8)/5.1 (11.5)	200 - 300	5.6 (12.5)/6.4 (14.3)
3	150 - 200	5.1 (11.5)/5.6 (12.5)	300 - 400	6.4 (14.3)/7.0 (15.7)
4	200 - 250	5.6 (12.5)/6.0 (13.4)	400 - 500	7.0 (15.7)/7.5 (16.8)
5	250 - 300	6.0 (13.4)/6.4 (14.3)	500 - 600	7.5 (16.8)/8.0 (17.9)
6	300 - 400	6.4 (14.3)/7.0 (15.7)	600 - 800	8.0 (17.9)/8.8 (19.7)
7	>400	>7.0 (15.7)	>800	>8.8 (19.7)

*Where can I buy the HWT?

The HWT will be available in 2009. The first retailer to carry the HWT will be ACE Hardware this fall. Other premium retailers, cataloguers, wholesalers and contractors will be offering the HWT in early 2010

*I'm a contractor or a dealer and I want to sell the HWT?

National wholesalers will stock inventory in 2010 to supply contractors and dealers. Our new web site launching late summer will detail this information. Please sign up now through the HWT web page http://www.earthtronics.com/honeywell.aspx and we WILL keep you posted.

*I'm a contractor and want to install the HWT?

Please register on this web page and we will be certain to notify you as training commences in your area. http://www.earthtronics.com/honeywell.aspx. **Please see the Download section of our site under Certified Installer Training Program**.

*What's involved to install the HWT?

Certified installers are being trained on a continual basis. By the fall of 2009 an interactive web application will be launched to make finding an installer a click away. Because the HWT operates in low wind speeds, installation is simple too. The HWT can be installed on a pole, plate, rooftop, tripod, or to the side of your building, anywhere with unobstructed access to the wind. A number of UL certified fixtures are readily available.

*How long does installation take, what are the costs?

Installation should take no longer than a day by certified installers and should cost $500 - $1500. The product manual details electrical panel configurations and tips to help you harness, optimize and www.convertthewind.com .The connection to your panel is similar to a gas powered generator.

*How do I learn about and apply for Federal, State and utility rebates?

We recommend that you visit www.dsireusa.org for local rebate and incentive programs. We will launch a web application in the fall of 2009 to help streamline this process.

*What are the state and local regulations governing turbine installations?

The small wind industry is changing rapidly and so are the bylaws and ordinances governing them. Many localities and States are clearing the way for small turbine (<2 KW) installations, but there's still much work to be done. The HWT is only 95 lbs and 6 foot high output turbine, making it far easier to get approvals. Most restrictions are in place to prevent 30- 60 foot towers and >12 foot blades. The HWT is redefining the market again.

*What happens in high winds?

All functions of the HTW are controlled by a computerized Smart Box connected to an anemometer, constantly reading wind speed and direction. The HWT Smart Box interacts with the turbine's motor, optimizing the turbines' positioning, maximizing wind capture (up to 40mph) and turning into the wind, when exceeding 40mph.

The HWT is rigorously tested and certified to all safety stress and electrical standards. HTW will unveil another first in our industry: declaring energy output levels in low wind speeds, not something the competition wants to talk about.

A little known fact about us….we're one of the few turbine manufactures to have our own wind tunnel facility, constantly testing the turbines.

*What happens in ice and snow?

The HWT is designed to handle the elements. Freezing rain will certainly slow the unit down and could keep the unit out of service until it thaws. The HWT was developed with maintenance in mind. With far fewer moving parts than traditional turbines, service and maintenance is greatly reduced. Most parts can be quickly replaced, including the bearings and blades.

*What is the warranty?

The HWT has a limited 5 year manufactures warranty and is designed for a 20 year life. Commercial warranties may vary.

*Can the system handle more than 1 turbine and what about my solar panels?

The HWT controller can handle 2 turbines and is solar compatible.

* What about the noise from turbines that's in the news?

Traditional turbines have reported issues with vibration caused when the wind passes over and behind the blades, referred to as cavitation. The HWT deflects the wind in a completely different manner, alleviating this characteristic.

*Why does the system require a 12V battery?

The HWT requires a minimum of 1 standard auto battery which sits between the Smart box and the panel. The battery, referred to as the "bucket" is a system resource that allows the HWT to always capture the energy being generated by the turbine. The Smart Box inverter converts 12 volt to 110 and uses the battery as a storage and buffer device to regulate the energy being generated to your panel (especially in low winds speeds where the bucket is always being trickle charged). The battery also serves as a standby power resource when the grid is down, for this reason a second battery is often installed to extend the standby power resource of a KW per battery.

* Is the HWT a replacement for a backup generator?

The HWT has standby power capabilities but does not replace a gas powered generator. During power outages the wind is often blowing and the HWT will generate energy in addition to the stored power.

*Does the HWT support Net Metering

The current system is a closed loop system and is not configured to return energy to the grid. An additional box is required. Once utilities standardize Net Metering, HTW will accommodate this connectivity.

*What are the KW ratings and kWh power curves for the HWT?

By June 15, 2009 the company will release its certified kWh power curve and KW classification along with additional specifications. This information will be added to the download section of http://www.earthtronics.com/honeywell.aspx. We encourage you to check back with us for our industry leading Cut-In Speeds, Certified Power Output & Decibel ratings.

EarthTronics is proud to have engaged Fluid Market Strategies, Inc., to oversee and develop the certification and training program. Fluid can be contacted for more information on the course material and to arrange min 20 person group training session right in your area wind@fluidms.com.

Please be sure to also signup at http://www.earthtronics.com/honeywell.aspx

We appreciate your interest in our company

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