

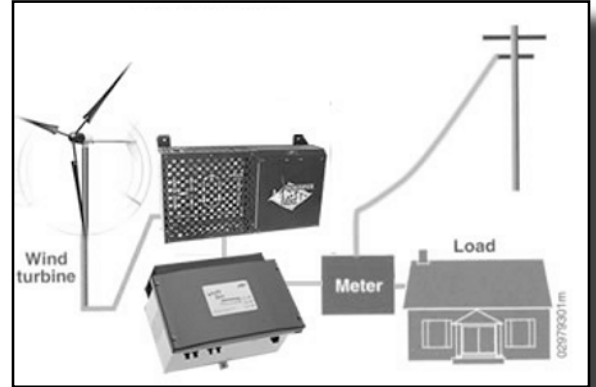
# GRID-TIE WIND POWER - 9

## Whisper Link Grid Connected Wind System

Enjoy the benefits of utility power while reducing your electric bill every time the wind blows. The Whisper Link wind system can reduce or eliminate your monthly electric bill if your location has enough wind. The Whisper wind turbine can be directly connected to the electrical grid through an SMA Windy Boy inverter.

The Whisper Link grid-tie concept is the lowest cost energy producing home system on the market today. Depending on your wind speed, a Whisper Grid Tie system may significantly reduce or even eliminate your monthly electrical bill.

Keep in mind, these systems are not for everyone. If you live in an urban or city environment or if your State does not allow the use of small systems to connect to the grid then it is likely a grid-tied wind system can not work for you. However, according to U.S. census data, there are more than 17 million homes in America that could use a Whisper Link system. Is your home one of them?

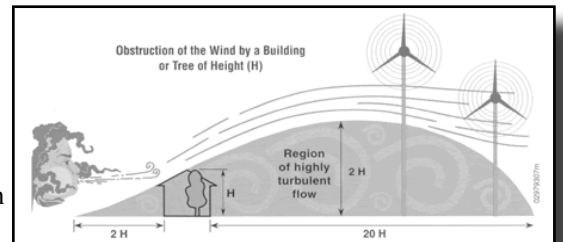


## Siting

Proper siting is very important to the performance and longevity of your wind turbine. A poorly sited wind turbine will bring nothing but poor performance, maintenance issues and frustration. For a wind turbine to operate effectively, it needs to be placed in good clean wind above obstructions which cause turbulence.

Your site should:

- 1) Be free from trees and other obstructions within a 250 foot radius of the site.
- 2) Be able to locate a tower where the top of it would be at least 20 feet above any surrounding object within that 250 foot radius.



## Determining The Wind Speed In Your Area

Now that you know you have a good spot to locate your wind turbine, next we need to determine if you have enough wind. There are a number of ways to determine if you have a wind resource in your area.

You need a minimum average wind speed of 9 MPH (about 4.2 M/S) for your small wind system to be practical.

The National Renewable Energy Labs and a number of private and state organizations have been developing high resolution wind maps which offer resolutions up to 1 sq km. Currently, only certain states have an active map. Keep in mind, any data that is a class two or higher means you have enough wind at your site. Visit State Wind Resource Maps to see your state's wind map.

□ you are. However, if the country side is very hilly then location to location will have a different wind speed.

Looking at the trees can give you a fairly accurate determination of wind speed. If small trees sway, the wind speed is around 20 MPH. If large branches are in motion the wind speed is greater than 25 MPH. If trees are permanently deformed by the wind, there is likely to be a good wind resource in the area. See the Wind Power section of this catalog for more information.

## Incentives

If you have determined that you have a proper location and you have a wind resource of at least 9 mph, you will need to ensure that your state allows the connection of a small wind turbine into the grid and perhaps offers incentives.

More than half the States in the Union offer incentives. These range from no tax on renewables to discounts on the Whisper Link system by up to 70 percent! Click on The Database of State Incentives for Renewable Energy, <http://www.dsireusa.org>, then select your state to see what programs are available. Incentives are not critical but they can significantly reduce cost of your wind system. Most important in this issue is what is known as Net Metering. For a small wind system to be practical, a Net Metering law must be in place.

## Whisper System

The Whisper Link System includes a Whisper 200 1kW wind generator, an intertie inverter and control unit. A tower is not included. See Whisper 100/200 tower kits on page 39. Tower kits do not include pipe, which can be obtained locally. Your utility may have requirements for AC and DC disconnects .

Description	Item Code	Price
Whisper Link Grid Tie Wind System	16.1201	\$5,200