



## Segen is meeting the need for affordable clean energy.

**Segen** is committed to the production of clean and affordable energy through the development of sustainable energy generation projects.

**Segen** is an authorised distributor and installer for the Southwest Windpower Whisper 500 3.2kW turbine which is a very cost effective small wind turbine. The Whisper 500 small wind turbine generates exceptional levels of power for its cost.

**Segen** can supply, install and support the Whisper 500 turbine to power rural domestic properties and many more applications.

**Segen** works in a partnership with site owners, financiers, suppliers and other stakeholders to guide projects through the process until the energy starts to flow and beyond.

**Segen** also sells the Iskra AT5-1 5kW and Westwind 20kW wind turbines, for larger, more power hungry applications.



## 3.2kW Small Wind Turbine

### HIGHLIGHTS

#### Overview

A 3.2kW small wind turbine suitable for powering rural domestic properties and many more applications.

The Southwest Windpower Whisper 500 is a well tried and tested product over many years from the USA and comes with a 5 year warranty.

The Whisper 500 is for serious small wind energy generation

#### Performance

The energy capture of the Whisper 500 turbine is exceptionally good across a wide range of wind speeds, and comes with a very cost effective 13m guyed tower for maximum energy capture.

#### Reliability

The Whisper 500 turbine is intended for a range of conditions, especially remote rural locations. The design life of the machine is 20 years.

#### Cost

The Whisper 500 is very competitively priced and has been designed for ease of installation to minimise costs.



## 3.2kW Whisper 500 Technical Specification

### Efficiency

The cost effective two blade configuration drives the permanent magnet rotor.

At rated rpm, the automatic furling mechanism operates and the turbines turns out of the wind to prevent over powering.

The Whisper 500 is supplied complete with one of the most efficient and modern grid connect inverters on the market today, the Magnetek PVI-3600-WIND, which includes automatic over speed protection.



### Reliability

Southwest Windpower have been developing and selling small wind turbines for many years to operate in the harsh American climate.

The Whisper 500 is a long established model that has recently undergone some further reliability improvements and now comes with a **five year** warranty.

### Characteristics

<b>Generator rating</b>	3.2 kW at 12 m/s
<b>Rotor speed</b>	500 rpm nominal (variable)
<b>Cut-in wind speed</b>	3.4 m/s
<b>Survival wind speed</b>	55 m/s (120 mph)
<b>Rotor diameter</b>	4.5 m
<b>Rotor orientation</b>	Upwind
<b>Number of blades</b>	2
<b>Blade material</b>	Carbon reinforced fibreglass.
<b>Control system</b>	Automatic side furling
<b>Gearbox</b>	None
<b>Brakes</b>	Electro-dynamic
<b>Generator</b>	Permanent magnet alternator
<b>Yaw control</b>	Tail vane
<b>Tower height</b>	13 m
<b>Tower</b>	Guyed.

### Performance

At a particular location, the wind speed will vary about an annual mean value. The expected energy yields for the Whisper 500 at various annual mean wind speeds (AMWS) is shown below.

AMWS m/s	Annual MWh	Daily kWh
4	3.2	8.8
5	5.2	14.2
6	8.0	21.9
7	10.8	29.6

*Note: The annual electricity consumption of a medium size home is in the region of 4 to 6 MWh. This is equivalent to a daily consumption of 11 to 16 kWh.*

COST EFFECTIVE LIFETIME POWER GENERATION



Phone: 0845 094 2445  
Fax: 01252 336934  
E-mail: [info@segen.co.uk](mailto:info@segen.co.uk)  
[www.segen.co.uk](http://www.segen.co.uk)

Wesley Hall,  
Barrack Road  
Aldershot  
Hants, GU11 3NP.