



HELIX WIND® MODEL D15000



OUR PHILOSOPHY

Freedom is at the heart of our values – energy independence and autonomy – a freedom fueled by a resource that never runs out. The wind.

Often the simplest and most elegant solutions are the best. We believe that energy self sufficiency is better than the current antagonistic legacy system in decline. However progressive change requires courage, creative and positive innovation and unerring focus on performance. This is the soul of the Helix system.

WHY HELIX WORKS

Inexpensive, reliable, simple, the hallmarks of the Helix systems make them the best choice for a wide variety of different applications. The turbine design catches wind from all directions creating smooth powerful torque to spin the electric generator. Mounted up to 45 meters high, in winds as low as 2.5 m/s the Helix system creates electricity to power your community or business.

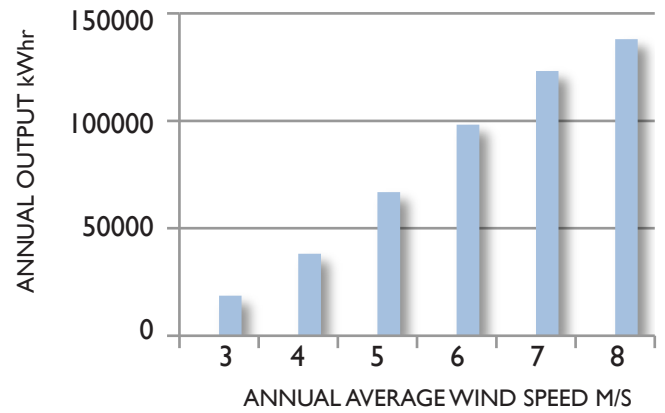
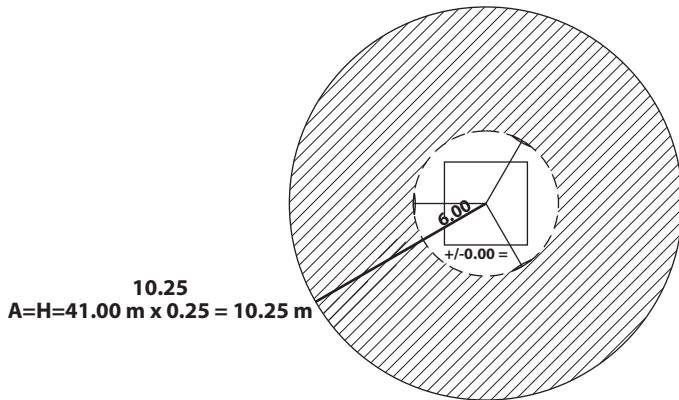
HOW IT WORKS:

As the wind blows the vertical blades catch wind from all directions. The turbine generator is connected directly to your community or business, and as electricity is generated your home or battery pack is powered. If the wind isn't blowing your home is powered by the energy grid as usual. If the wind is blowing strongly then your energy produced can exceed your energy consumed and, depending on your local utility, your meter can spin backwards rolling back your energy bill and even making you money.

IS HELIX RIGHT FOR ME?

The Helix D15000 is designed for community or commercial applications, and works under conditions that were previously prohibitive. If your location fits the conditions below then the Helix D15000 will most likely work for you:

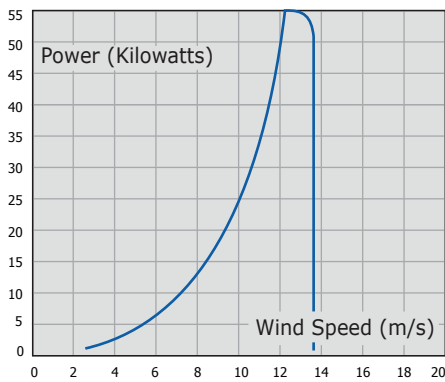
- Local zoning that permits wind turbine installation at 35 meters or higher.
- A site with adequate wind (greater than 2.5 m/s) and an installed height of at least 35 meters.
- An existing interconnection agreement with your local utility (to check the net energy meeting regulations in your state refer to this website: <http://www.awea.org/smallwind/states.html>)
- Turbulent or gusty wind or wind that frequently changes direction.



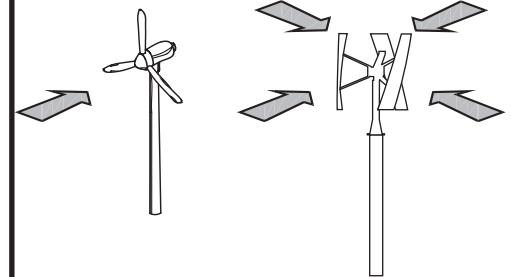
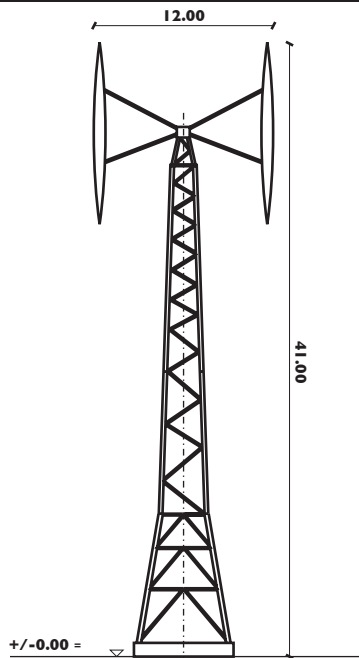
POWER CURVE

SAMPLE INSTALLATION

VAWT ADVANTAGES



VAWT output rates 50 kW at 12 meters per second.



Horizontal Turbine
Must have smooth laminar wind flow from a single direction.

Vertical Turbine
- Functions in wind from any direction.
- Functions in Turbulent or gusty winds.

TECHNICAL SPECIFICATIONS

Swept Area - 150 m²

Rotor Diameter - 12 m (39.37')

Blade Height - 12.5 m (41.01')

Rotor Construction - Epoxy glass resin blades

Type - Vertical Axis Darrieus Rotor

Cut-in Speed - 2.0 m/s, power producing at 2.5 m/s

Brake System - Disc brake and short circuit

Rotor speed control- variable via Microprocessor

Safety System- Self Supplying Generator Control
*patent pending

Warranty - 5 year Limited Warranty. Extended warranty options available upon request.

Generator - Siemens asynchronous generator

Recommended Installation height - 35 m, lattice tower

- Unique patent pending design.
- Epoxy glass resin and galvanized steel construction for any environment.
- Robust construction without wearing parts.
- Low maintainance.
- Works reliably even under extreme conditions.
- Design gives virtually silent operation.
- Safe for our friends the birds and bats.
- Utilizes turbulent omni-directional air instantly, no yaw control required.