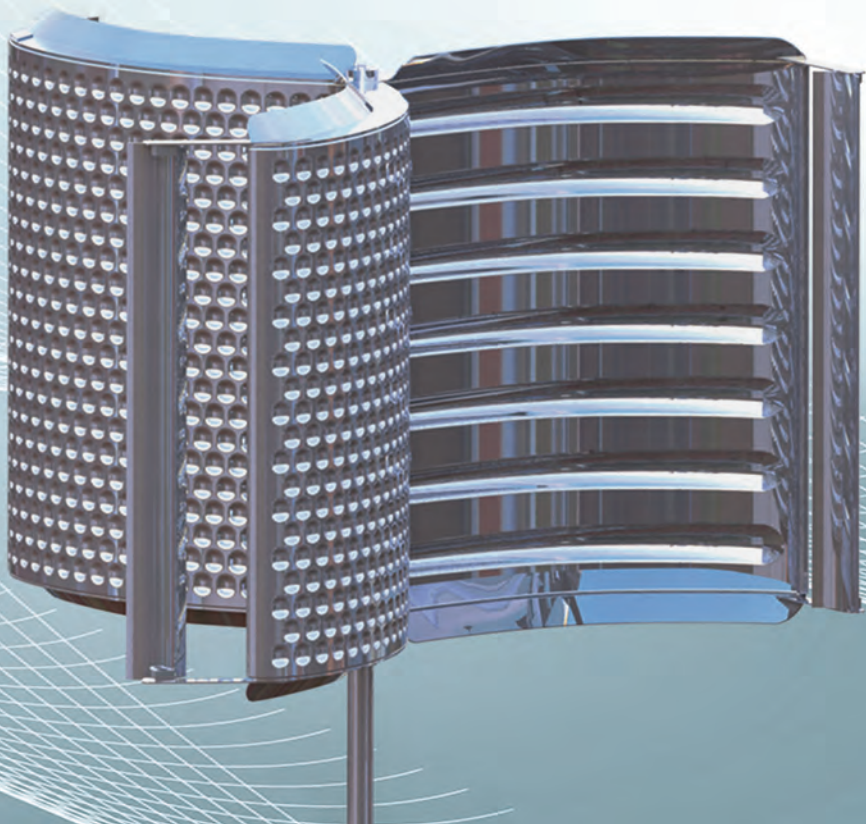


WindCharger

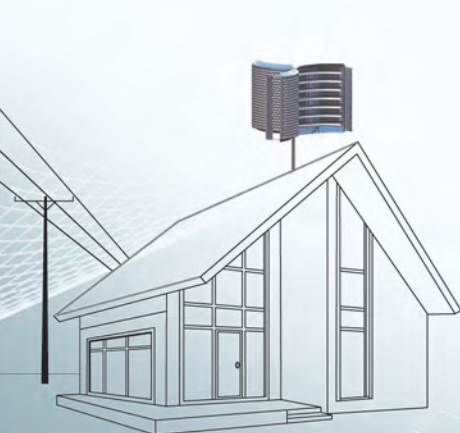


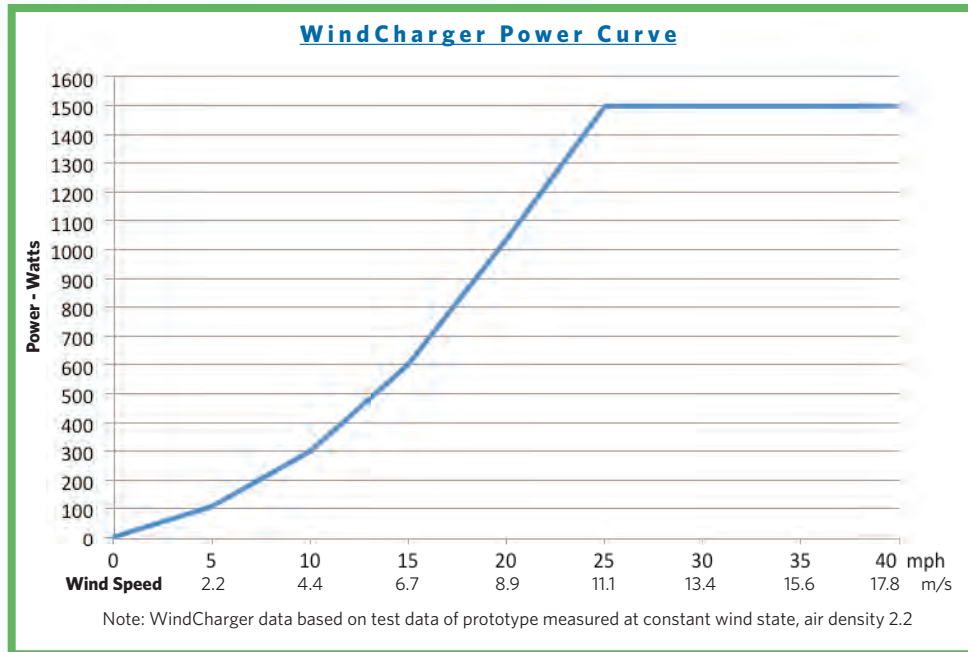
WindCharger

The current world energy situation has set the stage for the industrial revolution of this century. The consumption rate has increased at lightning pace. With this rising demand for power, the world's focus is on pollution-free renewable energy sources.

- Sauer Energy, Inc. is proud and pleased to introduce its small vertical axis wind turbine system, the one-of-a-kind WindCharger. With its innovative and revolutionary design features, it is extremely effective and can be roof-mounted on homes or small buildings
- Finally, an opportunity for families and small businesses to recognize that they have the ability to make a difference with regard to the critical climate change situation.
- Empowering the individual is the main concept of the WindCharger.
- Particular attention to wind capture efficiency was key in the design of the WindCharger. Strong and durable, lightweight composites lend elegance to the sleek curves of the WindCharger.
- The WindCharger's disruptive technology enables end users to generate their own electricity to offset their utility bills.
- Sauer Energy has added multi-patents and patents pending to their intellectual property arsenal.
- In addition to energy cost reduction in windy areas, the WindCharger is a powerful exhibition of one's dedication to the green movement and willingness to take charge.
- Sauer Energy plans to become the most effective small wind producer worldwide.
- Made in America means jobs for Americans.

Our passion is to provide the most innovative energy technology, without a negative impact to our planet. This is our earth and we cherish its resources. We believe our environment is the hope for the future and Sauer Energy's philosophy supports this belief. Our expertise and finest quality products in the renewable energy arena are a testament to this as well. Let us never forget to respect and make the most positive use of nature's gifts to us. It's time we all do our share.





Physical Parameters

Turbine Blade Size	3.6' x 4' (1.10 m x 1.22 m)
Shaft Size	2.5" (6.35 cm) Outside Diameter
3 Blade Radius	5.5' (1.68 m) Swept Area
Height	2' (0.61 m) Clearance from roof — overall height 6' (1.83m)
Kit Weight	Approx. 125 lbs (56.82 kgs)

Performance

Rated Power	1.5 kW
Cut-in Wind Speed	5 mph - 2.2 m/s
Rated Wind Speed	25 mph - 11.1 m/s
Rated Revolutions	140 rpms

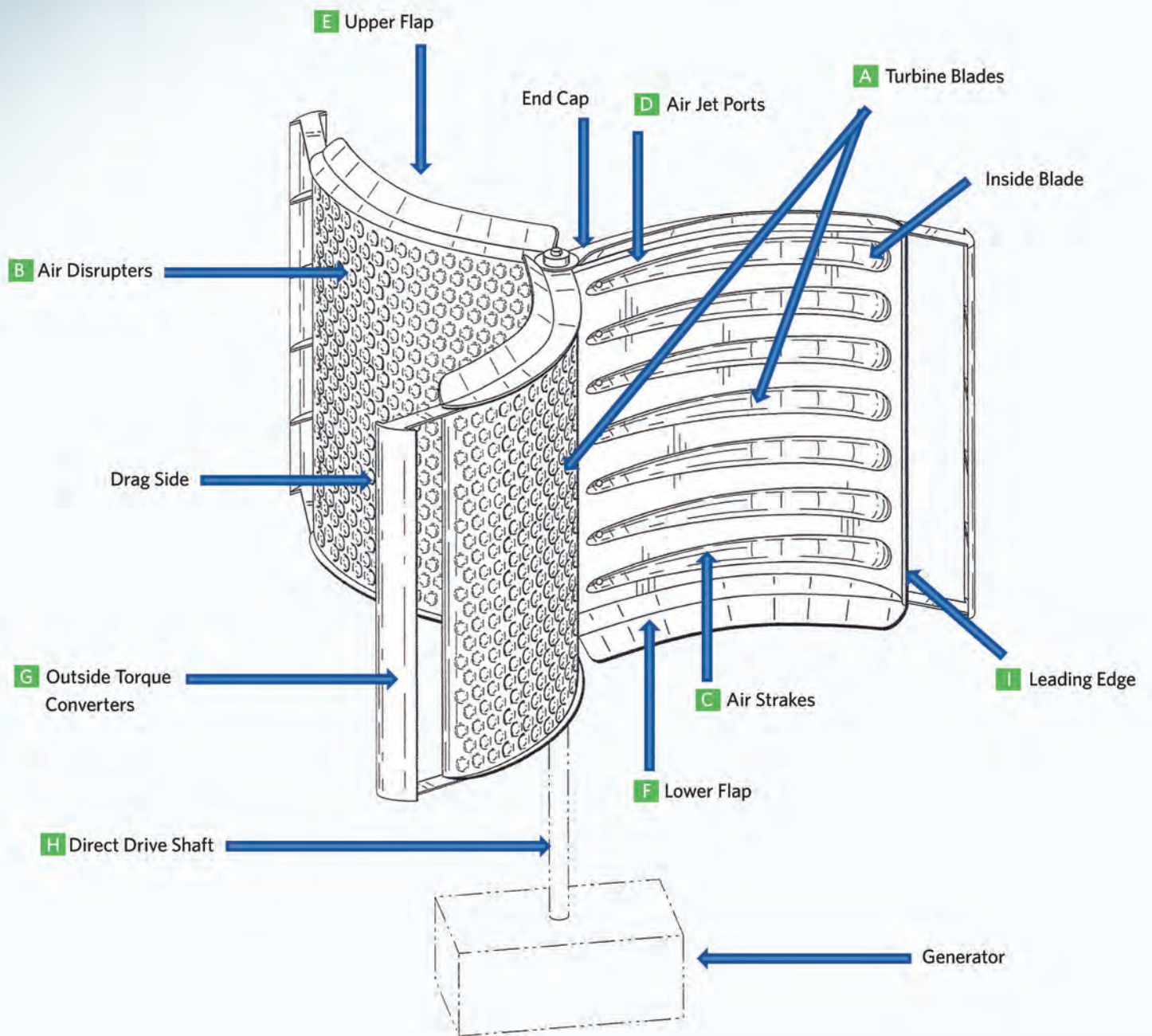
Generator

Proprietary Modular Design	Direct Drive
No Gears, Brushless	No Maintenance, High Efficiency
Start-up Torque — 0.6 Nm	Spectral Efficiency — Between 85-96%
No Cogging	
PMA — Rare earth magnetics, Neodymium (NdFeB)	

Inverter

DC to AC Inverter with grid tie-in

Please note: the specs above illustrate data compiled from testing working prototype units. The final manufacturing figures may vary and will be disclosed prior to sales of final units.



A TURBINE BLADE

It is designed with a concave/convex angle curvature for a precision fix to create a vortex for maximum torque. Blade configuration is used to create higher rpm using a 3-blade model for different wind speeds. Gravitational stresses are exactly even. Based on the Savonius vertical axis wind turbine (VAWT) design, the lift and drag co-efficiencies are usually normalized by the dynamic pressure of the direct air attack.

The leading edge of the blade is designed for the tangent force and to direct the flow along the air strikes, which are ribbed. The center of the turbine blades meets at a precision angle to create a vortex. The blades are aerodynamically efficient to extract maximum performance. Material used to construct the blades is lightweight composite, resin, plastic combo, for light weight and strength, extreme weather and UV protection. Life expectancy is about 20 years. Omni-directional air attacks low level wind.

B AIR DISRUPTERS

The drag side of the turbine blade features indentations designed to break up the even airflow pattern on the surface. It creates a layer, or boundary, of air directly over the surface. As the back of the blade moves through the air, there is less resistance and friction. These indentations are placed in a pattern to create a boundary air flow over the surface to decrease the drag effect, increasing the revolutions per minute (RPMs). The dimple pattern will also benefit the strength of the blade.

C AIR STRAKES

The plurality of the rows is designed to channel and capture the air flow. Front inside of turbine blades has indented channels that run in parallel horizontal lines. From the outer edge they are wider, toward the center shaft where they are thinner. They increase in depth and decrease in width. They are ribbed on both sides to hold the airflow and channel it toward the center shaft, where there are air jet exits. This flow will create a ram jet propulsion, along with a stronger capture. The rib design is for rigidity and prevents flexing.

D AIR JET PORTS

Holes that propel air through one blade onto the next blade are designed to exhaust air flow out of the blade and help push the following blade. Smaller exit port to a larger port will have a vacuum vortex effect on the drag side. These ports are designed to displace as much of the airflow from the center vortex, increasing the direct attack to accept more wind at a higher efficiency. The overall effect is to dissipate the dead zone. Elimination of air from the center shaft will increase efficiencies in the realm of torque and revolutions. Expulsions of air on the convex side will increase the boundary flow.

E/F UPPER & LOWER FLAP

They are designed to capture leading air at 45° angle. Directional flow will be to the center of the turbine blades, so it channels and captures the vortex flow. The drag side of each flap is to deflect air away from the unit, so no stale air is left. Inside flaps will increase the air volume and increase torque drive for maximum capture and utilization of impending air.

G OUTSIDE TORQUE CONVERTERS

Designed for various applications and usage, these handle various applications, such as high wind, bigger generation to low wind. Different blade configurations, including air scoops, air foils that range from 4" to 16" capture outside air directly, or angled to recapture the vortex air flow for maximum torque. They maintain low startup and increase surface area for main force. Harnessing the outside torque will create faster startup rotation along with maintaining higher revolutions. The outside converters will absorb the turbulent flow, and increase the driving pressure oriented to impinging wind as desired for different operating environments and conditions.

H DIRECT DRIVE SHAFT

The shaft incorporates a "plug and play" application of the turbine blades, all in one unit. It directly connects generator rotor to the shaft as one. No outside bearings or gears. Turbine blades are secured within the shaft and closed off at both ends with machined caps. It is designed for one worker to assemble.

I LEADING EDGE

Designed to meet the airflow at an angle to extract and capture air flow, the leading edge features a triangular shape and extends out of the turbine blade. The concave configuration of the scimitar curvature is designed for minimal wind resistance. Sustaining the vortex flow into the center mass, it spans the entire length of the blade. The fixed edge angle will help to accelerate the blade and contribute to an increase in low start up. It will ensure air-flow into the strakes and decrease front stagnation. Impinging air is captured with higher efficiency.

Please Note: All of the above features were designed to work in harmony and complement each other to benefit the efficiencies of the overall performance. Please take note these features are patent protected exclusively, both domestically and internationally.

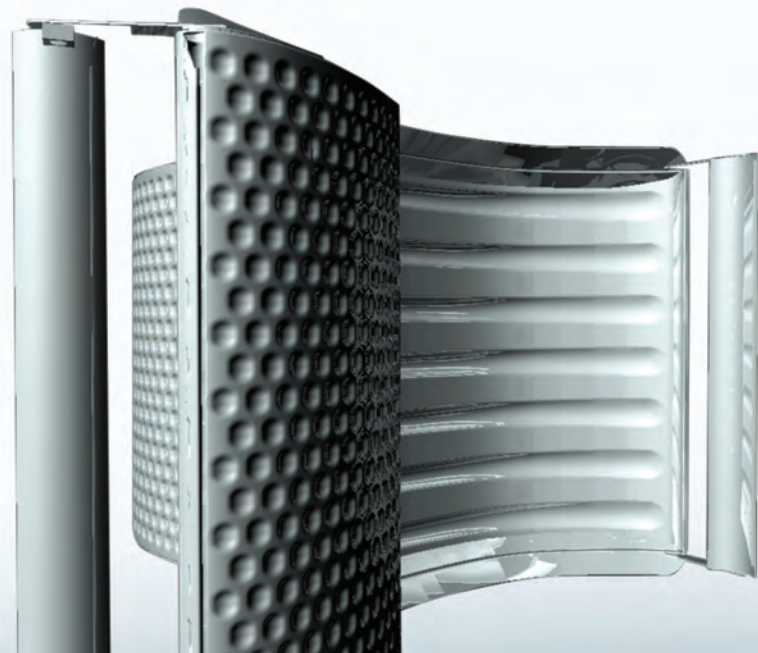
Turbine Specifications


WindCharger System	3 Blades, Generator, Inverter, Mounts
Turbine Type	Savonius Rotor - Vertical Axis Wind Turbine
Turbine Blade Construction	Injected Polymers Composite
Vibration	Next to None
Mounting	Roof or Monopole (stand-alone)
Brake	Unnecessary, Manual
Gear Box	None
Warranty	10 years
Maintenance	Unnecessary, Clear of Obstructions
Designed Lifespan	Approximately 20 years
Generator	2.0 kW Peak, Direct Drive, High Torque Low rpm, Permanent Magnets
Unit Color	Stock Colors or Custom Optional

Special Features

- Low wind startup, can work in high wind
- Multi-patented design is unique for maximum aerodynamic efficiency
- Easy to use, plug and play design, with virtually no vibration
- Materials selected to withstand extreme environments
- Roof mountable or stand-alone use
- Nearly silent operation design for less than 34 decibels with background noise, at 10 feet
- Omni-directional airflow capture, withstands high wind gust attacks
- Safe for birds and animals

Please note: The specs above illustrate data compiled from testing working prototype units. The final manufacturing figures may vary and will be disclosed prior to sales of final units.





Where can I get a WindCharger?

We are excited to report that we are in the beginning stages of production with our WindCharger. Our projected launch is scheduled for the fourth quarter of 2011. Sign up for our email updates, for news on our progress. You will find our press releases informative.

How much is the WindCharger?

We are targeting the WindCharger to retail for approximately \$7,000, not including options or permits, if needed. You can find specific information regarding incentives and/or rebates exclusive to your area at: www.dsireusa.org

What comes in the WindCharger basic kit?

The basic kit includes the turbine, generator, inverter and mounting brackets.

How does WindCharger work?

As the WindCharger spins, the generator produces direct current (DC) electricity. It is wired to an inverter that converts the DC electricity to alternate current (AC) electricity, which is house current. The inverter is wired to the power meter. Everything it creates goes into the grid to offset what you consume.

WindCharger Options?

WindCharger options, such as batteries and an output monitor are to be determined.

What can WindCharger produce?

The WindCharger is rated at 1.5 kW. We do purport it can offset approximately 25% of your energy consumption for an average household. WindCharger will produce energy depending on many variables, like location, wind speed and frequency of wind.

WindCharger installation?

We recommend you always use a licensed professional to install WindCharger on site, and a licensed electrician to connect it, and in most cases, it should take about 4 hours to install. Always comply with local building and safety regulations and permits, wherever applicable.

Maintenance for WindCharger?

WindCharger is virtually maintenance free with no moving parts and no need for greasing or oiling.

WindCharger Distributorships/Dealerships?

Due to the overwhelming interest, there will soon be a section on our website dedicated to distributors/dealers. To stay continuously informed of Sauer Energy's latest news, please sign up for email updates at: www.SauerEnergy.com



Phone/Fax: 888.829.8748 ▪ email: info@SauerEnergy.com ▪ web: www.SauerEnergy.com