

TEXAS SOLAR POWER COMPANY

1703 West Koenig Lane, Austin, Texas 78756
 Phone: (512) 459-9494 Fax: (512) 451-5934
 Toll Free: (866) 459-9494
 Web: txspc.com

Texas Solar Power Company (TXSPC) specializes in the design and installation of renewable energy systems. We provide an alternative, sustainable power source for residential, commercial and government clients. TXSPC offers outstanding service and ensures high quality, dependable products at competitive prices.

Photovoltaic (PV) is clean energy from the fuel source that belongs to all of us - the sun.



We carry everything you need for your renewable energy project. TXSPC is an authorized dealer of SolarWorld, Sharp Solar, and Kyocera modules as well as SMA and Fronius products. As technology in the renewable energy industry is dynamic, we are constantly evaluating new products and manufacturers to offer the best package to the environmentally and energy conscious public.

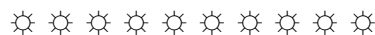


Our services are available throughout the world - wherever there is a need for photovoltaics.

Sales ~ Design ~ Installation

Owners Craig Overmiller, Architect, and Joe Garcia have been in the renewable energy space since 1995 helping home and business owners towards energy independence. The TXSPC team of designers and installers are committed to professional presentation and quality work.

Residential ~ Commercial



Texas Solar Power Company headquarters is a working example of integrating both a wind turbine as well as a hybrid grid-tie solar system.

- The 1st floor is an SMA Sunny Island grid-tie system with back-up batteries.
- The 3rd floor is an Outback stand-alone system.
- We also have two Air 403 wind generators on the roof for additional power.



Owner is
NABCEP Certified

At Texas Solar Power Company, YOU have the POWER.



PROPOSAL

Proposal No. 80215
 Date: 2/25/2008

1703 W. Koenig Ln. Austin, TX 78756
 Phone: 512-459-9494 Fax 512-451-5341
 Website: txspc.com
 Email: info@txspc.com

To: SAMPLE

Project: Wind Turbine
 1,000 DC Watts

Item No.	Quantity	Description	Unit Price	Amount
1	1	Whisper 200 w/ Charge Controller	\$ 2,995.00	\$ 2,995.00
2	1	Whisper 200 50' Guyed Tower Kit	\$ 625.00	\$ 625.00
3	1	Auger 4ft Kit	\$ 172.00	\$ 172.00
4	1	Tower Adapter Kit	\$ 118.00	\$ 118.00
5	1	Hing Plate	\$ 322.00	\$ 322.00
6	1	Hardware	\$ 358.00	\$ 358.00
7	1	Misc Wire	\$ 1,300.00	\$ 1,300.00
8	8	8A27 106 AH Battery	\$ 195.00	\$ 1,560.00
9	2	Outback 3648 Inverter	\$ 2,022.56	\$ 4,045.13
10	1	Outback PS2AC	\$ 229.43	\$ 229.43
11	1	Outback PS2DC	\$ 344.14	\$ 344.14
12	2	Outback 175A Breaker	\$ 111.26	\$ 222.53
13	4	Outback Adapter	\$ 38.81	\$ 155.25
14	1	Outback Mounting Plate	\$ 123.75	\$ 123.75
15				\$ -
16				\$ -
			Subtotal	\$ 12,570.21
			Sales Tax 0.0825	\$ 1,037.04
			Labor	\$ 4,000.00
			Total	\$ 17,607.26

Terms Subject to Working Contract.

If you have any questions concerning this proposal, call:
 Craig Overmiller, Secretary/Treasurer 512-459-9494

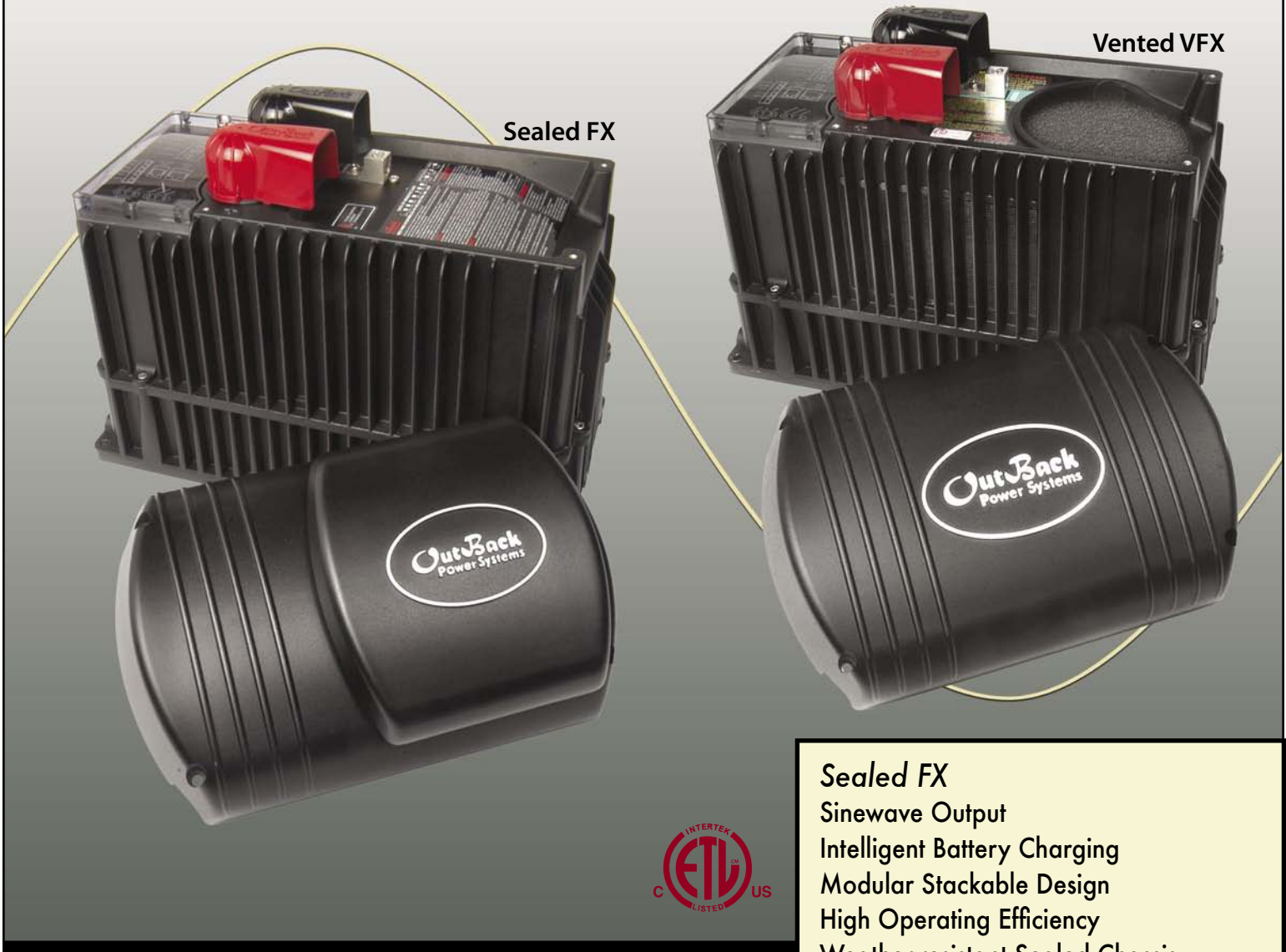
FX & VFX Series

Sealed & Vented True Sinewave Inverter/Charger

OutBack
Power Systems

Sealed FX

Vented VFX



Sealed FX

- Sinewave Output
- Intelligent Battery Charging
- Modular Stackable Design
- High Operating Efficiency
- Weather-resistant Sealed Chassis
- Corrosion Resistant Internal Components
- Field Serviceable
- Integrated Network Communications
- Standard 2 Year Limited Warranty

Vented VFX

- Sinewave Output
- Intelligent Battery Charging
- Modular System Architecture
- High Operating Efficiency
- "Bug Proof" Chassis
- Corrosion Resistant Internal Components
- Field Serviceable
- Integrated Network Communications
- Standard 2 Year Limited Warranty

The OutBack true sinewave inverter/charger is a complete power solution. It incorporates a DC to AC sinewave inverter, battery charger and AC transfer switch housed within a die-cast aluminum chassis. Intelligent multistage battery charging runs your generator less, and prolongs the life of your batteries. Built-in networked communications enables multiple units to be stacked and connected with other OutBack power electronics providing industry leading integration and near infinite application flexibility. The exclusive modular system architecture means that increased power output is just an additional inverter/charger away. Our flagship FX series uses a sealed chassis that can operate in the harshest environmental conditions such as high humidity and corrosive salt air. The VFX series uses a vented chassis with "bug proof" screened openings that allow high output AC power in the hottest of operating conditions.

OutBack Power inverter/chargers are the only choice when you need a true sinewave, powerful, modular and reliable power solution for your home, business or extreme application.

Off-Grid Specifications

	Sealed Models			Vented Models			
		FX2012T	FX2524T	FX3048T	VFX2812	VFX3524	VFX3648
Nominal DC Input Voltage		12 VDC	24 VDC	48 VDC	12 VDC	24 VDC	48 VDC
Continuous Power Rating at 25° C		2000 VA	2500 VA	3000 VA	2800 VA	3500 VA	3600 VA
AC Voltage/Frequency		120 VAC 60 Hz	120 VAC 60 Hz	120 VAC 60 Hz	120 VAC 60 Hz	120 VAC 60 Hz	120 VAC 60 Hz
Continuous AC RMS Output at 25° C		17.0 amps AC	20.8 amps AC	25.0 amps AC	23.3 amps AC	29.2 amps AC	30.0 amps AC
Idle Power	Full	~ 20 Watts	~ 20 Watts	~ 23 Watts	~ 20 Watts	~ 20 Watts	~ 23 Watts
	Search	~ 6 Watts	~ 6 Watts	~ 6 Watts	~ 6 Watts	~ 6 Watts	~ 6 Watts
Typical Efficiency		90%	92%	93%	90%	92%	93%
Total Harmonic Distortion	Typical	2%	2%	2%	2%	2%	2%
	Maximum	5%	5%	5%	5%	5%	5%
Output Voltage Regulation		± 2%	± 2%	± 2%	± 2%	± 2%	± 2%
Maximum Output Current	Peak	56 amps AC	70 amps AC	70 amps AC	56 amps AC	70 amps AC	70 amps AC
	RMS	40 amps AC	50 amps AC	50 amps AC	40 amps AC	50 amps AC	50 amps AC
AC Overload Capability	Surge	4800 VA	6000 VA	6000 VA	4800 VA	6000 VA	6000 VA
	5 Second	4000 VA	4800 VA	4800 VA	4000 VA	5000 VA	5000 VA
	30 Minutes	2500 VA	3200 VA	3200 VA	3200 VA	4000 VA	4000 VA
AC Input Current Maximum		60 amps AC	60 amps AC	60 amps AC	60 amps AC	60 amps AC	60 amps AC
AC Input Voltage Range (MATE Adjustable)		80 to 150 VAC	80 to 150 VAC	80 to 150 VAC	80 to 150 VAC	80 to 150 VAC	80 to 150 VAC
AC Input Frequency Range		54 to 66 Hz	54 to 66 Hz	54 to 66 Hz	54 to 66 Hz	54 to 66 Hz	54 to 66 Hz
DC Input Voltage Range		10.5 to 17.5 VDC	21.0 to 34.0 VDC	42.0 to 68.0 VDC	10.5 to 17.0 VDC	21.0 to 34.0 VDC	42.0 to 68.0 VDC
Continuous Battery Charge Output		80 amps DC	55 amps DC	35 amps DC	125 amps DC	85 amps DC	45 amps DC
Minimum Recommended DC Breaker		OBDC-250	OBDC-175	OBDC-100	OBDC-250	OBDC-250	OBDC-175
Warranty		Standard 2 year / Optional 5 year			Standard 2 year / Optional 5 year		
Weight	Unit	62.6 lbs (28.4 kg)			61 lbs (27.7 kg)		
	Shipping	67 lbs (30 kg)			64 lbs (29 kg)		
Dimensions (H x W x L)	Unit	13 x 8.25 x 16.25" (33 x 21 x 41 cm)			12 x 8.25 x 16.25" (30 x 21 x 41 cm)		
	Shipping	21.75 x 13 x 22" (55 x 33 x 56 cm)			21.75 x 13 x 22" (55 x 33 x 56 cm)		



Main Office:
 19009 62nd Avenue NE
 Arlington, WA 98223 USA
 Phone: (360) 435.6030
 Fax: (360) 435.6019

European Office:
 Urb. Garraf II Buzón 214
 08860 Les Botigues de Sitges
 Barcelona, ESPAÑA
 Phone: (+34) 600.843.845

www.outbackpower.com

Available From:

The Power of Wind



Air X



Whisper 100



Whisper 200



Whisper 500



Grid Tie



Off Grid Home



Water Pumping
Cathodic Protection
Telecomm

WHISPER

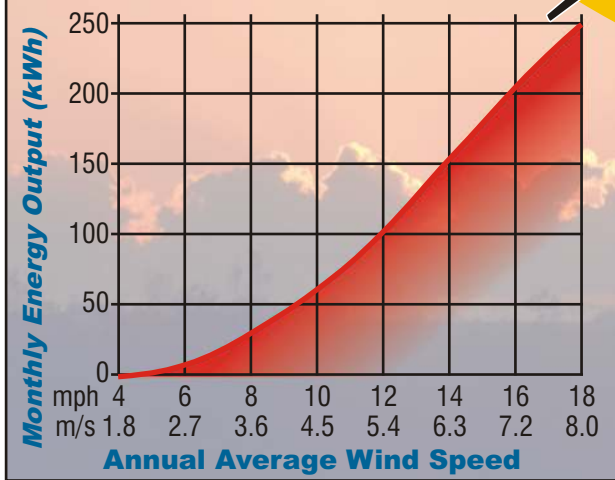
- Quiet
- Affordable
- Reliable
-

WHISPER 100



Moderate to High Wind Areas
(9 mph and above)

Years of reliable operation by thousands of customers have made the Whisper 100 the number one selling small wind turbine in its class. With thousands in the field, the Whisper 100 has become the standard for remote homes, telecom sites and rural developing projects for moderate to extreme environments. Assuming a 12 mph (5.4 m/s) average wind, a Whisper 100 will produce 100 kWh per month for your batteries.



Continuous Refinement

Our Goal is to produce strong, simple designs that offer years of maintenance free operation. At Southwest Windpower, we listen to our customers. Valuable feedback enables us to upgrade our product and manufacture one of the most reliable small wind turbines.

Your Whisper's **voltage** is now **field adjustable** to grow with your RE system



New **bushing** provides superior **reliability** and smoother operation

MULTI-VOLTAGE

A **four bearing spindle** benefits both **efficiency** and **reliability**

Upgraded **yaw shaft** provides **optimal current path**

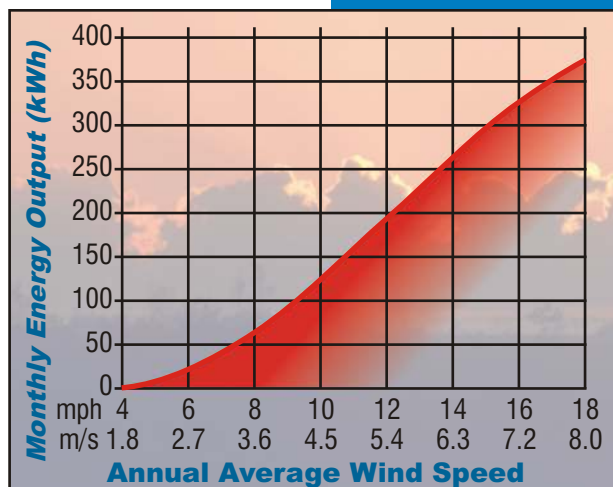


Patented side furling Angle Governor protects the turbine in high winds by turning the alternator and blades out of the wind, reducing exposure. Unlike other wind turbines that lose as much as 80% of their output when furling, the Whisper achieves maximum output in any wind.

WHISPER 200

Low to Moderate Wind Areas
(7 mph and above)

Get the most out of the wind with a larger swept area blade. The Whisper 200's 9 foot blade has almost twice the swept area of the Whisper 100 which means twice the energy! The Whisper 200 is a versatile design that is used in many applications from remote homes to water pumping. A high voltage model is available for transmission over long distances and grid tied systems.



Whisper Charge Controller



Optional digital display reads kWh production, battery voltage, max amps, max volts and actual amps.

The Whisper Charge Controller is included with every Whisper 100 and 200. The SCR-based shunt-type controller is housed in a single unit and it is dedicated wind only.

- Individually rectified phases.
- Battery/turbine shunt isolation during regulation.
- Bright LED lights indicate regulation operation and Power ON.
- Quiet diversion-powered fan.
- Large heat sink for efficient temperature dissipation.
- Easy access block connectors for turbine and battery wires. Compatible with any programmable inverter.



Directly connect an anemometer to measure and display peak and average wind speed!

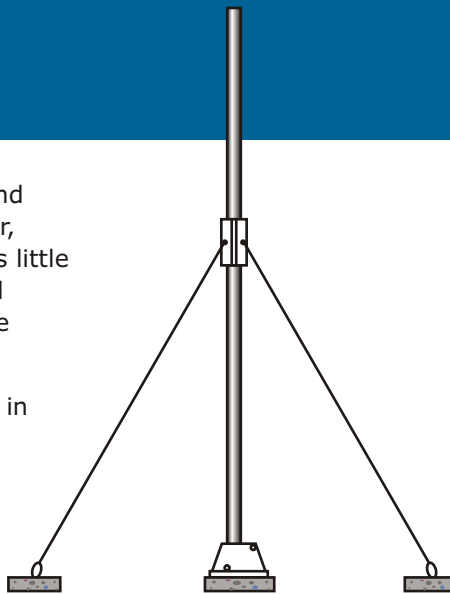
UNPRECEDENTED
5 YEAR
WARRANTY
Southwest Windpower

Warranty your Whisper for an unprecedented 5 years with any approved installation.

Towers

Tower technology has advanced along with wind turbines. Designed specifically for the Whisper, economical guyed tower kits install easily in as little as 4 hours. All hardware is included (pipe and anchors are available from your local hardware store or Whisper Dealer).

Free standing towers provide a viable solution in areas where space is an issue.



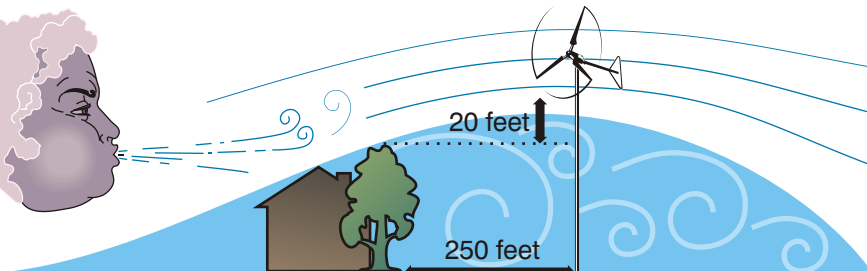
Free Standing Tower



How can Whisper work for me?

The most important factors in deciding if a Whisper wind system is right for you are wind resource and proper siting. Ask yourself the following questions:

- Do I have adequate wind resource (at least 9 mph average)?
- Do zoning laws allow the use of towers?
- Do I live on 1/2 acre or more of land?



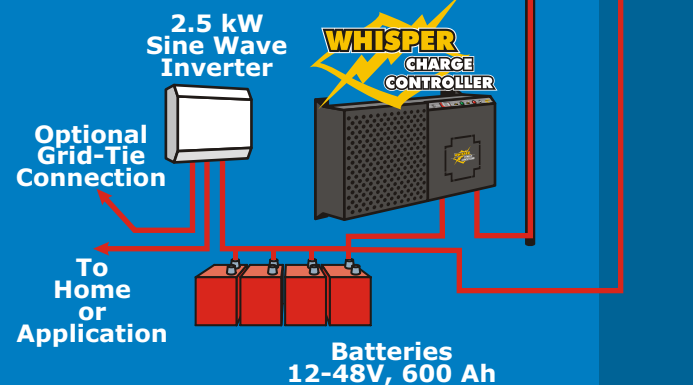
For proper wind siting you must locate your Whisper wind turbine 20' above any surrounding object within a 500' radius.

If your wind speed averages 9 mph (4 m/s) or greater, wind may be an electrical power option for you. Wind turbines can produce power day and night, even in inclement weather.

Visit www.windenergy.com for more information on choosing the best site for your wind system.

Typical Whisper System

Most modern renewable energy systems combine a small wind generator with their photovoltaic panels. The purpose is to balance out the ever fluctuating solar and wind resources. Seasonal variances are even more extreme but the patterns of available resource are complementary. Generally in winter months, it is windy and cloudy and in the summer months it is sunny but calm. A hybrid system using a Whisper wind generator is the answer.



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Visit www.windenergy.com for a dealer located near you!

Southwest Windpower

Renewable Energy Made Simple

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Tel 928-779-9463 • Fax 928-779-1485
www.windenergy.com • E-mail info@windenergy.com

8A31

SPECIFICATIONS

Nominal Voltage (V)	12V
Capacity at C/100	116.2Ah
Weight	69 (31.3 kg)
Plate Alloy	Lead Calcium
Posts	Forged terminals & bushings
Container/Cover	Polypropylene
Operating Temperature Range	-40°F (-40°C) – 140°F (60°C)
Charge Voltage @ 68°F (20°C)	
Cycle	2.40 - 2.43 VPC
Float	2.25 - 2.30 VPC
Vent	Self-sealing (2 PSI operation)
Resistance	3.0 Milliohms (full charge)
Terminal	T876

Rated non-spillable by ICAO, IATA and DOT
Approved by CEC

Made in the U.S.A by East Penn Manufacturing

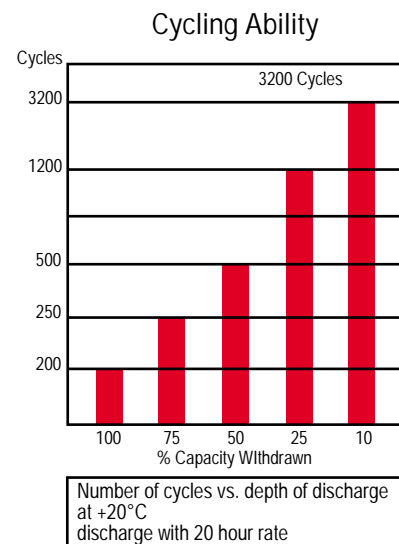
Distributed by:

Valve-Regulated, Absorbed Glass Mat Technology



DIMENSIONS

Length (mm)	12.94 (329 mm)
Width (mm)	6.75 (171 mm)
Height (mm)	9.88 (251 mm)



MK Battery

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