

*“Revolution in the wind”*

## Data sheet

# LAKOTA 900-WATT WIND TURBINE with Carbon Fiber Blades

### LIGHTWEIGHT AND POWERFUL!

THIS ENHANCED UPWARD FURLING WIND TURBINE WITH ZYTECH AERODYNE'S CARBON FIBER BLADES DELIVERS MORE POWER IN LOWER WIND SPEEDS!

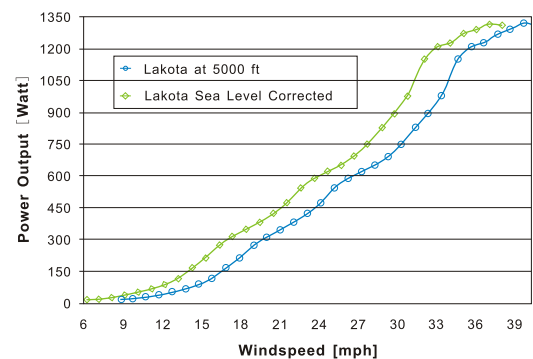
### WIND TURBINE GENERATOR FEATURES

- Rated 1000 Watts Power Output at 28.8 mph
- Peak 1500 Watts Power Output at 38<sup>+</sup> mph
- Start-up wind speed at 6 mph
- Charging 1 Ampere at 12 Volt at 9 mph
- Nominal 12, 24, 48 Volt available
- Lightweight 17kg
- Rare Earth Neodymium Iron Boron Permanent Magnets
- USCG approved tinned Copper wire for marine use
- Self-governing Rotor Design
- Permanently Sealed Unit
- Special Marine Coating available

### ZYTECH AERODYNE'S ADVANCED FEATURES

- Aerospace grade, advanced technology, uni-directional Carbon Fiber Blades
- Helicopter leading edge tape on each blade
- Smoother and far quieter than wood, plastic, injection molded or fiberglass reinforced blades
- Unprecedented 7 year blade warranty in the US.
- Extended warranty up to 10 years available on the blades
- Precision, computer designed aircraft quality rotor
- Stainless steel hub plates
- Torque Key with unique locking nut system

**Preliminary Power Curve LAKOTA**



## TECHNICAL SPECIFICATIONS

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Rotor Diameter:	2.090 m
Swept Area	3.43 m <sup>2</sup>
Start-up Wind Speed:	2.7 m/s
Alternator:	3 Phase AC Brushless Permanent Magnet
Power Output for Sea Level Conditions:	1000 Watt nominal at 28.8 mph 500 Watt nominal at 21.5 mph 300 Watt nominal at 16.5 mph
Total Weight:	17 kg

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## ZYTECH AERODYNE'S BLADE TECHNOLOGY

Zytech Aerodyne's aerospace grade uni-directional carbon fiber blades are not to be confused with carbon matrix or carbon reinforced plastic blades. Unlike plastic with powdered carbon blades that bend and flutter, the carbon fibers in the Zytech Aerodyne blade are 7 times stiffer than common steel, and carry the loads from tip to root.

This allows the Zytech Aerodyne LAKOTA to harness far more energy annually than comparable similar wind turbine generators. In addition, the increased output substantially lowers the overall cost of energy despite a slightly higher initial purchase price.

## TOWER STRUCTURES

- Most complete tower kits on the market
- Superior structural design
- Most advanced light weight tilt base available today
- Unique load transport tilt up /gin pole tower system
- Most comprehensive assembly manual (over 90 pages)

## REGULATION AND CONTROL

The electronics perform several functions to ensure maximum output and safety for the user. The regulation control maintain a load on the alternator at all times preventing turbine overspeed, regardless of the charge condition of the battery.

You may select among a variety of Regulation and Control Device from cost effective Rectifier Module to advanced Manual or Automated Load Divergence Center to professional Wind Turbine Flight and Battery Charge Controller.

If your application requires a quiet and powerful wind turbine and is in a place with low as well as potentially high winds, then consider the Zytech Aerodyne LAKOTA.

