Control the Cost of Energy

Entegrity Wind System’s EW50 is a commercial-scale wind turbine (50kW), suitable for a wide variety of locations and applications. From school districts in the Texas Panhandle to Rural Electric Cooperatives in Alaska, cost savings have been realized where electrical demands and energy economics required cost-effective solutions.

Key considerations include:

› Over 15 years of operating history and high performance
› Cost competitive and low maintenance requirements
› Low profile and small footprint

In moderate to strong wind resource areas, a strong business, educational and environmental case is supported by:

› COST SAVINGS
  Investment in a wind turbine from capital funds can generate over $15,000 per year in increased operational revenue.*

› HANDS-ON LEARNING OPPORTUNITIES
  The EW50 production data is an effective teaching aid, providing students, staff and the community with hands on learning opportunities in the areas of math, science and renewable energy.

› SUSTAINABILITY
  Installing an EW50 reduces the carbon emissions from electricity consumption and helps achieve sustainability and leadership goals.

*Based on $.10/kWh Power and 150,000 kWh annual production

Shallowater, Texas Case Study

The Shallowater, Texas high school requires more than 1,000,000 kWh/year of electricity; an annual cost of over $85,000. In 2007, the district installed three EW50 wind turbines to help control long-term energy costs.

The wind turbine project:

› Provides over 30% of the high school’s annual electricity usage
› Saves over $40,000 in annual energy costs
› Leverages capital moneys to free up operational funds
› Yields a competitive return on investment

The figure below shows the annual electricity usage for a typical school as compared to the estimated wind production of one (1) EW50.
Entegrity Wind Systems

Entegrity Wind Systems Inc. is a privately held corporation with its main offices in Boulder, Colorado and manufacturing in Charlottetown, Prince Edward Island, Canada and Montreal, Quebec. The company has over 30 employees with years of experience in wind and distributed energy.

The EW50 is based on the Atlantic Orient Corporation 15/50 design and includes a NREL patented blade design, robust drive train and a sophisticated monitoring and control system. Entegrity engineers and technicians are committed to continuous improvement. The EW50 outperforms its predecessors, while maintaining the same simple, robust configuration.

Entegrity’s staff of technicians and comprehensive network of partners ensure that the EW50 fleet exceeds performance expectations. Our project development engineers and technical staff are available to assist in the planning of your wind energy project.

Features of the EW50

- Simple, low maintenance design
- Thirty year interval to next major overhaul
- 15 year operating history
- >98% availability factor
- Redundant, failsafe breaking for high winds
- IEEE 1547 compliant, CE certified, UL listed
- ISO 9001 Drivetrain
- Engineered for grid integration
- 24/7 monitoring system
- Available production data streams

Specifications

**SYSTEM**

TYPE: 3-phase, Grid Connected

**ROTOR DIAMETER**: 15 m (49.2 ft)

**HUB HEIGHT**: 31.1 m (102 ft)

**PERFORMANCE**

RATED ELECTRICAL POWER: 50kW @ 11.3 m/s (25.3 mph)

**WIND SPEED RATINGS**

CUT-IN: 4 m/s (8.9 mph)

SHUT-DOWN (HIGH WIND): 22.4 m/s (50 mph)

DESIGN SPEED (MAX): 59.5 m/s (133 mph)