RSI Wind Providing GREEN Energy Solutions For YOU!

RSI Wind
888-830-5648
www.rsiwind.com

&

TECHNOSPIN
Everywhere the Wind Blows

PowerSpin Series

Powering residential & commercial sites at grid-connected and off-grid locations

4,000 Watt Wind Generator

PowerSpin TSW 4000

Wind Power System for residential and commercial use

The TechnoSpin PowerSpin TSW 4000 wind turbine provides a renewable energy source to a wide range of residential and commercial applications in remote and urban locations.

Based on a revolutionary blade design, the TechnoSpin wind turbine generates substantial energy in areas with low and medium winds.

Applications

- Household appliances including heating applications
- Lighting (building, street, etc.)
- Industrial/small business machinery
- Grid back-up systems
- Battery charging (use in remote areas, green car battery charging stations, etc.)

Product advantages

Performance

- Start-up and high energy output in low winds
- Superior efficiency (up to 30% higher than competition)
- Vibration free
- Silent operation in all wind regimes

Reliability

- Robust design
- Simple to install
- No maintenance required
- 5 year warranty (optional extension up to 20 years)

Cost effective - shorter ROI period compared to alternatives

RSI Wind ~ Reliability ~Performance ~ Independence

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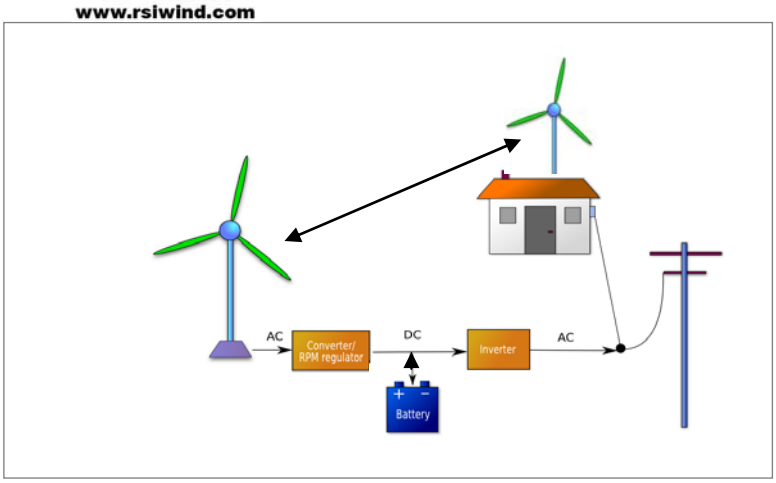
System configurations

- On-Grid Systems
- Off-grid systems
  - Stand-alone systems
  - Local-grid systems: serving a whole village/community instead of separate households
- Turbine could be installed on roof or on separate tower
- Wind only or Hybrid system with Solar/Diesel generator

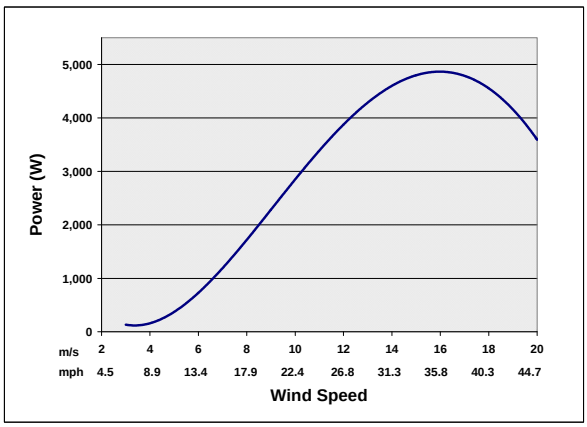
* On-Grid system does not require battery



Technical Specifications

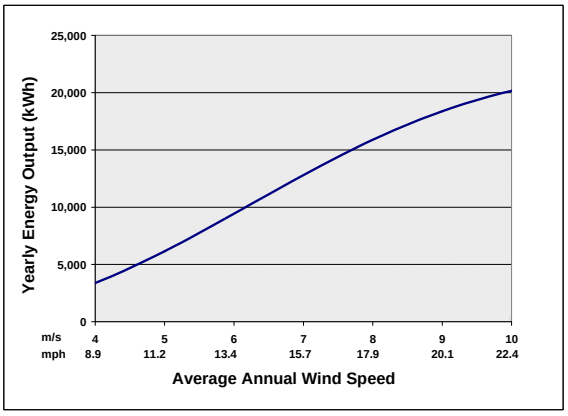
Rotor Diameter	4.2 m (13.8 ft)
Weight	175 Kg (385 lb)
Rated Power	4 kW
Rotor Efficiency	up to 45%
Yearly Energy Output	6,100 kWh at average wind speed of 5 m/s (11.2 mph)
Rated Wind Speed	12 m/s (26.8 mph)
Start-Up Wind	2.5 m/s (5.6 mph)
Survival Wind	60 m/s (134 mph)
Voltage for Battery Charging	12-48 V DC
Voltage for Grid Connection	Adjusted to requirements of inverter
Overspeed Protection	Mechanical and Electrical System
Maximum Axial Load	210 Kg force (460 lb)
Installation	Roof or Tower
Roof Mast Height	Minimum 6 m (19.7 ft)
Tower Height	Minimum 7 m (23 ft)
Product Design Life	30 years
Warranty	5 years (optional extension up to 20 years)

Power Curve



*Power curve data measured with appropriate load

Average Annual Energy



*This distribution is based on the Power Curve data and the average annual wind speed (weibull distribution)

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The standard kit includes:

- Blades
- Hub
- PMG Generator
- Turbine head
- Tail
- Stub
- Charge controller (for battery charging)

Noise

The turbine is extremely silent; its noise level is lower than 40 dB. Noise measurements are conducted based on the international standard 61400-11 and chapter 3 of the BWEA standard.

Regulation

The turbine is manufactured according to relevant international standards:

- IEC 61400-2 (International Electrotechnical Commission)
- BWEA British Wind Energy Association Small Wind Turbine Performance and Safety Standard

Mechanical Data

Aerodynamic tail
The aerodynamic tail allows utilization of wind resources irrespective of wind direction, and serves as part of mechanical protection set-up.

Furling
Wind furling by over pressure sensing

Generator
The PMG generator is optimized for maximum efficiency. Due to the direct drive, there are no transmission losses. Bearings are lubricated for life, the generator is closed and maintenance free.

The tower
The turbines have a low axial force and are vibration-free; therefore they can be installed on roof tops. Alternatively, they can be installed on separate galvanized towers, both guyed and free-standing monopole towers. The turbines can be easily installed by a small professional team, using basic equipment.

Electronics Data

The charge controller for battery charging applications is used for rectifying unstable wind energy power output, voltage control and battery charging. This device makes a DC voltage out of the 3-phase AC voltage of the turbine, acts as a safety device, making sure that the voltage will never exceed the maximum. The controller has the OCP (Over Charging Control) function - excessive energy is diverted to a dump load and converted into heat.

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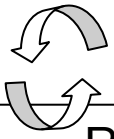
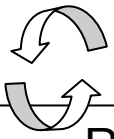


BWEA small wind turbine standard, 2008

Self certified by TechnoSpin Inc.

Reference Annual Energy	6,100 kWh

Annual average wind speed of 5 m/s (11 mph). Your performance may vary



BWEA small wind turbine standard, 2008

Self certified by TechnoSpin Inc.

Reference Power	3,400 w

Power at wind speed of 11 m/s (25 mph). Your performance may vary

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