



### Key Specifications

- **Blades:**
  - **Material:** Composite
  - **Quantity:** 3 blades
- **Rotor Diameter:** 1.17 m
- **Energy Output:** 1
  - Approximately 30–50 kWh/month at an average wind speed of 5.8 m/s (13 mph)
- **Startup Wind Speed:** 3.6 m/s (8 mph)
- **Survival Wind Speed:** 49.2 m/s (110 mph)

### Generator:

- **Type:** Permanent magnet brushless alternator
- **Function:** Converts the kinetic energy from the rotor into electrical energy.

### Additional Features:

- **Wind Tunnel:** Stainless steel construction with an aerogenerator and a computer-controlled variable speed axial fan.
- **Rotor Design:** Capable of holding up to 3 removable blades with an adjustable incidence angle, allowing for optimization based on wind conditions

### Instrumentation and Sensors

The system is equipped with various sensors to monitor operational parameters:

- **Air Temperature Sensor:** Measures ambient air temperature.
- **Air Speed and Rotor Speed Sensors:** Measure air speed (ranging from 0.20 – 10 m/s) and rotor speed in RPM.
- **Voltage and Current Sensors:** Monitor electrical parameters before and after the regulator.
- **Force Sensors:** Measure mechanical torque (up to 600 g) and thrust force (up to 3000 g).

### Electrical System

*Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.*



Export Sales: +91-9829132777  
India Sales: +91-9588842361



IT-2013, Ramchandrapura Industrial Area,  
Sitapura Extension, Jaipur-302022, India.



info@tesca.in  
www.tescaglobal.com



- The electrical system includes a DC Load Regulator, an auxiliary battery charger, a battery, and a DC Loads module that supports various loads such as lamps, a rheostat, and a DC motor, allowing for versatile operational capabilities.

### Control and Software

- The turbine is supplied with an EDIBON Computer Control System (SCADA), which includes a control interface box, a data acquisition board, and control/data acquisition software, facilitating comprehensive monitoring and control of the turbine's operations.

*Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.*



Export Sales: +91-9829132777  
India Sales: +91-9588842361



IT-2013, Ramchandrapura Industrial Area,  
Sitapura Extension, Jaipur-302022, India.



info@tesca.in  
www.tescaglobal.com