

## SMALL TULIP WIND TURBINE

A 1.5 meter-high turbine with electronics to charge a 12, 24 or 48 volt battery or a grid-connection for large bouquets (depending on the number of turbines and your project). This fits on a pole for fixed installation. It can be used off-grid for lighting small displays outdoors, or on-grid or off-grid to supplement solar power. Standard color is white.

Please note that projected data is based on research, field testing, and simulations.

Model Number: FT 1.15M Turbine

**Type:** 2 Bladed Vertical Axis Wind Turbine

IEC Turbine Class: IEC61400 Class IV

**Rated Power:** 100 watts, reached at 14.5 m/s (32.4 mph) (higher capacity for

bouquets)

**Expected Production:** ≈62.2 w/h alone at 12m/s (27 mph) with a 25% increase for each turbine when properly oriented to utilize the Bouquet Effect.

(Example: 4 turbines times 25% = 100%

or double the power)

**Expected Production in a Bouquet of 5:** 

≈144.7 w/h each when correctly oriented (≈723.5 w/h total) at 12 m/s (27 mph)

**Grid-Tied Output:** Between 110 or 220 volts, depending on the country & the inverter used to connect to the grid.

**Generator:** High Efficiency Permanent

Magnet Generator

Bearings: Included in Generator

Blade Material: Thermoplastic

**Turbine Diameter:** 0.55 m (1.79 ft)

**Blade Height:** 1.15 m (3.77 ft)

Total Height: 1.4 m (4.58 ft) with extended

pole options.

**Total Weight:** ≈20 kg (44.1lbs)

Cut-In Wind Speed: 0.7 m/s (1.57 mph)

**Cut-Out Wind Speed:** Inverter or charge controller will control high speeds.

Max Survival Wind Speed: 54 m/s (120.8

mph)

**Operating Temperature Range:** -15°C to

50°C (5°F to 122°F)

Design Life: 40 Years (Must be checked

annually)

**Warranty Period:** 5 Years for parts made by Flower Turbines; other parts are according to the warranty that comes from that manufacturer.



