

Wind Cupola Series

CP-01000 Micro Wind Energy System

Rooftop or Ground Mounted Resilient Power.

Ships easily, deploys quickly, lasts for decades, neighbor friendly.



Wind Cupola System

Infrastructure in a Box

A source of low-cost power for residences, farms, and marinas.

Use to complement battery storage, grid and solar power.

Simple to install wind energy structure ships fully assembled, wired, and tested.

Designed to produce approximately 5kWh daily typical min*. (Larger sizes available upon request) Hardened construction: Survives austere conditions and extreme weather events.

Patented (US 10,495,063).

Construction

- Wind energy enclosure comprised of durable powder coated aluminum enclosure with high performance, polymeric geomembrane rotor.
- Prewired charge controller, Li Ion battery storage, and external power connections.
- Pre assembled, wired and tested; ready for installation.

Technology Summary

Revolutionary Approach To Wind Energy Capture

The sails of the CP Wind Energy System intercept the wind, create a vortex and focus its energy in a chamber at the center of the enclosure.

The fortified, hidden-in-plain-sight stationary structure harvests wind from all directions. Does not need to be pointed into wind.

70 year design life. Survives 200mph winds.

Produces 2x power of typical alternative energy technology.

Silent, stationary, no shadow flicker, people and wildlife friendly. Blends in with built-environment.

Dynamic Chamber

At the center of our enclosure is a chamber housing the rotor. The chamber dynamically changes size and shape responding to ambient wind speed and direction, optimizing air flow and power production.

Easy Deployment

Ground or roof mounted. No tower or foundation, connect with solar arrays.

Next Generation Rotor

Our revolutionary, lightweight high performance rotor starts at lower wind speeds, stable at high wind speeds

Minimum Maintenance

All units are designed to operate in extreme and harsh environments with minimal maintenance.

Deployment, operation and maintenance training included.

10-year warranty and optional Investment Protection Program extended warranty and service / maintenance program.

Proudly 100% Made in the US.

Company Information

CAGE CODE 8HFH9

UEI W7MYFTTHZJP7

Web Address www.cbcwindenergy.com

Model Information

CP-01000-A: On Grid Model No. CP-01000-B: Off Grid

CP-01000-C: Grid as Backup

Design Lifetime

No foundation required, mount to roof or on ground Foundation Type

with optional base.

Orientation Stationary enclosure

N/A - Dynamic chamber mechanically adapts to Yaw System

changes in wind speed and direction.

Weight

Silent Noise Level

(0 dB above ambient at 0 ft from equipment.)

Performance

Cut In Wind Speed 5 mph

Cut Out Wind Speed 100 mph

Max Survivable Wind Speed 200 mph

Rated power v. Wind speed 2 kW @ 30mph

Electrical Output

Generator Type Permanent magnet generator with synchronous power and Drivetrain transmission belt.

Available in 3 configurations:

· Off Grid: 15.5VDC to charge controller for Li Ion batteries.

· On Grid: 120VAC / 60 Hz single phase. Output

· Grid-As-Backup: 120VAC / 60 Hz single phase with Li Ion battery storage.

Order batteries separately.

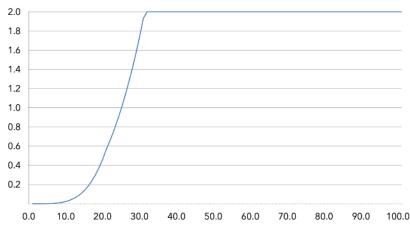
Battery Storage Li Ion - Customer configurable, contact factory.

Environmental Specifications

| Min Temp | -40 F |
|---------------------------|---|
| Max Temp | 115 F |
| Humidity and Corrosion | All materials are non corrosive. Enclosure designed to suffer airborne particulate matter including sand and ice. |
| Lightning | Lightning rod and electrical surge protection included. |

Power Curve

Standard Conditions*



Average Monthly Production

| Avg. Annual Wind Speed (mph) | Energy (kWh / mo) |
|------------------------------|----------------------|
| 8.0 | 21 |
| 9.0 | 34 |
| 10.0 | 50 |
| 11.0 | 72 |
| 12.0 | 98 |
| 13.0 | 129 |
| 13.5 | 146 |

^{*} Standard conditions: air density 1.225 kg/m³, equivalent to 15°C at sea level.

Dimensions

