

P5000-AB

Vertical Wind Turbine (VAWT)

Suitable for any Application; Urban to Rural, Residential to Commercial, Industrial to Institutional

Performance

| | |
|---------------------|-------|
| Rated Power | 5kW |
| Max Power | 6kW |
| Rated Wind Speed | 12m/s |
| Cut-In Speed | 2m/s |
| Cut-Out Speed | 25m/s |
| Survival Wind Speed | 55m/s |

Physical Parameters

| | |
|-----------------------|-------------------------------|
| Mill Diameter | 4m(13.1ft) |
| Mill Height | 4.6m (15.1ft) |
| Mill Weight | 975kg (2150 lbs.) |
| Tower Height & Weight | 5.5m (18ft) 650kg (1433 lbs.) |

Generator Parameters

| | |
|------------------|-------------|
| Type | PMG 3 phase |
| Rated Voltage | AC 250V |
| Rated Current | AC 11.5A |
| Protection Level | IP54 |

Controller Output

| | |
|--------------------------|-------------|
| Output Voltage(On-grid) | DC 50-375V |
| Output Voltage(Off-grid) | DC 48V/110V |



Over Speed Protection & Braking System

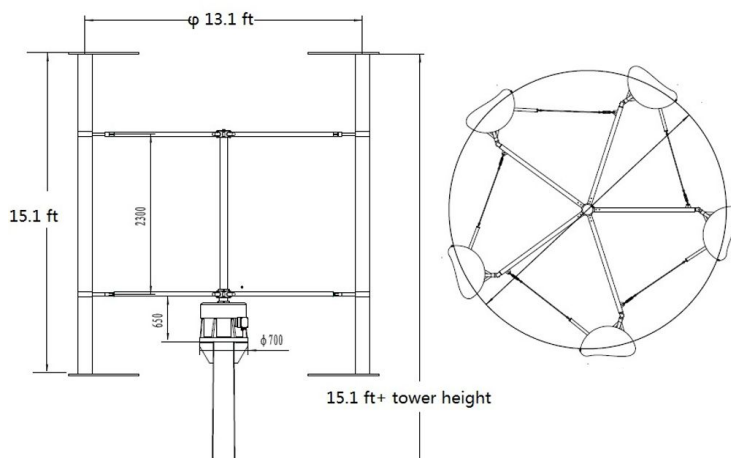
| | |
|---------------------|---------------------------|
| Speed Control Style | Pitch Control System |
| Brake Style | Automatic Hydraulic Brake |

Advantages of VAWT

- Nearly Quiet
- Birds Friendly
- More Safety Features
- Wonderful Performance at Low Wind Speed
- Captures Wind from All Directions
- Longer Working Life
- Less Maintenance
- Less Requirements on Foundation
- Lower Supporting Tower

Advantages over Other VAWT

- High Efficiency
- Pitch Control to Govern Speed
- Automatic Magnet Brake



Annual power generation

| Average Wind Speed(m/s) | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> |
|-------------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| Production (kWh) | 553 | 1,758 | 3,900 | 7,018 | 10,839 | 14,917 | 18,867 | 22,432 | 25,443 |

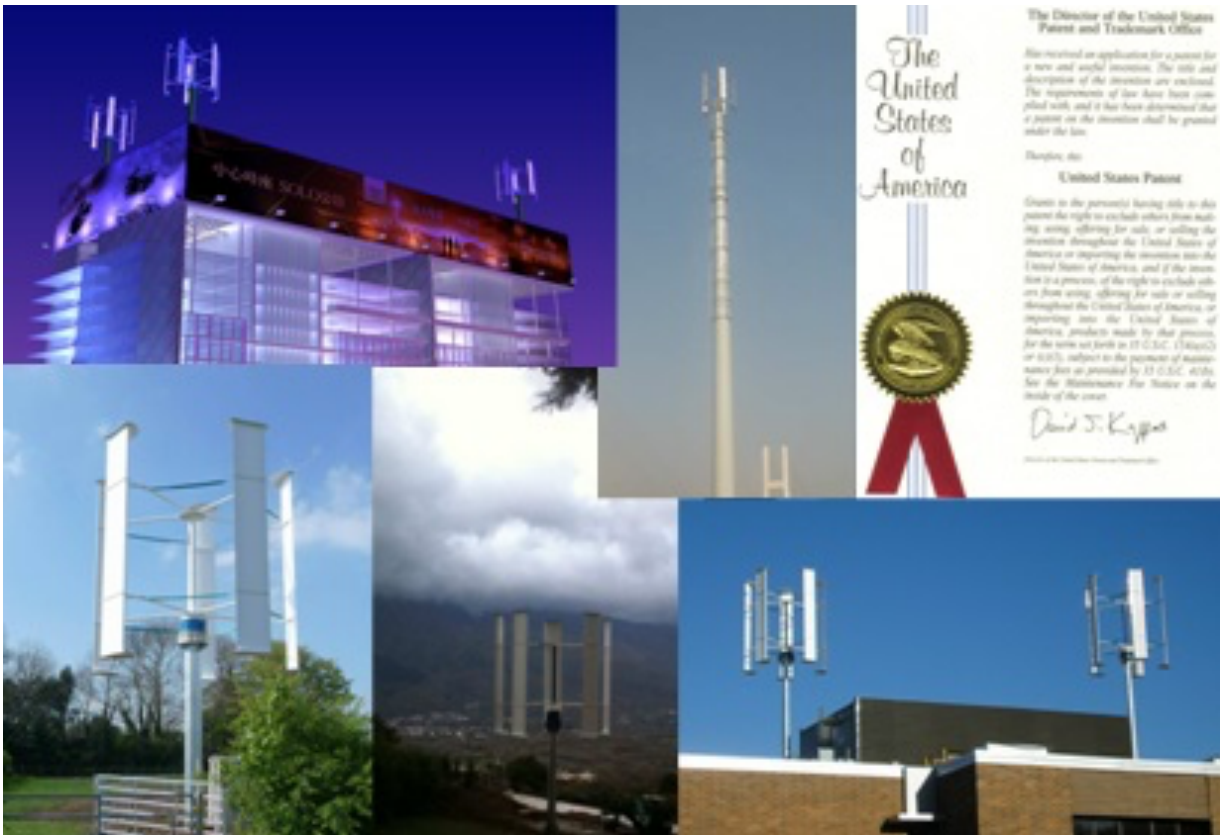
Packing Size

| Mark | Name | Volume | Gross(KG) | Net(KG) | Package |
|--------------|--------------------|-------------------|-----------|---------|-------------|
| P5000-S/L | Long Arms | 160cm*75cm*35cm | 95 | 80 | Plywood Box |
| P5000-S/S | Short Arms | 61cm*61cm*51cm | 75 | 65 | Plywood Box |
| P5000-FRM | Generator Assembly | 315cm*94cm*85cm | 750 | 680 | Steel Frame |
| P5000-B | Blades | 470cm*72cm*20cm*5 | 35*5 | 30*5 | Paper Box |
| P50000-C-G/I | On-grid controller | 60cm*40cm*25cm | 25 | 20 | Plywood Box |



7 Cubic meters, Gross weight 1120Kgs, Net weight 995Kgs

A 40ft open-top container can hold eight units. (excluding the tower)



Application

Protected by US Patents 7967569; 8272840; 8322035; 8390142; 8496433; 8567038;
 Korea Patents 10-1039915; 10-1115740; 10-1296785; EU Patents 2098726; 2039929