

# Specification SHEET

## 3.5kW VAWT

### OVERALL

Cut-in Wind Speed	_____	3m/s (6.8mph)
Rated Wind Speed	_____	12.5m/s (28mph)
Survival Wind Speed	_____	40m/s (90mph)
Rated RPM	_____	170
Maximum RPM	_____	250

### TURBINE

Overall height	_____	3.5m (11.5ft)
Weight	_____	130Kg (285lbs)
Rotor height	_____	3m (10ft)
Rotor diameter	_____	2.75m (9ft)
Blades	_____	3 ea.
Blade Composition	_____	Reinforced Fibreglass
Spokes (airfoil)	_____	6 ea.

### GENERATOR

Type	_____	3-phase PMG
Rated Phase Voltage	_____	120VAC
Rated Phase Current	_____	10A
Rated Speed	_____	170 RPM
Maximum Speed	_____	250 RPM
Rated Power	_____	3.5kW
Maximum Power	_____	5kW
Brake	_____	Built-in

### CONVERTER / INVERTER \*

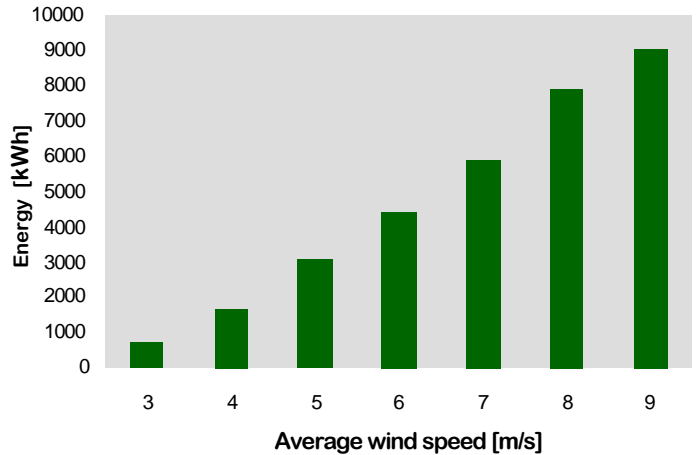
Type	_____	4 Quadrants AC-DC-AC <i>(with turbine start-up operation)</i>
Rated Voltage	_____	120VAC / 220VAC
Rated Frequency	_____	60Hz / 50Hz
Rated Power	_____	3.5kW / 6kW
Peak Power	_____	5kW / 9kW

\* compliant with: IEC 61400-2, UL 1741, CSA 22.2 No.107.1-01, IEEE 1547

### Major Functions:

- Maximum Efficiency Optimizer - Variable Speed Operation
- Dump-load Control
- On-grid & off-grid Operation - Optional
- PV connection / Battery Operation - Optional
- Dual Brake Control (generator short / generator brake)
- Protection:
  - Grid Failure (For on-grid operation only)
  - Anti-islanding
  - Internal errors

Estimated Energy per year



Turbine Output Power

