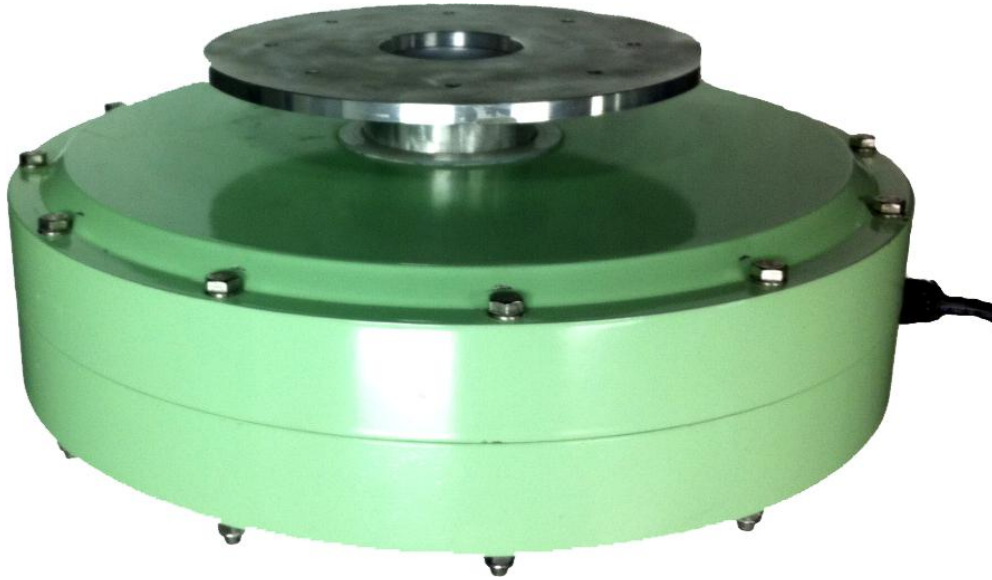


PWG - 1 1.5 kW Renewable Energy Generator



VAWT Systems, LLC of Anaheim CA is proud to announce its 1.5 kW Renewable Energy Generator – the Polar Wind Generator (PWG) 1. The PWG-1 is a new patent-pending design that re-defines the way 3-Phase A.C. generators operate. This new high-tech design provides more power output at lower Revolutions per Minute (RPMs) than conventional generators.

The PWG-1 is based on Axial Flux, Rare Earth Permanent Magnet designs with a unique stator design providing mechanical to electrical efficiencies of greater than 70% which achieves lower operating temperatures, more output voltage and allows direct connection to a Grid-Tied inverter for reducing the utility power requirements in commercial, agricultural and residential wind and hydro power installations.

While originally intended for use in Vertical Axis Wind Turbines, the PWG-1 is perfectly suited for use in any type of mechanical device that provides rotational power. The PWG-1 uses high magnetic flux Neodymium-Boron-Ferrite magnets for superior performance in heavy duty applications.

The PWG-1 is shown here on our PWT-1 VAWT Wind Turbine. This turbine will generate useful energy in as low as 10 mph wind and produce greater than 1 kW at 28 mph. The PWG-1 generator can be used with horizontal (propeller based) wind turbines, water wheels, bicycle frames and exercise equipment. The PWG-1 can be used to replace existing wind generators and alternators as well as designed into new equipment or for the Do-it-Yourself project builder wishing to take advantage of the available free wind power.



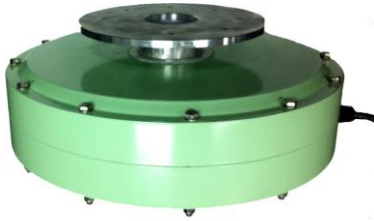
If you are a dealer or distributor of renewable energy equipment, please contact us for pricing and availability. We will be producing 500 Watt and 5 kW units soon. Please visit our web site at <http://www.vawtsystems.com> for more information.

Overview

The Polar Wind Generator - 1 (PWG-1) is a Direct Drive Permanent Magnet Axial Flux Generator. The PWG-1 is based on a proprietary new assembly process allowing for maximum usable power at minimum revolutions per minute (RPM's). This generator may be mounted vertically or horizontally and is best suited for Vertical Axis Wind Turbines and lower speed Horizontal Axis Wind Turbines. The PWG-1 is designed for a 20 year life span and is weather resistant. The PWG-1 has a 3-phase A.C. electrical power connection and is supplied with a low voltage output for battery charging or a high voltage output for connection to a grid interactive inverter. A 3-phase rectifier is included and a 240V, 60 Hz A.C. grid-tie inverter is optional.

Features:

- Low Speed Operation
- Direct Drive
- Quiet Operation
- Maintenance Free



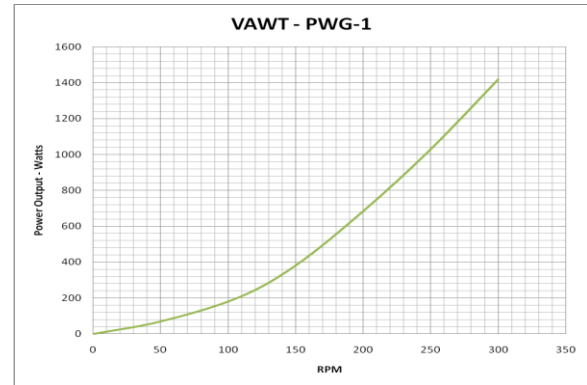
Polar Wind Generator - 1

New Technology

The Polar Wind Generator - 1 is a proprietary, Direct Drive Axial Flux Permanent Magnet Generator, utilizes the latest technology in permanent magnets. These Neodymium-Ferrite-Boron (NdFeB) magnets are among the strongest available. This very strong magnetic field movement across associated wire coils produces current flow and an associated voltage.

The typical RPM to power conversion is shown in the subsequent graph. The generator includes a 20 year warranty, and all VAWT Systems'

products are covered by U.S. Patents or Patents Pending.

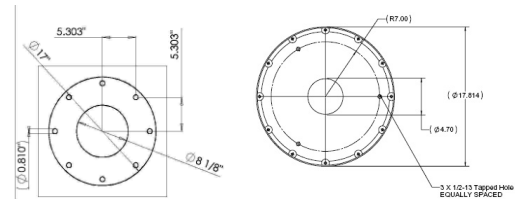


Electrical Specifications

Power Output @350 RPM	1500 Watts Peak
D.C. Voltage output – H.V.	0-300 V Peak
D.C. Voltage output – L.V.	0-150 V Peak
D.C. Current output – H.V.	0-10 A Peak
D.C. Current output - L.V.	0-20 A Peak
Wire Type	14 AWG
Electromagnetic Containment	FCC Class B

Physical Specifications

Height	6.28 inches
Diameter	17.76 inches
Weight	90 pounds
Rated Rotation Speed	0 to 500 RPM
Sound (Noise) Pressure Level	6 dB (at 5ft) Above Ambient
Vibration	Vibration Free
Hazardous Materials	RoHS Compliant
Country of Origin	Made in U.S.A.



PWG - 1 Mounting Patterns

Environment:

- Operating Temperature -40 to 120° F
- Storage Temperature -50 to 140° F
- Relative Humidity 0 to 95% NC

Note: Price and specifications subject to change without notice