AMTEK RENEWABLE ENERGY SERIES

5 KW VERTICAL AXIS WIND TURBINE

Convert wind into electrical energy more efficiently and reliably thanks to AMTEK's innovatively-designed wind turbine.

The AMTEK Vertical Axis Wind Turbine is today's most viable and resilient renewable-energy solution across varied conditions and applications.

- Reliably captures maximum horsepower from directional winds at 360 degrees.
- Incorporates a Magnetic-Direct-Drive [MDD] with high-power magnets in the flywheel's blade to more effectively capture and direct electrical fields.
- Operates with only one moving part, a high-quality oil-lubricating immersed double bearing. This makes the VAWT easy to transport, install and maintain with minimal mechanical expertise, as well as contributing to its extended life.
- Remarkably durable in severe weather conditions such as high winds, extreme temperatures, and varied precipitation.
- Operates with minimum vibration, electro-mechanical emissions, and lower ambient noise. Thus it is possible for the VAWT to share space with communication towers, control systems, and the like without signal interference.
- **Starts generating electricity at a wind speed as low as 3 m. / sec.**

AMTEK CANADA ACI, Suite #200, 550 Sherbrooke West, Montréal, Québec, Canada, H3A 1B9
Tel: +1(514) 819-1653 | www.amtekgroup.com

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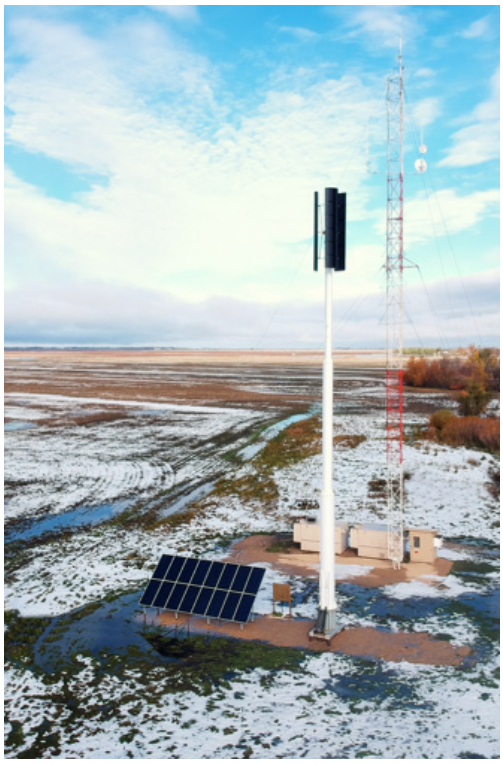
AMTEK

DESCRIPTION

TURBINE	Savonius-Darrieus hybrid (drag-lift); Will take wind from any direction
MAINTENANCE REQUIREMENTS	Low (1 sealed bearing / Auto-greaser standard equipment)
EXPECTED LIFE	15 - 25 years
WARRANTY	2 years



DIMENSIONS

BLADE HEIGHT	192 in. / 488 cm.
BLADE WIDTH	29 in. / 74 cm.
BLADE DEPTH	10 in. / 25 cm.
DIAMETER OF TURBINE W/BLADES	78 in. / 198 cm.
CIRCUMFERENCE	292 in. / 742 cm.
WEIGHT OF TURBINE	1030 lb. / 468 kg.

SPECIFICATIONS

GENERATION CAPACITY	5000 Watts
TURBINE OUTPUT	1 - 5000 Watts. AC 3 Phase
AVERAGE-RATED WIND SPEED	5 KW @ 11 m. / sec.
ROTATION BEGINS AT	2 m. / sec. wind speed
GENERATION BEGINS AT	3 m. / sec. wind speed
CUT-OFF WIND SPEED	70 mph. / 145 km. / h.
OPERATING RPM	70 - 100 RPM
BRAKING SYSTEM	ANA-5000 Over Rotate Control System: Designed to keep the turbine operating under 120 RPM up to 145 km./hr., with a manual breaking system in case of severe storm
VIBRATION	Minimal vibration
CONFIGURATION	Three wind blades mounted directly to generator
BLADES	Powder Coated
NOISE	65 db. @ 15 ft. (4.5 m.)

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