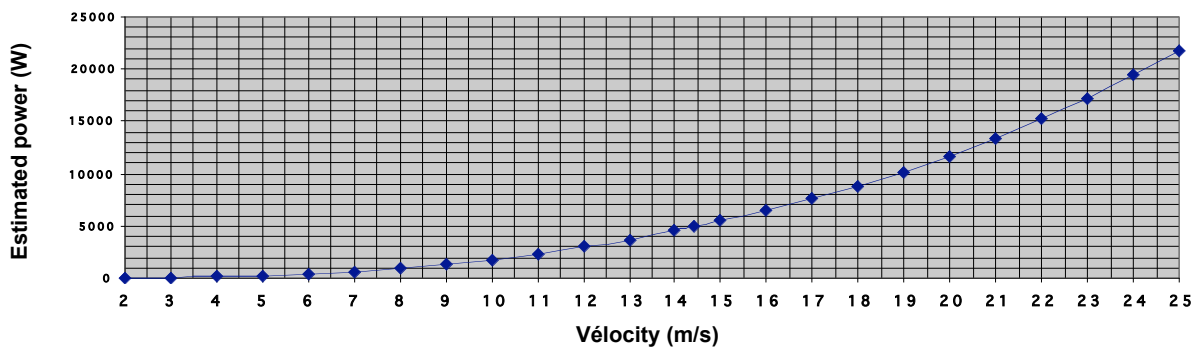
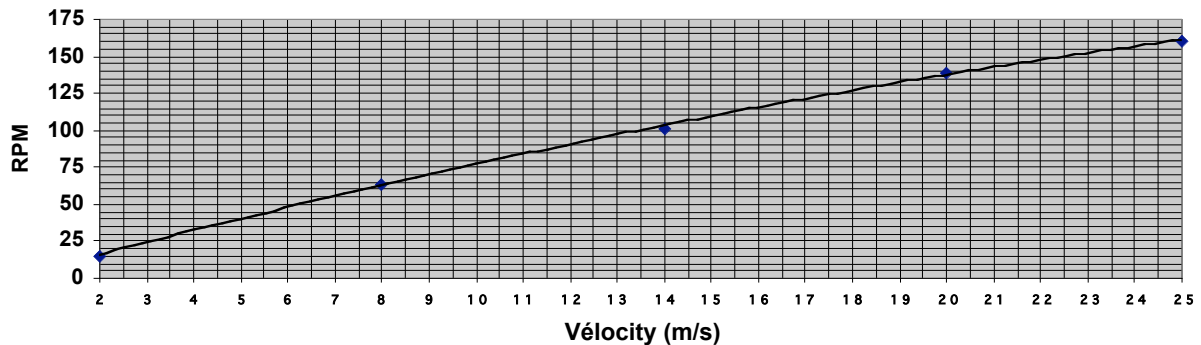


Power curve for the WindPorts 5 & 20 kW

Calculated power curve for the WindPorts 5 kW



Rotation vs vélocité



Notes: Start rotating speed: **1.8 m/s** (compared to 3.1 m/s with rotor type turbines)
 Energy is being generated as early as **2.5 m/s** (compared to 3.4 m/s with rotor type turbines)
 The unit includes a programmable electronic module used to stabilize the volume of incoming air based on local conditions and the user needs. The volume of air has been limited to **25 m/s** in these charts. Most propeller type turbines are stopped when wind reaches between 15.6 m/s and 19 m/s. The **20 kW** produces **95% of 4 times the energy produced by the 5 kW** unit.
Tests: Tests conducted in the national Research Council of Canada 9 m wind tunnel

Calculations and CFD Modeling: Swiderski Engineering Inc, Ottawa, Canada

Technical data

Materials:

Air intake and deflection panels : Fiberglass
Structure : Aluminium T6
Power transmission shaft : Cold roll steel
Energy transfer spokes : Stainless steel
Vanes : Composite

Sizes:

WindPorts □ 5 kW Maximum diameter : 4.4m (14.44') Height : 4.13 m (13.55')
Approx. weight. (Without drive shaft) : 1000 Kg

WindPorts □ 10 kW Maximum diameter : 4.4 m (14.44') Height : 6.8 m (22.31')
Approx. weight. (Without drive shaft) : 1910 Kg

WindPorts □ 20 kW Maximum diameter : 4.4 m (14.44') Height :13.6 m (44.62')
Approx. weight. (Without drive shaft) : 3700 Kg

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