



## Technology K2118: Dual Rotor Counter Rotating Wind Turbine

Current wind turbines traditionally rotate a shaft that spins a rotor within the stationary stator of an electric generator. Through electromagnetic induction, this mechanical energy is converted into electrical energy. AHHA Energy's patented design utilizes one set of blades to spin the rotor clockwise and another set of blades that spin a rotating stator counterclockwise. For a given wind speed, the generator rpm is approximately twice that of current wind turbine designs with a resultant increase in electrical generation.

### Electrical production comparison:



Wind Speed	1kw single rotor wind turbine	1kw dual rotor counter rotating wind turbine
6.7 mph	21 watts	52 watts
13.4 mph	175 watts	421 watts
18 mph	416 watts	1000 watts
27 mph	1000 watts	1700 watts

The single rotor required a minimum 6.7 mph wind speed to initiate electrical generation while the AHHA design required 4.5 mph.

The 1kw wind turbine is in production. 10kw model is undergoing field testing—production expected August, 2010. Development of a 250kw model is underway—testing will begin in June, 2010.

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