

Increasing Energy Efficiency for Residential & Commercial Wind Turbine Applications



Technology & Product Brochure



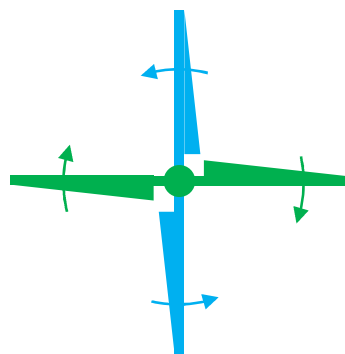
AN INNOVATIVE COMPANY

Infinite Wind Energy, LLC (IWE) is an innovator, developer, and manufacturer of wind turbine systems. We incorporate our proprietary and highly efficient generators, which use two sets of counter-rotating blades and generate 40% more energy when compared to other turbines of similar sizes in today's market. Our revolutionary generator uses hyperbolic (vertical systems) or catenoid (horizontal systems) shape that virtually eliminates vibration and related noise. Our unique assembly also significantly reduces maintenance upkeep.

ADVANCED TECHNOLOGY – KEY FEATURES

A

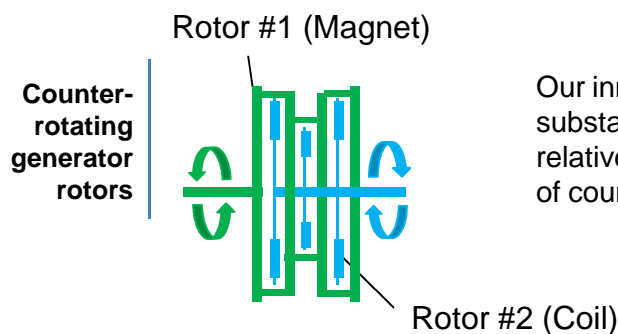
Counter-Rotating Blades



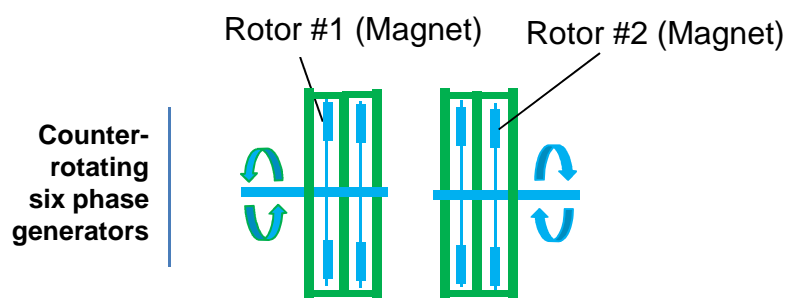
Our counter-rotating blades efficiently capture kinetic wind energy at both high and low wind speeds.

B

Innovative Proprietary Generator



Our innovative generator provides substantially more power due to the relative motion between the two sets of counter-rotating rotors.



We have technologically advanced proprietary generator designs.

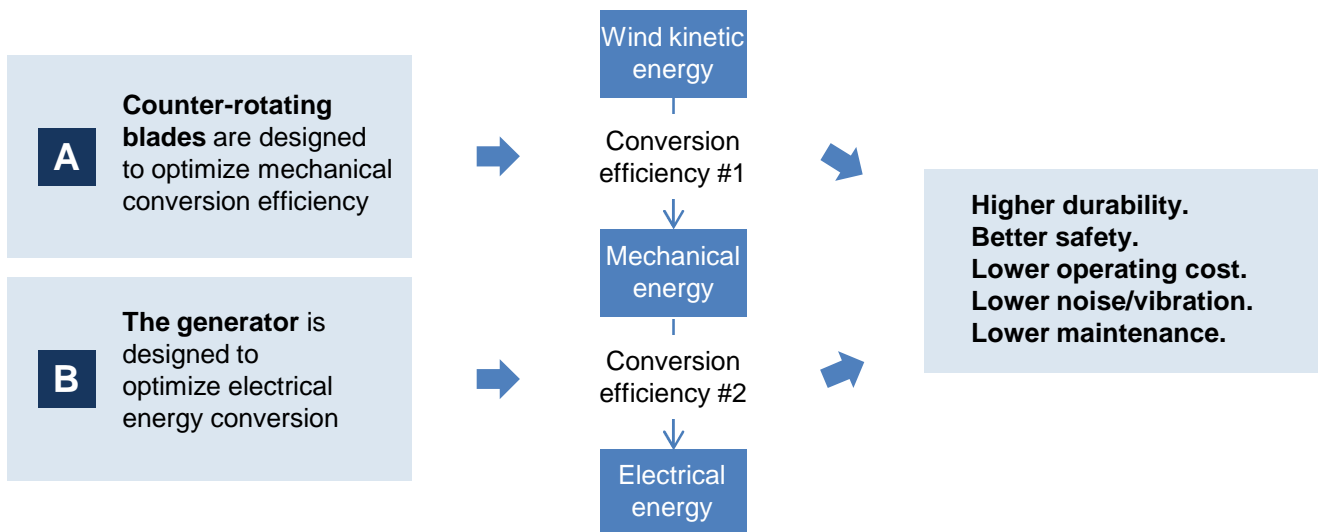
IWE's SUPERIOR DESIGN

Our counter-rotating blade design (A) and innovative proprietary generator design (B) not only optimizes total conversion efficiency, but also allows superior operating characteristics.

IWE designs

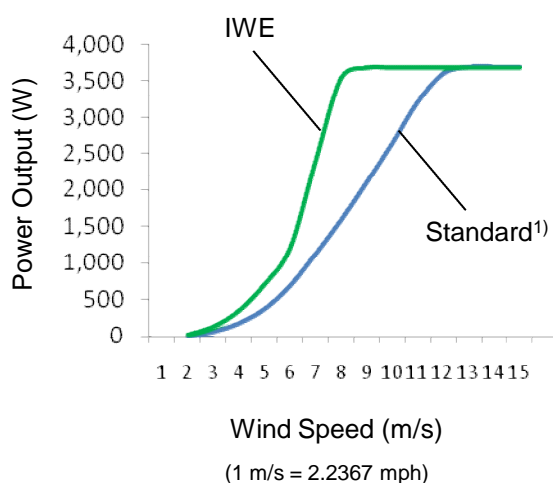
Energy conversion efficiency

Operating characteristics



ADVANTAGE

Power curve comparison – 3.6 kW turbine



Our designs are superior because:

- it captures energy even at lower wind speeds unlike our competitors;
- Its simplicity and efficiency allow elimination of gear boxes, thereby lower operating and maintenance costs;
- our counter-rotating set of blades increase "swept area" substantially, which generate greater power output;
- our counter-rotating rotors increase the rotational speed of generator, which in turn increase power output;
- in sum, our proprietary design allows our turbines to generate greater energy output consistently and reliably at lower cost.

1) Standard – single set, 3-bladed wind turbines

VERSATILITY

Our technology principles are universal. Our technology can be applied to all wind applications and sizes. We provide customized wind turbines at various sizes.

Small Wind Turbines

IWE provides technologically advanced small wind turbines that provide long term economic advantages.

IWE's small wind turbines are capable of providing a cost-effective, efficient, durable, low maintenance, renewable energy source for residential, community, and industrial use in various locations. Examples of locations include:

- Land
- Roof-tops
- Cell/water towers
- Street lights
- Any remote locations

Like other small wind turbines, IWE turbines can provide grid-tie¹⁾ functionality.

IWE small wind turbines provide substantial benefits for the owners:

- reduced carbon footprints;
- reduced or total elimination of electricity bill;
- minimized risks of rate hikes and power outages;
- reduced capital costs due to states and federal tax incentives;
- great source of green marketing while doing the right thing for the environment.



1) Grid-tie functionality means that when you generate extra electricity it is sold to your utility company; when your wind turbine isn't producing enough electricity the grid will automatically provide the required electricity

TECHNICAL SPECIFICATION DATA



Small Wind Turbines

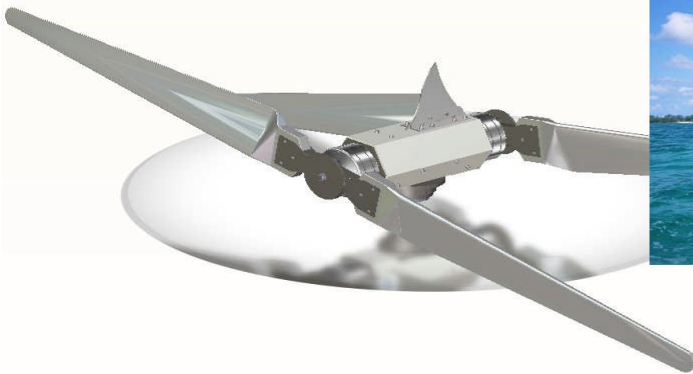
Nominal Power		3.6 kW	10kW	20kW	50kW
		Horizontal	Horizontal	Horizontal	Horizontal
Model Name		Dolphin3.6	Dolphin10	Dolphin20	Dolphin50
Generator	Type	Permanent Magnet Generator			
	Rated Power	4kW	11kW	22kW	55kW
	Voltage	200-300 V	300-500 V	300-500 V	400-600 V
Blade	Blade sets	2			
	Blade Number (front/back)	2/2			
	Diameter (front/back or top/bottom) - approx.	4.4 m	8.6 m	10.8 m	15.5 m
	Blade Material	GFRP			
	Swept Area	15.2 m ²	58.1 m ²	91.6 m ²	188.7 m ²
Tower	Type	Monopole or Hydraulic Monopole			
	Height (optional)	Varies depending on location & mounting type			
	Material	Metal with UV coating			
Operating Conditions	Cut-in Wind Speed	2.5 m/s			
	Rated Wind Speed	8 m/s	8.5 m/s	9 m/s	9.5 m/s
	Furling Wind Speed	12 m/s	12 m/s	12 m/s	Electronic yawing
	Survival Wind Speed	45 m/s			
Clutch/Brake	Clutch	No (Direct Drive)			
	Electric Brake (Dump Load)	Yes			
	Extreme Wind Control	Natural Furling			
Inverter	Type	Grid-Tie Inverter (UL Certified)			
	Rated Power	4.0 kW	10.0 kW	20.0 kW	50.0 kW
	Operating Range/Utility Voltage & Frequency	208, 220, 480 V AC, 3 Phase / 50 or 60 Hz			
Total Weight (Without Tower) - Approx.		250kg	450kg	500kg	920kg

Subject to technical alterations, errors, and omissions. © Infinite Wind Energy, LLC. All Rights Reserved.

Increasing Energy Efficiency for Residential & Commercial Wind Applications



Dolphin 3.6



3.6kW Horizontal Axis Wind Turbine

**We consistently achieve 40% more energy output
than our competitors.**

Let us help you with your renewable energy needs.

Please contact us for more information:

Email: info@infinitemwindenergyllc.com

www.infinitemwindenergyllc.com

Korean: www.iwekorea.com