

Wind turbine generators

low cost, highly efficient power generation





Airwave Technology supplies a wide range of standard upwind wind turbines with outputs from 5kW to 100kW.

Suitable for most wind regimes our high reliability, low cost wind turbines are ideal for small scale wind projects.

We understand that the purchase of a turbine is a long term investment and believe the cost of energy produced by our turbines is the lowest of any small turbine.

Further package options allow the customer to tailor the turbine to suit their exact site requirements and budget.

Wind Turbine Package Options

- Standard: Nacelle, Blades and Controller with tower drawing.
- Standard + Monopole tower.
- Standard + Grid connected or off grid inverter packages.
- Foundation calculations (*full site information required*).
- Installation by one of our accredited contract partners.
- 24 hour technical support warranty and service packages.

Visit www.airwavetechnology.ie for our free guide to buying a WER wind turbine. It provides a general overview, advice and details the information required by the turbine manufacturer to ensure the product supplied is correct for your application.

System Design and Expertise

Our sales organisation are supported by qualified application engineers. These engineers work closely with the manufacturing facility to ensure we offer the best solutions to our customers installation problems.

We can also offer hybrid wind solar systems and diesel solar systems designed to your energy needs. Both of these hybrid applications are ideal for remote off-grid sites.

About Airwave Turbines

Airwave Technology Ltd. is a privately owned company having headquarters in Kinvara Co. Galway, Ireland.

Airwave Turbines | www.airwavetechnology.ie



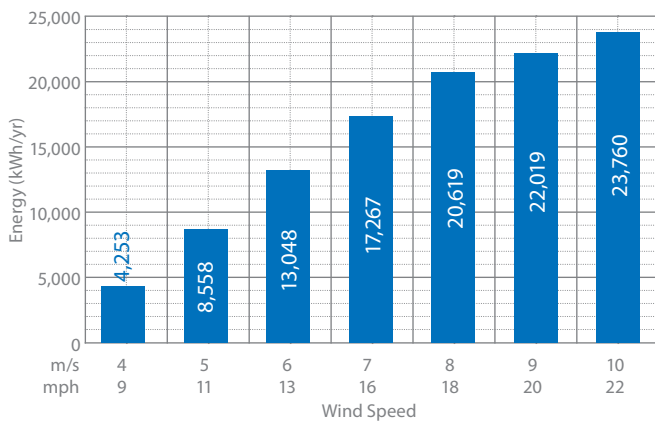


5 kW wind turbine generator

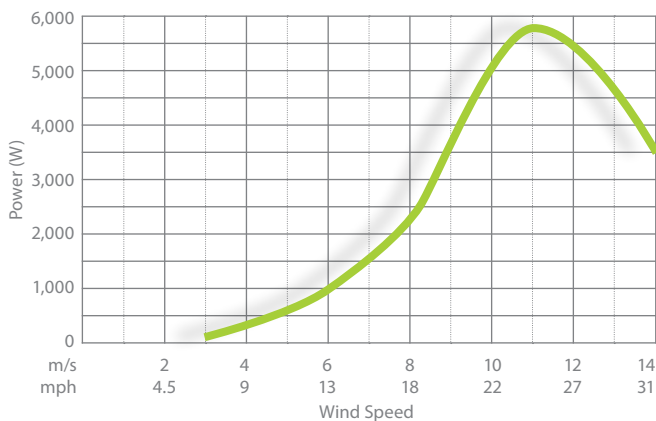
Key Features and Benefits

- Neodymium permanent magnet DC generator for highly efficient power generation.
- Low starting torque for improved power generation at lower wind speeds.
- High tensile wood-epoxy blades for lightweight operation and survivability.
- Self aligning to maximise power extraction.
- Less mechanical components for low maintenance operation.

5 kW Yearly Energy Yield



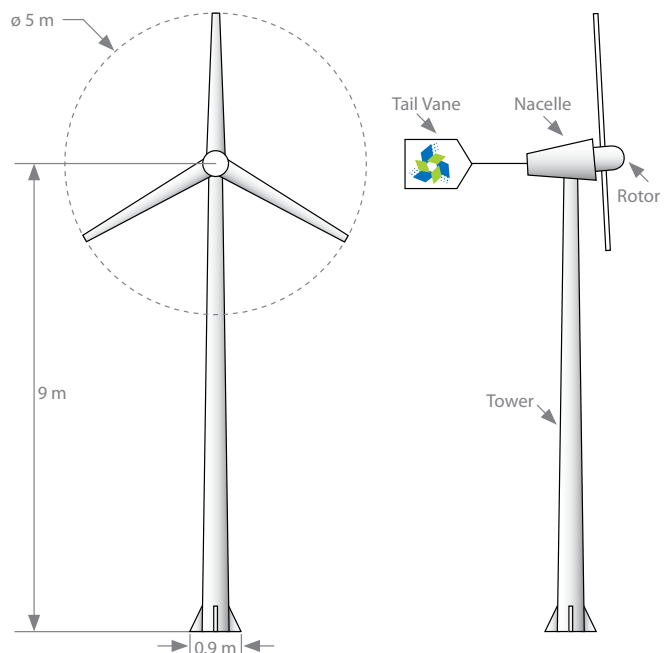
5 kW Power Curve



Specification and Controller Features

Model	FD5-5/10
Rotor Diameter	5 m
Blade Material	Wood-Epoxy
Number of Blades	3
Working Wind Speed	3–25 m/s (7–56 mph)
Cut-in Wind Speed	<3 m/s (<7 mph)
Rated Wind Speed	10 m/s (22 mph)
Survival Wind Speed	50 m/s (112 mph)
Rated Output Power	5 kW
Maximum Output Power	5.8 kW
Rated Output Voltage	DC 230 V
Generator Type	3 Phase Permanent Magnet Generator
Weight	167 kg
Speed Regulation	Yaw Regulating, Electromagnetic Brake and Passive Stall Control
Noise with 6 m/s wind speed and background	<55 dBA
Distance of measure	8 m

- Intelligent battery management with PWM charging.
- Unique rotor speed control for safe operation.
- Reverse connection protection, open circuit protection.
- Dump load protection, over voltage protection.



Note power output for wind turbines vary due to location, height, quality of wind available



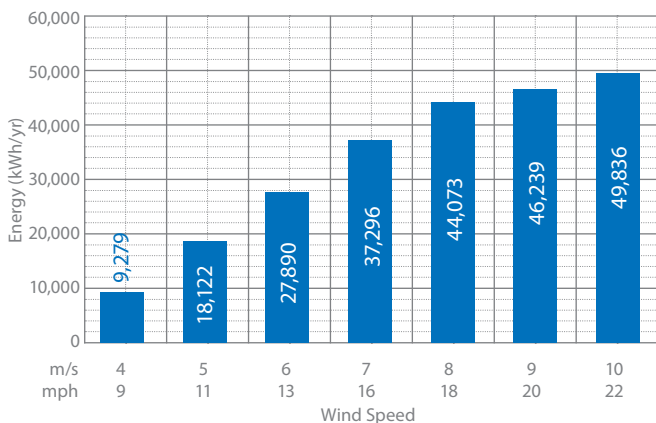
10 kW wind turbine generator



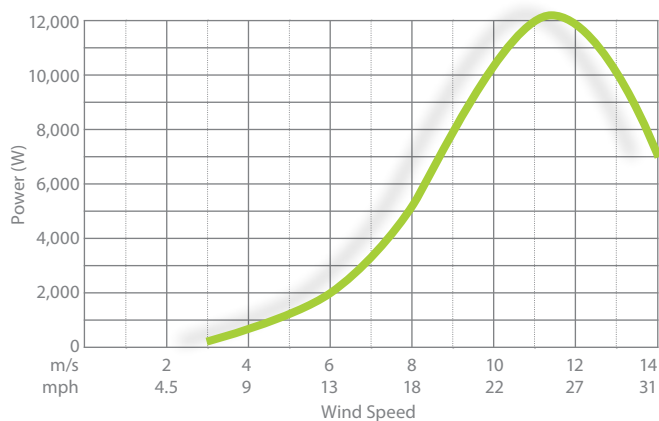
Key Features and Benefits

- Neodymium permanent magnet DC generator for highly efficient power generation.
- Low starting torque for improved power generation at lower wind speeds.
- High tensile wood-epoxy blades for lightweight operation and survivability.
- Self aligning to maximise power extraction.
- Less mechanical components for low maintenance operation.

10 kW Yearly Energy Yield



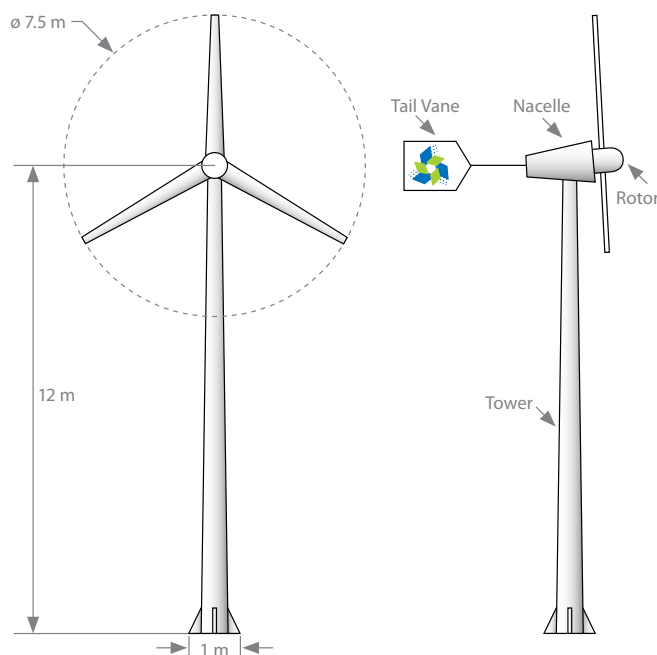
10 kW Power Curve



Specification and Controller Features

Model	FD7.5-10/10
Rotor Diameter	7.5 m
Blade Material	Wood-Epoxy
Number of Blades	3
Working Wind Speed	3–25 m/s (7–56 mph)
Cut-in Wind Speed	<3 m/s (<7 mph)
Rated Wind Speed	10 m/s (22 mph)
Survival Wind Speed	50 m/s (112 mph)
Rated Output Power	10 kW
Maximum Output Power	12.4 kW
Rated Output Voltage	DC 460 V
Generator Type	3 Phase Permanent Magnet Generator
Weight	600 kg
Speed Regulation	Yaw Regulating, Electromagnetic Brake and Passive Stall Control
Noise with 6 m/s wind speed and background	<58 dBA
Distance of measure	10 m

- Intelligent battery management with PWM charging.
- Unique rotor speed control for safe operation.
- Reverse connection protection, open circuit protection.
- Dump load protection, over voltage protection.



Note power output for wind turbines vary due to location, height, quality of wind available

30 kW wind turbine generator



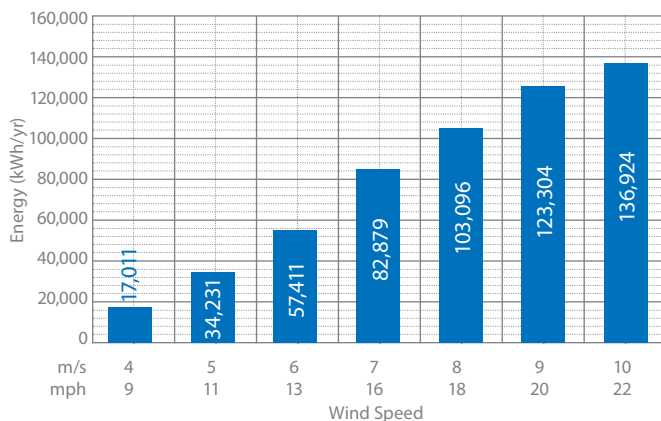
Key Features and Benefits

- Neodymium permanent magnet DC generator for highly efficient power generation.
- Low starting torque for improved power generation at lower wind speeds.
- High tensile wood-epoxy blades for lightweight operation and survivability.
- Self aligning to maximise power extraction.
- Less mechanical components for low maintenance operation.

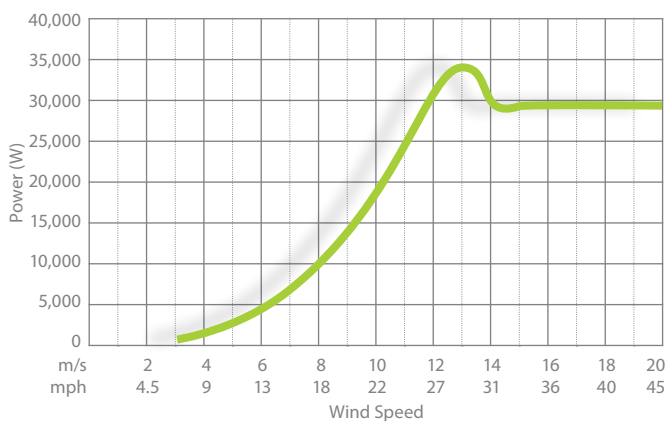
Specification and Controller Features

Model	FD10-30/12
Rotor Diameter	10 m
Blade Material	Wood-Epoxy
Number of Blades	3
Working Wind Speed	3–25 m/s (7–56 mph)
Cut-in Wind Speed	<3 m/s (<7 mph)
Rated Wind Speed	12 m/s (27 mph)
Survival Wind Speed	50 m/s (112 mph)
Rated Output Power	30 kW
Maximum Output Power	35 kW
Rated Output Voltage	DC 460 V
Generator Type	3 Phase Permanent Magnet Generator
Weight	2000 kg
Speed Regulation	Mechanical Brake, Electromagnetic Brake and Yaw Regulating
Noise with 6 m/s wind speed and background	62 dBA
Distance of measure	14 m

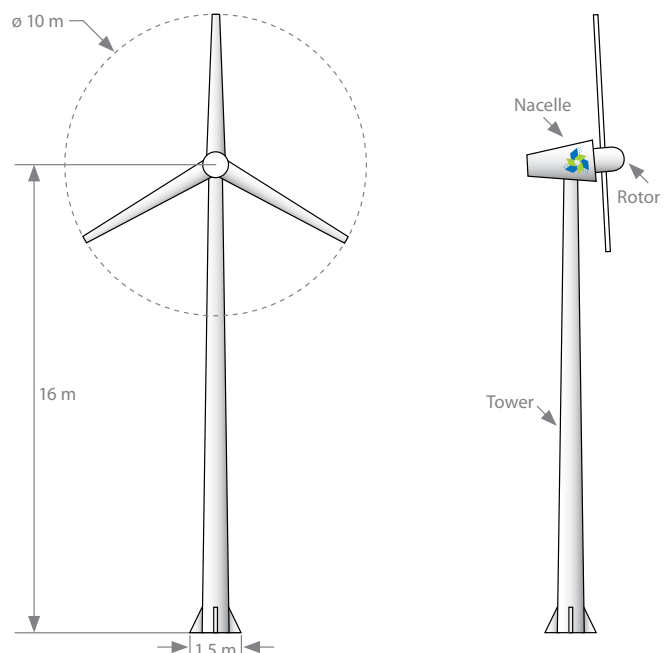
30 kW Yearly Energy Yield



30 kW Power Curve



- Intelligent battery management with PWM charging.
- Unique rotor speed control for safe operation.
- Reverse connection protection, open circuit protection.
- Dump load protection, over voltage protection.



Note power output for wind turbines vary due to location, height, quality of wind available



50 kW wind turbine generator

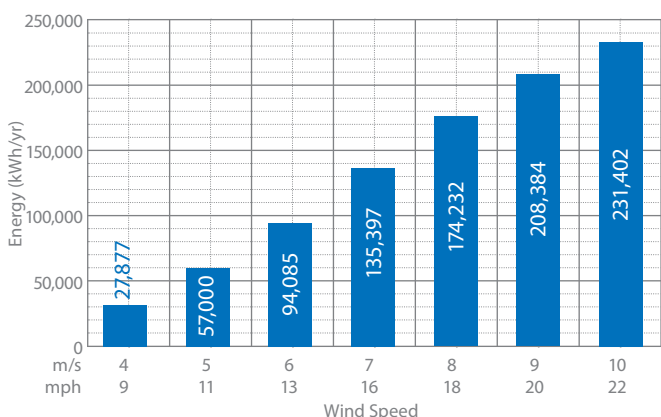
Key Features and Benefits

- Neodymium permanent magnet DC generator for highly efficient power generation.
- Low starting torque for improved power generation at lower wind speeds.
- High tensile wood-epoxy blades for lightweight operation and survivability.
- Self aligning to maximise power extraction.
- Less mechanical components for low maintenance operation.

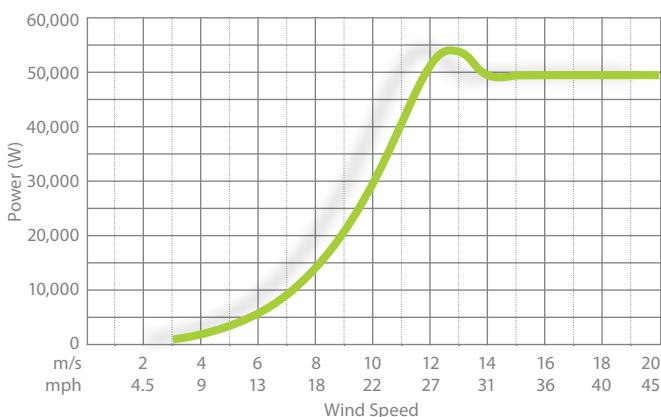
Specification and Controller Features

Model	FD13-50/12
Rotor Diameter	13 m
Blade Material	Wood-Epoxy
Number of Blades	3
Working Wind Speed	3–25 m/s (7–56 mph)
Cut-in Wind Speed	<3 m/s (<7 mph)
Rated Wind Speed	12 m/s (27 mph)
Survival Wind Speed	50 m/s (112 mph)
Rated Output Power	50 kW
Maximum Output Power	55 kW
Rated Output Voltage	DC 460 V
Generator Type	3 Phase Permanent Magnet Generator
Weight	2900 kg
Speed Regulation	Mechanical Brake, Electromagnetic Brake and Yaw Regulating
Noise with 6 m/s wind speed and background	65 dBA
Distance of measure	19 m

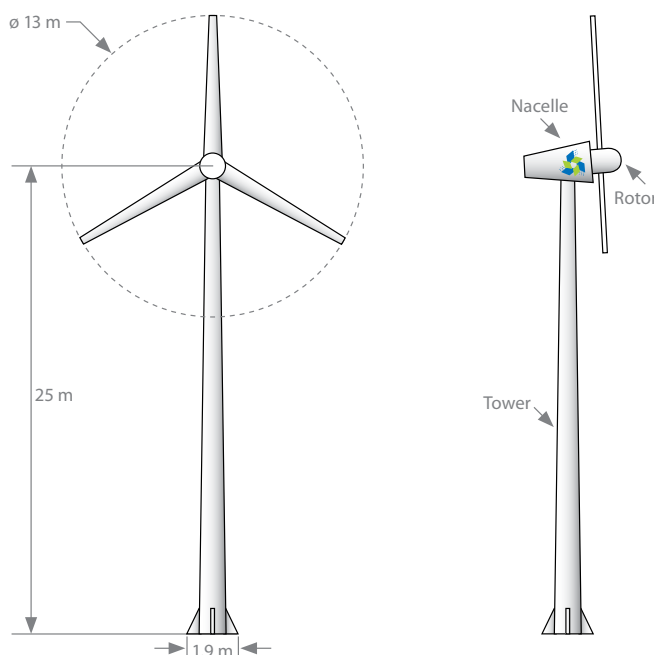
50 kW Yearly Energy Yield



50 kW Power Curve



- Intelligent battery management with PWM charging.
- Unique rotor speed control for safe operation.
- Reverse connection protection, open circuit protection.
- Dump load protection, over voltage protection.



Note power output for wind turbines vary due to location, height, quality of wind available



100 kW wind turbine generator



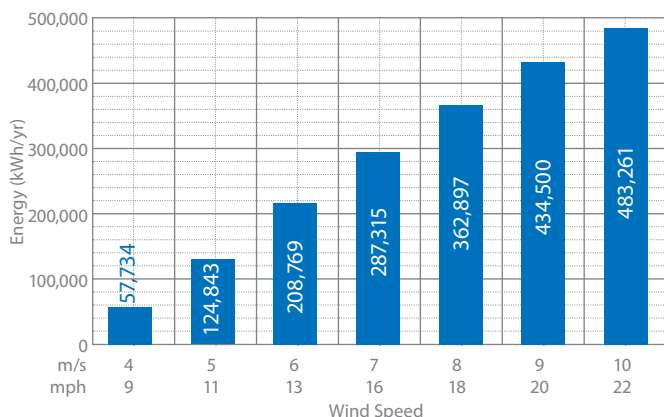
Key Features and Benefits

- Neodymium permanent magnet DC generator for highly efficient power generation.
- Low starting torque for improved power generation at lower wind speeds.
- High tensile wood-epoxy blades for lightweight operation and survivability.
- Self aligning to maximise power extraction.
- Less mechanical components for low maintenance operation.

Specification and Controller Features

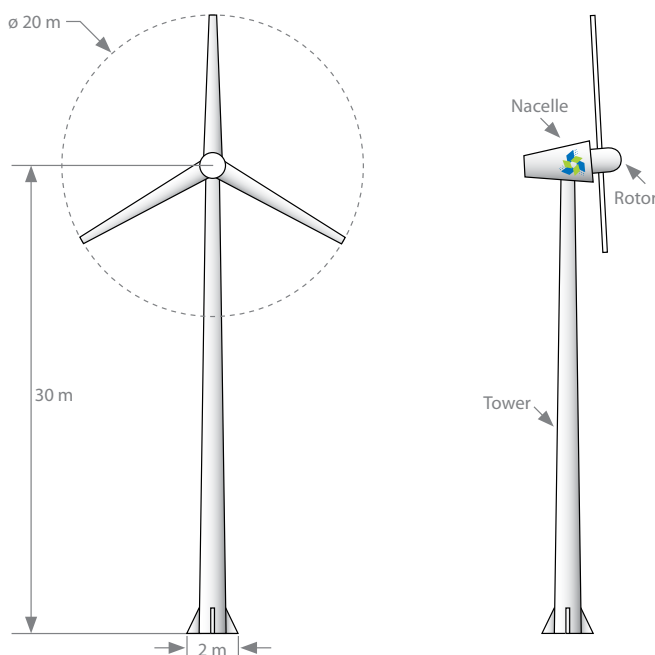
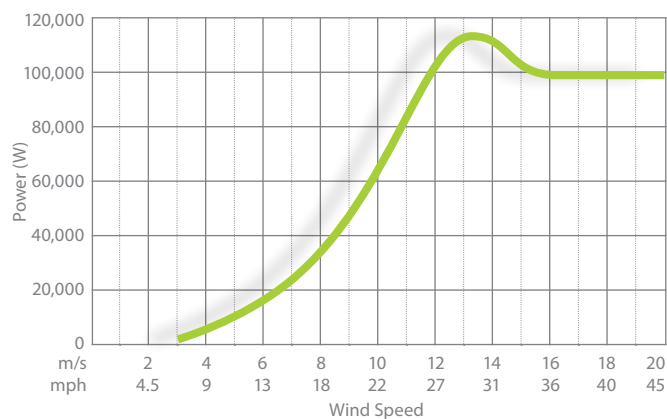
Model	FD20-100/12
Rotor Diameter	20 m
Blade Material	Wood-Epoxy
Number of Blades	3
Working Wind Speed	3–25 m/s (7–56 mph)
Cut-in Wind Speed	<3 m/s (<7 mph)
Rated Wind Speed	12 m/s (27 mph)
Survival Wind Speed	50 m/s (112 mph)
Rated Output Power	100 kW
Maximum Output Power	118 kW
Rated Output Voltage	DC 460 V
Generator Type	3 Phase Permanent Magnet Generator
Weight	6500 kg
Speed Regulation	Mechanical Brake, Electromagnetic Brake, Yaw Regulating and Blade Pitch Control

100 kW Yearly Energy Yield



- Intelligent battery management with PWM charging.
- Unique rotor speed control for safe operation.
- Reverse connection protection, open circuit protection.
- Dump load protection, over voltage protection.

100 kW Power Curve



Note power output for wind turbines vary due to location, height, quality of wind available



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