



KestrelL2500

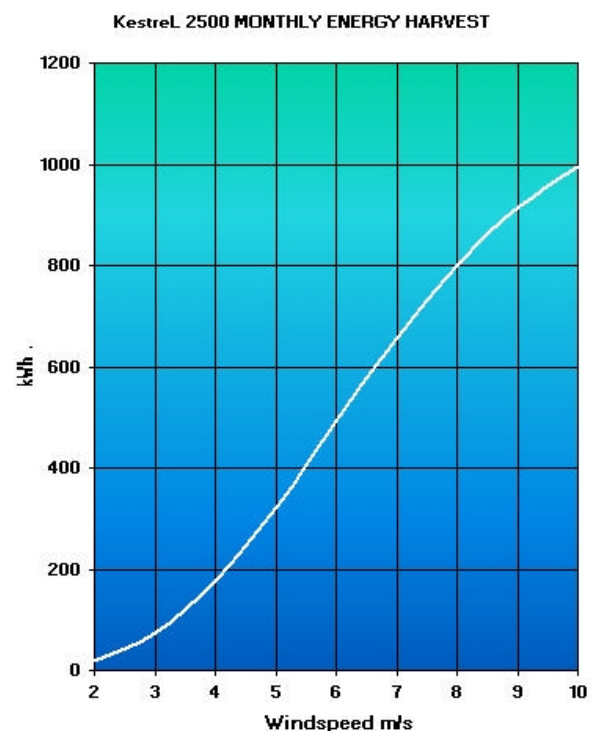
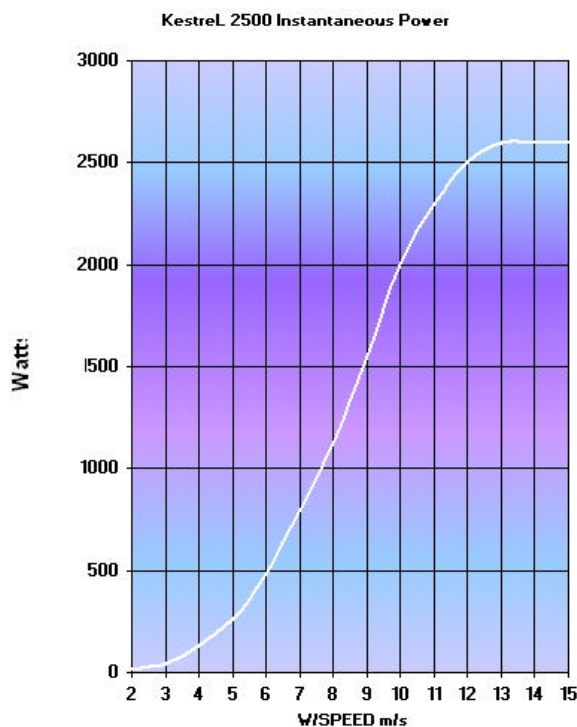
Full Axial Flux Discoid Technology

The KestrelL2500 is fitted with a fully aerodynamic high performance three-blade rotor

The KestrelL2500 uses a totally new design 120 pole single rotor direct drive alternator that incorporates three main shaft bearings. It runs virtually silent.

The efficient three blade configuration drives the axial flux permanent rotor and the alternator output is matched to the blade characteristic by using new step generation principles.

At rated rpm the passive pitch mechanism operates. Overspeed control is by alternator rpm and not by windspeed. The turbine produces full power in any excess wind speed by simply spilling the wind.



The KestrelL2500 can produce a maximum power of 2700 Watt. This is more than 50 Amp of charging current into a 48V battery system. The Monthly Energy Graph shows what a KestrelL2500 can harvest from different annual average windspeeds. Actual results can vary with factors such as wind distribution, topology, tower height and altitude.

Kestrel2500 Wind Turbine Generator

Data Schedule

Rated Output	2500W	Rated Power 10.5m/s
Maximum Power	2700W	Dynamically limited
Rated Rotational Speed	500rpm	Turbine rpm for Rated Output
Cut in Windspeed	2.0m/s	Windspeed for Charging Output
Rotor Swing Diameter	3.8m	Diameter of Swept Area
Number of Blades	3	Optimised Upwind 3 Blade Design
Blade Type	Aerofoil	Full Aerodynamic Blade
Lateral Thrust	500N	Horizontal Force Vector at 12m/s
Speed Control	750rpm	Passive Blade Pitching
Noise Control		Blade Laminar Modifier
Tower Top Mass	150kg	Total turbine mass
Protection	IP55	Protected from Moisture and Dust
Generator Type	PM12	Polyphase Brushless Permanent Magnet
Output Voltage	DC	Manufactured for 48, 110, 300Vdc
Utility Intertie	YES	Using an approved Inverter
Resistance Heating	YES	Micro Systems, Incubators etc.
Water Pumping	YES	Optional Pump Controller
Estimated Monthly Energy	350kWh	Capacity Factor (CF) of 20% and 5m/s
Warranty	2 Year	Conditional Warranty
Routine Maintenance	Visual	Periodic Visual Inspection

Regulator

Depending on the application the regulator will be made to specification.