



kestrel  
wind turbines

Eveready Diversified Products (Pty) Ltd

[www.kestrelwind.co.za](http://www.kestrelwind.co.za)

## e300i

### Specifications

The next generation e300 exemplifies the beauty of sophisticated aerodynamic design. Every feature is designed to optimise renewable energy generation. The e300i is compact and unobtrusive making it suitable for urban living. Its advanced pitch control regulation maintains full power in any wind that exceeds the rated wind speed optimising energy harvest capacity.

The e300i is suitable for all environments as it is a low torque machine that requires minimal wind to generate energy. Modern living demands more applications that require energy usage. The e300i generates regulated and optimised energy for increased energy efficiency and cost saving.

### Design

The three aerofoil blades are limited by a passive pitch control system that allows the e300i to continuously generate usable energy whenever the wind blows.

Each of the three blades, with a diameter of 3.0m, has a blade laminar modifier that reduces noise emissions, making it an inconspicuous method of renewable energy generation in all installations and environments.

### Applications

- Cost saving mechanism, replacing noisy generators for back-up power that rely on fossil fuels
- Boost other renewable energy installations with hybrid generation, making the installations more productive, reliable and cost effective
- Water pumping systems with optional water pump controller to reduce utility costs
- Telecommunication applications as energy generated is continual and reliable
- Grid tie applications using approved inverters to reduce energy costs
- Small wind farm installations
- Resistance heating with micro systems or incubators
- Adaptable to meeting all other specific electrical needs

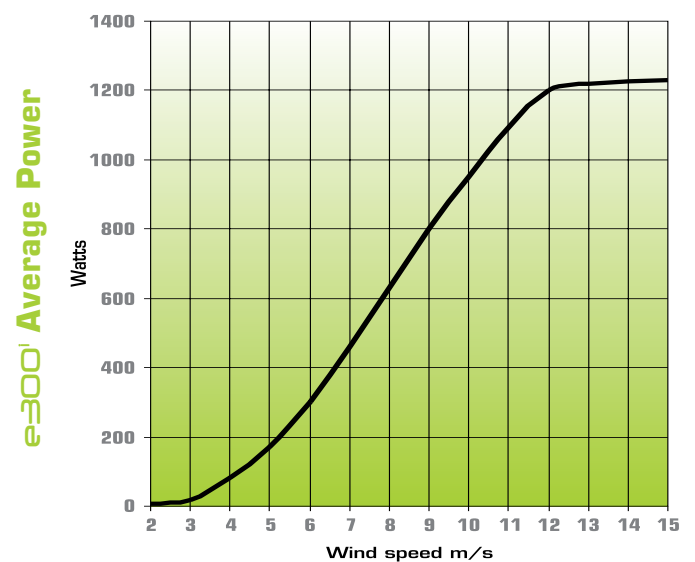
Up to 1000 watts of power from a high performance three blade turbine

Affordable clean electricity, adaptable to your needs

Reliable and convenient with a long life design

Suitable for urban living

### POWER • QUALITY • AFFORDABILITY



Renewable Power for Life



Small Wind Turbine Class	II
Rated Power	1000w
Rated Windspeed	10.5m/s
Rated Rotational Speed	650rpm
Power Output@11m/s	1000w
Maximum Power	1200w from 12m/s
Cut in Windspeed	2.8m/s
Alternator Type	Axial Flux
Rotor Diameter	3m
Number of Blades	3
Type of Blades	Full Aerofoil
Tower Top Weight	40kg
Speed Control	Pitch Control
Emergency Brake	Electrodynamic
Charge Regulator	Charge or Dump
Standard Voltage	12, 24, 48, 110, 200
Protection	IP55

## Technical Specifications

Rated output is the optimal power rating of the turbine at the rated wind speed at sea level. Rated rotational speed is the turbine rpm for optimal power output.

Without a cut-out wind speed power generation is continuous. Rated output is maintained by limiting the output using passive pitch control in high winds, which prevents over speeding inefficiencies.

The Axial Flux Alternator remains cool while maximum energy is being generated in the form of polyphase high frequency output, reducing inefficiency through energy losses.

The full aerofoil blades are moulded from glass fibre to protect against dust and moisture damage. The e300i conforms to IEC standards and follows the provisions in the directives IEC61400-2 (Small wind turbines).

Kestrel Wind Turbines and its global affiliates and dealers are committed to renewable energy generation as well as reducing the use of fossil fuels. Wind power addresses most of the current issues of present renewable power generation options. Kestrel is continuously developing small wind turbine technology to supply personal or business energy demands.

Kestrel is continuously improving current small wind turbines in the Kestrel range to ensure the highest quality product is distributed. All Kestrel dealers share these values and are trained to support Kestrel's customers in understanding their power requirements and the local wind resource available to them. Also, to evaluate the turbines in the Kestrel range that best accommodates these requirements, assist installations and advise on maintenance procedures.

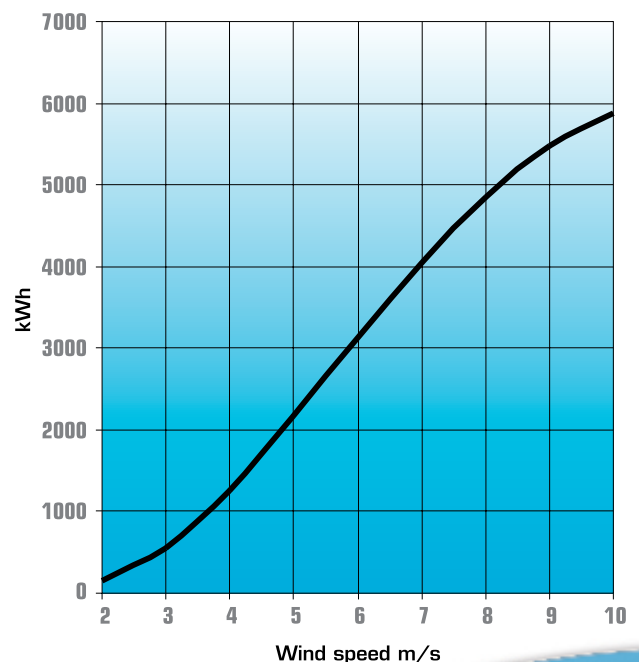
## Power Generation

Generating your own renewable power is low maintenance as routine maintenance is largely based on visual assessments. Maintenance schedules are designed to suit the local, respective, wind area and power class. With a maximum instantaneous power rating of 1200W, annual energy harvests can exceed 5500kWh. Energy may be harvested at any wind speed above the cut-in speed and rated output is maintained at any wind speed exceeding the rated wind speed through passive speed control. Energy output is intrinsically linked to regional wind distribution, topology and altitude as well as tower height. Potential energy harvest is estimated using an average wind speed in order to tailor the most suitable Kestrel wind system to your electrical need.

Results may vary based on wind distribution, topology, tower height and altitude. In order to estimate ones own potential energy harvest an average wind speed must be used.

Note: Specifications may vary with continuing development and innovation.

e300i (48v) Annual Harvest



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