



kestrel
wind turbines

Eveready Diversified Products (Pty) Ltd

www.kestrelwind.co.za

e220

Specifications

The e220 is an innovative small wind turbine with every feature designed to optimise small scale renewable energy generation. Its advanced pitch control regulation maintains full power in any wind that exceeds the rated wind speed optimising energy harvest capacity.

Compact and durable, the e220 has a low cut-in speed resulting from the advanced technology incorporated in this machine. Modern living demands more applications that require energy usage. The e220 generates regulated and optimised energy for increased energy efficiency in any specific application.

Design

The three aerofoil blades are limited by a passive pitch control system that allows the e220 to generate usable energy efficiently and inconspicuously.

The generator technology minimises start up torque which means the e220 generates energy in low wind speeds. With a diameter of 2,2m it is discreet in all installations and urban environments.

Applications

- Cost saving mechanism, replacing noisy generators for back-up power that rely on fossil fuels
- Battery charging for use in remote areas or specific electrical needs
- 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
- Small wind farm installations
- Adaptable to meeting all other specific electrical needs

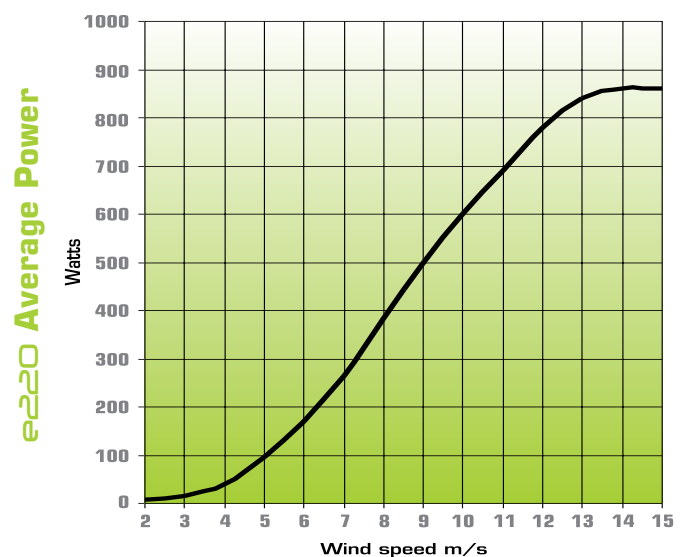
Up to 800 watts of power from a high performance three blade turbine

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	800w
Rated Windspeed	12.5m/s
Rated Rotational Speed	1000rpm
Power Output@11m/s	700w
Maximum Power	850w from 13m/s
Cut in Windspeed	2.8m/s
Alternator Type	Axial Flux
Rotor Diameter	2.2m
Number of Blades	3
Type of Blades	Full Aerofoil
Tower Top Weight	30kg
Speed Control	Pitch Control
Emergency Brake	Electrodynamic
Charge Regulator	Charge or Dump
Standard Voltage	12, 24, 48, 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 e220 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.

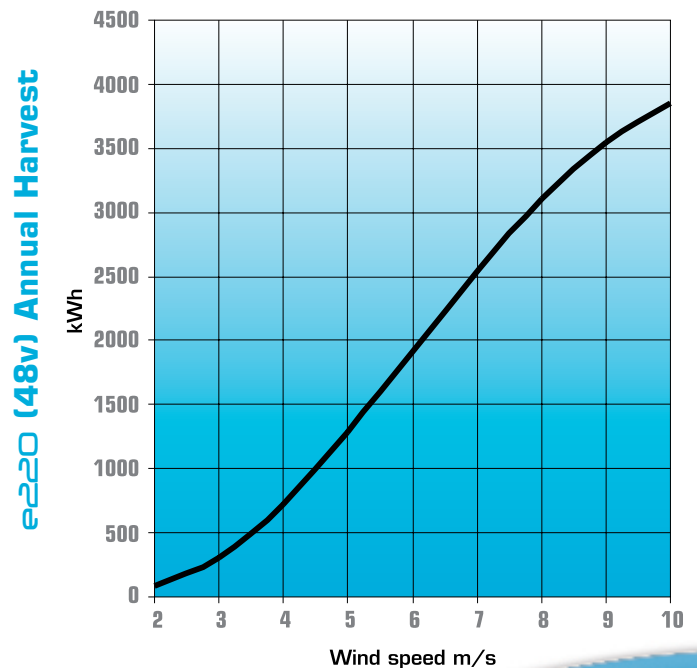
Kestrel is continuously improving current small wind turbines in the Kestrel range to ensure the highest quality product is distributed. All Kestrel dealers share these values and are trained to support Kestrel's customers in understanding their power requirements and the local wind resource available 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 850W, annual energy harvests can exceed 3800kWh. 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.



kestrelwind@eveready.co.za • www.kestrelwind.co.za
Tel: 27 (0) 41 401 2027 / 2500 • Fax: 27 (0) 41 394 5090
Eveready Road, Scrivandale Port Elizabeth, 6000, South Africa

Renewable Power for Life