## Kestrel **e400nb**

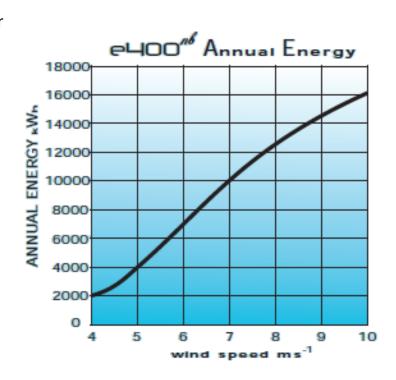




Whether to boost solar & other renewable energy application in a reliable and cost effective manner, or as part of a small wind farm installation, whether to integrate within a water pumping system to reduce utility costs, or to provide continual & reliable power for repeater stations, either tied to the grid using approved inverters to reduce energy costs, or for housing, community & health centres not connected to the national grid, the e400nb by Kestrel is adaptable to meeting many specific electrical needs.

- ✓ Up to 3,500 W of power from a high performance 3 blade turbine
- ✓ Affordable clean electricity, adaptable to your needs
- Reliable and convenient with a long life design
- √ Valuable asset for fulfilling energy requirements
- Advanced passive pitch control system that maintains full power in any wind, optimising energy harvest capacity
- Moderates noise emissions effectively, making it an and reliable method of renewable energy generation in all installations and environments
- The advanced direct drive alternator incorporates three main shaft bearings for longevity and increased reliability
- Minimum maintenance, comprises of only periodic visual checks

## ✓ ELIGIBLE FOR UK FEED-IN TARIFFS

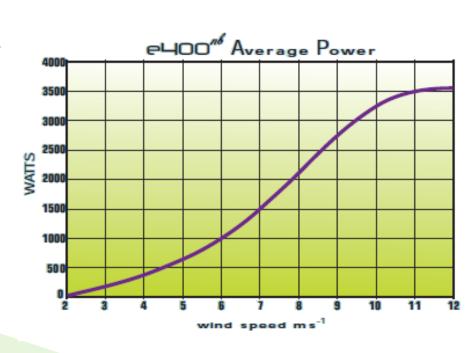


## Specifications - small wind turbine class I

Rated output	3,500 W
Maximum power	3,600 W at 12 m/s
Rated wind speed	11 m/s
Cut-in winds speed	3.2 m/s
Generator type	Permanent magnet axial flux brushless
Rotor diameter	4 m (13.1 ft)
Number of blades	3
Blade material	Fiberglass to protect against dust and moisture damage
Tower top mass	250 kg (550 lb)
Tower height	12 to 18 m (39 to 59 ft)
Tower type	Monopole
Over speed protection	Pitch control to prevent over speeding inefficiencies
Output voltage	48, 110 and 250 Vdc
Applications	Battery charging, grid tie, hybrid, water pumping, telecommunications

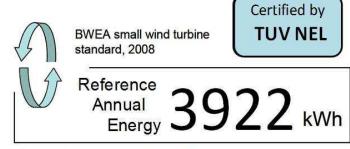
The design of the generator and the rotor reduces inefficiency through energy losses.

The e300i conforms to IEC standards and follows the provisions in the directives IEC 61400-2 (small wind turbines).

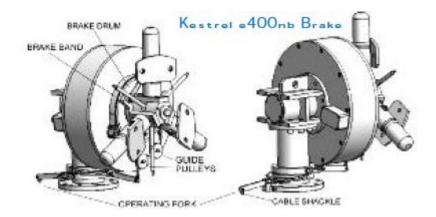




Certificate Number MCS/2012/02
Kestrel e400nb 3.5kW 250 Wind Turbine



Annual average wind speed of 5m/s (11mph). Your performance may vary.



The same wind turbine is available in selected countries without the mechanical brake and is designated the e400n.

The Kestrel e400nb is fitted with a mechanical brake that will stop the turbine safely in any wind condition. The brake is activated by a simple manual operation at the base of the tower.



ACOUSTIC NOISE LEVELS									
Turbine Make:			Kes	Kestrel Model:			e400nb 3.5kW 250		
NOISE EMMISSION LEVEL						NO	NOISE PENALTY		
Sound Power LWd,8m/s	100 dB(A)	Noise Slope SdB (dB/m/s)		1.52			NO	)	
10.00 10.00 2.00 Avind Speed at Botor Centre (m/s) 8.00 2.00 4.00 2.00 0.00		>45dB(A) 40-45dB(A) <40dB(A)							
	20 40 60 80 100 120 140 160 180 200 220 240 260 280 300  Slant distance from rotor centre (m) Immission Noise Map								
	Derived from test results issued by TUV SUD NEL Ltd March 2012								