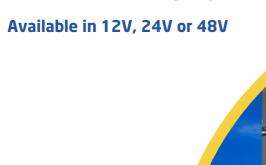


### **Local Power Worldwide**

**LE-v50** 

The perfect silent turbine









For pricing or any further information, please contact Omni Instruments Ltd.







#### Silent

Noise produced is below that of background level

#### Compact and lightweight

Can be installed in a variety of positions with ease

#### Reliable

Precision engineered in the UK

#### Rugged

Survives gusts of 27 m/s (60 mph)

#### Output

Up to 70W

#### Marine quality finish

High quality components and lasting performance

# Designed and proven to survive gusts of 60mph

The LE-v50 vertical axis wind turbine is a compact, silent and lightweight turbine designed to trickle charge marine batteries or for low power electronic devices such as data-loggers, radio and telemetry equipment.

The LE-v50 delivers power outputs of up to 70W in absolute silence. Compared to similar vertical axis turbines, the LE-v50 delivers far higher output thanks to the crossventilated 'savonious' vertical axis rotor. This is coupled with the well proven axial flux alternator design that has been successfully used on all our turbines. With only one moving part, there is little to go wrong.

The small footprint and lightweight design allows the turbine to be installed in places where space is a premium. The turbine will receive the wind from 360 degrees without the need to yaw into position.

The LE-v50 can self-regulate without the need for external charge controllers and the turbine's double bearing arrangement is superior to cantilever designs found in other vertical axis turbines.

For pricing or any further information, please contact Omni Instruments Ltd.



Contact Details: Tel: +44 1382 443000 Email: info@omni.uk.com **Mailing Address:** Unit 1, 14 Nobel Road, Wester Gourdie Industrial Estate, Dundee, DD2 4UH.



Rotor diameter - 270mm

Height - 456mm

Rotor type - 3-Blade savonious

Blade material - Aluminium

Rated output - 10W at 12m/s (26mph)

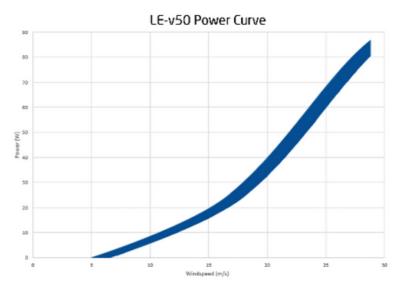
Peak output - 70W

Cut-in speed - 5m/s (11mph)

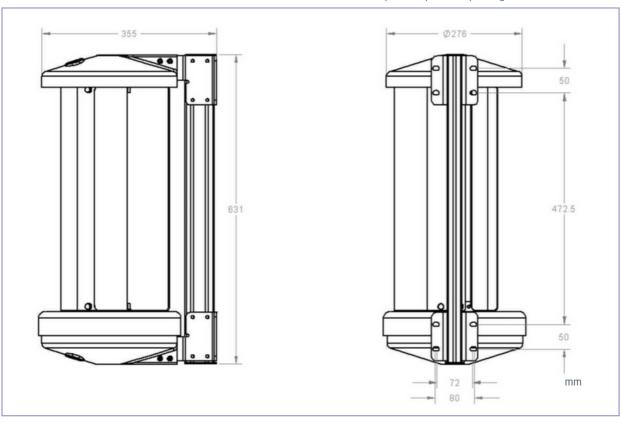
Survival wind speed - 27m/s (60mph)

Weight - 9Kg

Warranty - 2 years



Wind turbine performance is subject to many factors. All output data contained in this document is indicative and actual turbine outputs will depend on the prevailing site and installation conditions.



The LE-v50 wind turbine uses a proven 'Savonious' rotor design which gives silent and effective performance. Using the latest solid modelling and Computational Fluid Dynamic simulations, an elegant 'cross-ventilated' rotor provides good power conversion for a vertical axis wind turbine of this size.

The rotor is then coupled to our specially designed low inertia, zero 'cogging' axial flux permanent magnet alternator. Using Neodymium rare earth magnets, this alternator design has become one of the most field proven alternators that is deployed across the entire range of Leading Edge products.

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## **LE-v50 Applications**





- Data logging
- Telemetry
- Security
- LED Lighting systems
- Data communications
- Environmental monitoring

Our LE-v50 vertical axis turbine will trickle charge your batteries or provide energy for low power electronic devices such as datalogging and telemetry equipment.

Unlike other small wind turbines this turbine can run 'off-load' with no connection to the batteries. The LE-v50's rotor design will limit its RPM automatically. If anything comes into contact with the rotating blades, It will be pushed away from the rotor rather than being

caught and causing damage. These safety features make the wind turbine ideal for installation in places where space might be an issue, and where people are nearby.

Whilst every effort has been made to ensure the accuracy of this specification, we cannot accept responsibility for damage, injury, loss or expense from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.

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