



Local Power Worldwide

LE-v50 Extreme

Ultra-tough for extreme environments



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LE-v50 Extreme Features



Rugged

Can survive winds up to 35m/s (80mph)

Reliable

One moving set of parts and no brushes to wear out

Small compact size

Easy to install where space is a premium

Lightweight

At only 9kg, can be installed with ease

Designed for sub-zero temperatures

Ideal for temperatures down to -40degC

Fully marinised

Designed for corrosive marine environment

Designed and proven to survive gusts of 80mph

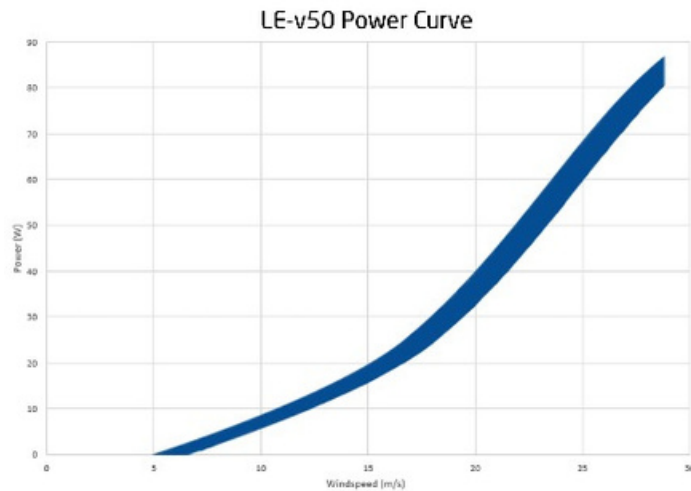
The LE-v50 Extreme fills a gap in the market where small amounts of power are required in harsh environments. This turbine is very robust having proved itself in the Antarctic, Greenland and Arctic Canada.

The LE-v50 Extreme delivers power outputs of up to 70W. Compared to similar vertical axis turbines, the LE-v50 Extreme delivers far higher output thanks to the cross-ventilated 'savonius' 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 1 moving part, there is little to go wrong.

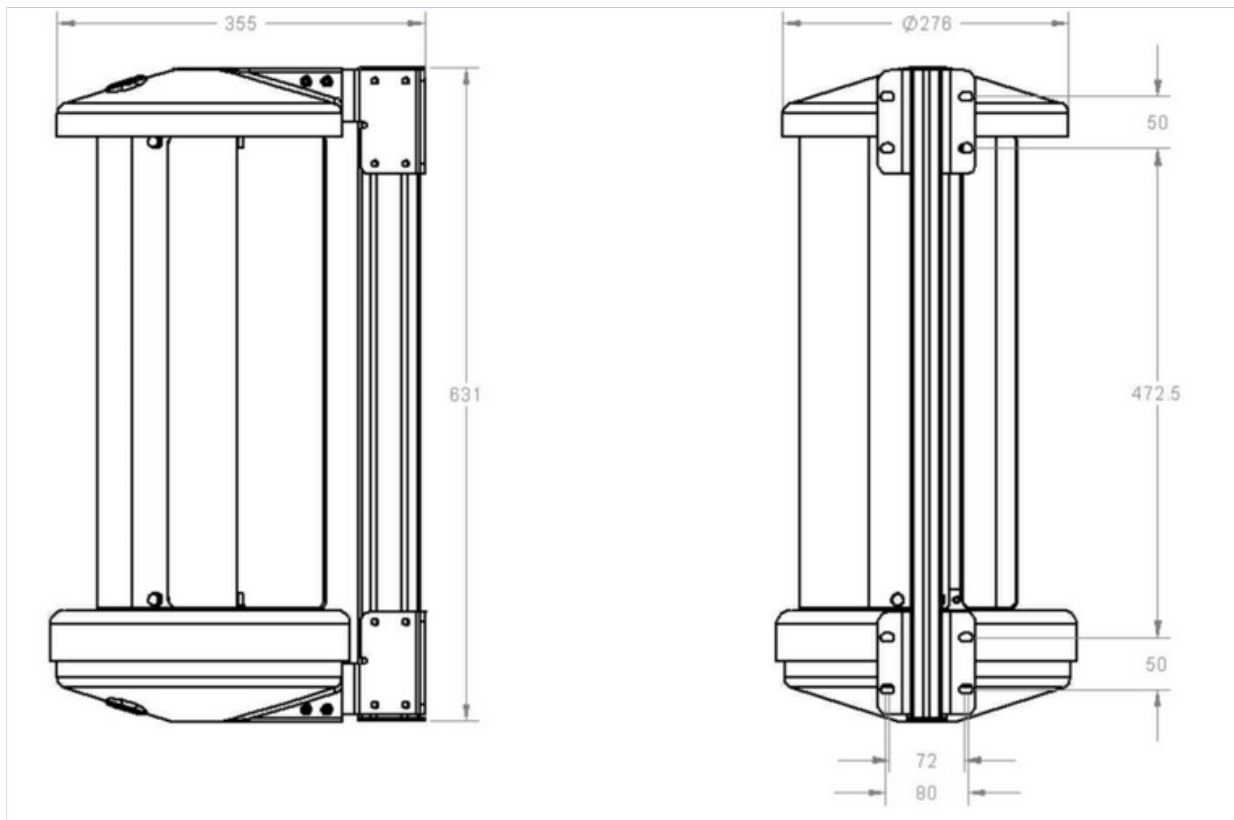
The small footprint and lightweight design allows the turbine to be installed in places where space is a premium. The turbine will receive the wind from 360 degrees without the need to yaw into position. The LE-v50 Extreme's double bearing arrangement is superior to cantilever designs found in other vertical turbines.

LE-v50 Extreme Technical

Rotor diameter:	270mm	Height:-	456mm
Rotor type:	3-Blade savonius		
Blade material:	Aluminium		
Rated output:	10W at 12m/s (26mph)		
Peak output:	70W		
Cut-in speed:	5m/s (11mph)		
Survival wind speed:	35m/s (80mph)		
Weight:	9Kg		
Warranty:	2 years		
DC Output voltage:	12V, 24V, 48V		



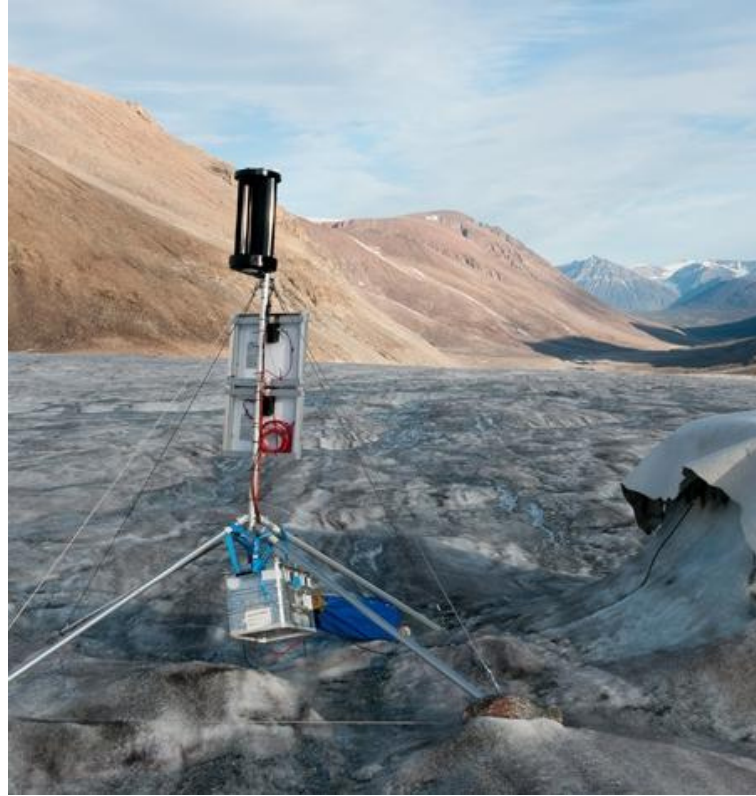
Wind turbine performance is subject to many factors. All output data contained in this document is indicative and actual turbine outputs will depend on the prevailing site and installation conditions.



Where wind speeds can regularly reach over 27m/s (60mph), the LE-v50 Extreme is the wind turbine of choice. It features enhancements that reduce the stress and fatigue on the blades during prolonged periods of storm force winds. It is also fitted with baffle plates that prevent damage to the upper cowling.

In sub-zero temperatures, the black body absorbs UV light to help prevent ice build up while the low-temperature bearings mean the turbine continues generating power at temperatures down to -40 degC.

LE-v50 Extreme Applications



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

Our LE-v50 Extreme vertical axis turbine is specially adapted for storm force winds and sub-zero temperatures. The LE-v50 Extreme will trickle charge your batteries or provide energy for low power electronic devices such as data-logging and telemetry equipment.

In a typical stand alone system, the LE-v50 Extreme sits on a tower (see our Guyed Tower Kit) and is connected to a battery bank via a maintenance (run/stop) switch.

In locations with very high wind speeds for prolonged periods of time, a charge controller is used to divert excess power to a dump load when the batteries are full.



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