

15kW Wind Turbine

- Specifically designed for high reliability and low maintenance
- Two versions – optimised for use in high and lower wind speed sites
- Exceptionally low payback times
- Conforms to IEC 61400-2 (ed3) international standard
- MCS accreditation makes the turbine eligible for Feed-in-Tariffs in the UK



The Britwind H15 is a state of the art small wind turbine, designed by the same team that developed the market leading Britwind R9000 wind turbine.

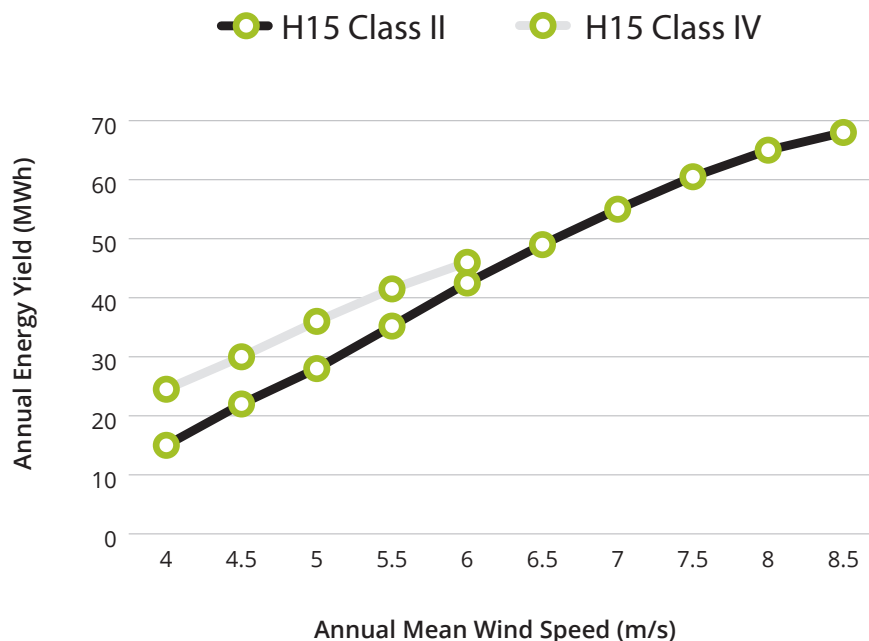
The whole concept of the Britwind H15 has been has been engineered with robustness, high reliability and low maintenance in mind, with the only wearing parts being the rotor bearing, the yaw bearing and the anemometer.

The turbine also has class leading performance to installed cost ratio.

There are two versions of the turbine; the Class II (as per IEC 61400-2) for the windiest sites, and the large rotor Class IV, which has exceptional performance at lower wind speeds.

Annual Energy Yield vs Annual Mean Wind Speed

This document provides indicative data for the H15 wind turbine.



Specification

Architecture	Upwind, 3 bladed rotor, self regulating	
Control Method	Stall regulated	
Blade	Fully optimised aerofoil ensuring maximum yield and minimum noise. Low reflection, UV & anti-erosion coatings	
Generator	Brushless direct drive, air-cored high efficiency radial flux permanent magnet alternator	
Gearbox	None required (see generator)	
Primary Brake	Electrical brake	
Secondary Brake	Aerodynamic brake	
Yaw Control	Passive using tail vane, for low maintenance	
Tower	Free-standing monopole, hydraulic ram tilt.	
Tower Foundation	Reinforced concrete pad	
Design Longevity	20 years design life	
Design Temperature Range	-20°C to +50°C	
IEC 61400-2 Turbine Class	Class II	Class IV
Design maximum wind conditions	60m/s gust 8.5m/s AMWS	42m/s gust 6m/s AMWS
Rotor	Diameter: 10.4m Speed: 100rpm nominal	Diameter: 13.1m Speed: 73rpm nominal
Tower height	14.5m (23m option)	18m
Noise	Measured sound power at 8m/s at hub height: 88.6dB Declared sound power at 8m/s at hub height: 89.9dB	Awaiting test results – expected to be lower than the Class II.
Maximum Power	16kW (600 second average) 20kW (1 second average) – 3 phase* 17kW (1 second average) – 1 phase*	12kW (600 second average). 17kW (1 second average) – 3 phase* 17kW (1 second average) – 1 phase*
Reference Power (11m/s @ hub height)	14.5kW – 3 phase 14.5kW – 1 phase	12kW – 3 phase 12kW – 1 phase

*The peak export power can be capped to a lower value if required.