

# Britwind R9000

## 5kW Wind Turbine



- MCS approved product
- Eligible for Feed-in Tariffs
- Generates power continuously from 3m/s
- Reliability backed by millions of operating hours in the field
- Outstanding durability - minimal maintenance
- Low environmental impact - noise, visual & foundations
- Single or three phase connection
- On-grid & off-grid solutions
- Conforms to IEC 61400-2 international standard



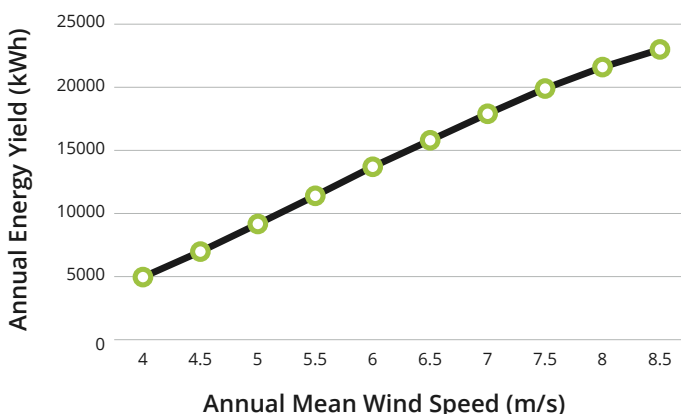
The Britwind R9000 small wind turbine is the result of years of dedicated research and development, based on engineering experience of designing big wind turbines.

Specifically designed to capture more energy at lower wind speeds, the Britwind R9000 is one of the most efficient small wind turbines available.

The Britwind R9000 has MCS certification in the UK, and has also received certification in Japan.

The efficient and reliable Britwind R9000 is already enabling homes, farms and businesses around the world to reduce energy bills and carbon footprint.

### Annual Energy Yield vs Annual Mean Wind Speed

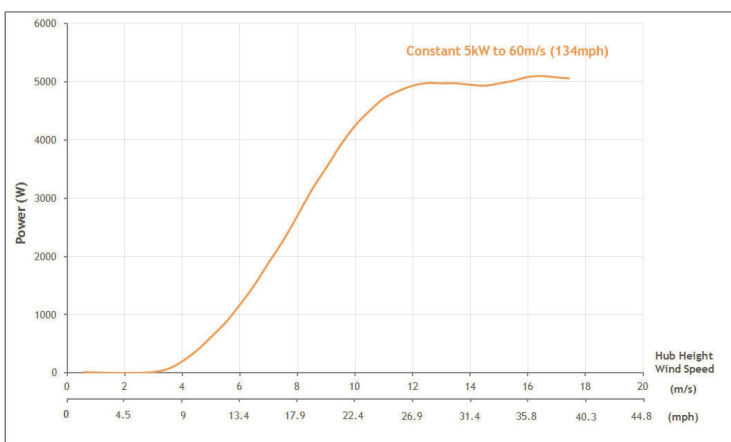


Annual Mean Wind Speed (m/s)	Annual Energy Yield (kWh)
4	4960
4.5	6980
5	9170
5.5	11400
6	13700
6.5	15800
7	17900
8	21600

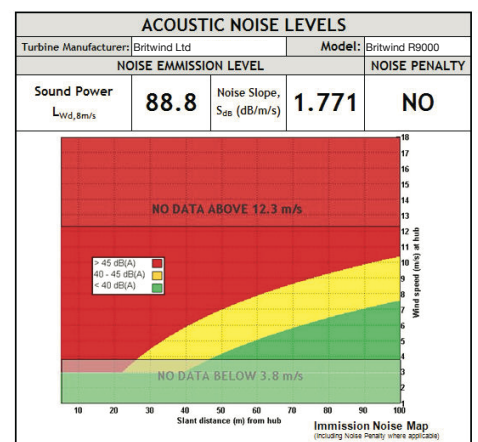
# Specification

<b>Architecture</b>	Upwind, 3 bladed rotor, self regulating
<b>Nominal Power</b>	5kW
<b>BWEA Reference Power</b>	4711W (power output at 11m/s (24.6 mph))
<b>Annual Energy Yield</b>	9170kWh with Annual Mean Wind Speed (AMWS) of 5m/s (11.2mph) (to IEC & BWEA Standards)
<b>Cut-In Wind Speed</b>	3m/s (6.7mph)
<b>Cut-Out Wind Speed</b>	None – continuous generation to survival wind speed
<b>Survival Wind Speed</b>	60m/s (134mph)
<b>IEC Turbine Class</b>	Conforms to IEC 61400 to Class II – AMWS up to 8.5m/s (19mph)
<b>Control System</b>	Patented Reactive Pitch™ control
<b>Rotor</b>	Diameter: 5.5m (18') Speed: 200rpm nominal
<b>Blade</b>	Fully optimised aerofoil ensuring max yield & min noise. Low reflection, UV & anti-erosion coatings
<b>Generator</b>	Patented brushless direct drive, air-cored high efficiency Permanent Magnet Alternator
<b>Gearbox</b>	None required (see generator)
<b>Emergency Braking</b>	Patented automatic ElectroBrake™ (with manual control for servicing). No moving parts
<b>Yaw Control</b>	Passive tail vane and rotor
<b>Tower</b>	Free-standing monopole, hydraulic RAM or Gin pole tilt Heights: 10m, 12m, 15m & 18m (33', 40', 50' & 60')
<b>Tower Foundation</b>	Root, pad & rock options
<b>Design Longevity</b>	20 years minimum with regular service inspection
<b>Noise</b>	Lp, 25m = 52.8dB(A). BWEA Reference Sound Level at 8m/s (17.9mph) & 25m (82') distance Lp, 60m = 45.3dB(A). BWEA Reference Sound Level at 8m/s (17.9mph) & 60m (197') distance
<b>Operating Temperature Range</b>	-20°C - +50°C
<b>Warranty</b>	5 years (see Britwind Terms & Conditions for details)

## Average Power vs Wind Speed



## Noise levels



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Certificate Number MCS WT0039  
Small Wind Turbine