# **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



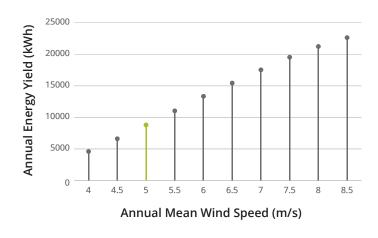
The Britwind R9000 small wind turbine is the result of years of dedicated research and development, based on engineering experience of designing big wind turbines.

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

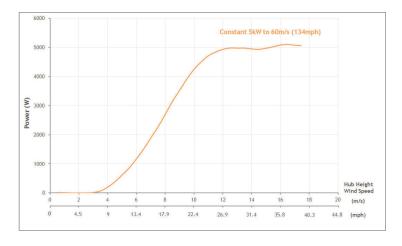


Annual Mean Wind Speed (m/s)	Annual Energy Yield (kWh)
4	4960
4.5	6980
5	9170
5.5	11400
6	13700
6.5	15800
7	17900
8	21600

## **Specification**

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

### **Average Power vs Wind Speed**



#### Noise levels

