

The RainWise AerVane™ for measuring Wind Speed and Direction

The WeatherLog AerVane™ was designed to meet or exceed the EPA guidelines for regulatory modeling applications.

The balanced propeller is supported in stainless steel instrument ball bearings. The propeller drives a serrated disc which generates pulses in an optical switch.

The direction is obtained through an optical resolver. There is no “dead band” and the resolution and accuracy are ± 1.0 degrees.

There are no contacts or brushes in the assembly. The AerVane™ is made from anodized aluminum, stainless steel, ultraviolet inhibited PVC and Lexan® plastic.

A RainWise interface can provide an RS-232 output or any desired analog output including 4-20 milliamps, 0-1 VDC, etc.

The RainWise AerVane™ is guaranteed for five years.

- Meets or exceeds EPA monitoring guidelines
- Accuracy traceable to NIST
- No direction dead band
- Five year guarantee
- Plug-in installation



WIND SPEED SPECIFICATIONS:

Range:	0-60 m/s (120 mph) Gust to 75 m/s (150 mph)
Accuracy:	$\pm 1.0\%$
Sensor:	Five blade propeller - Lexan® - uv inhibited
Distance constant:	≤ 3.0 meters (10 feet)
Threshold:	0.36 m/s (0.8 mph)
Transducer:	Optical switch.
Frequency:	10 cycles per revolution.

WIND DIRECTION SPECIFICATIONS:

Range:	360 degrees - no dead band.
Resolution:	1.0 degree.
Accuracy:	± 1.0 degrees.
Sensor:	Balanced Vane with a 33 cm. (13.0 inch) radius.
Delay distance:	≤ 5.0 meters.
Threshold:	$\leq .5$ m/s (1.0 mph) at 10 degree deflection.
Damping ratio:	$>.53$ software corrected

