



The Advanced Anemometer and Vane with Crossarm are economical sensors suitable for a wide range of wind measurement applications. They provide excellent corrosion resistance, are lightweight, and have minimal parts for easy maintenance.

The anemometer uses three lightweight hemispherical cups to measure wind speed. Cup wheel rotation produces an AC signal with frequency directly proportional to speed. The vane employs a balanced vane assembly with vane position sensed by a long

life precision conductive plastic potentiometer. Both the cup wheel and vane rotate on precision stainless steel ball bearings.

The anemometer and vane set includes a junction box for sensor connections and mounting for unthreaded standard 1-inch pipe. The separate anemometer and vane assemblies each include a junction box and mounting bracket for standard 1-inch pipe.

Two types of sensor interfaces are available for data logging applications. The voltage output interface provides calibrated speed and direction signals. The line driver interface provides separate 4-20 mA, two-wire current loops for lines up to several km long operating in high noise areas.

Technical Specifications

Range

Wind Speed: 0-50 m/s (112 mph)

Azimuth: 360° mechanical,
352° electrical

Threshold

Anemometer: 1.1 m/s (2.5 mph)

Vane: 1.3 m/s at 10° displacement
1.9 m/s at 5° displacement

Dynamic Response

Distance const: 2.3 m (7.5 ft)

Vane delay: 0.5 m (1.6 ft)

Damping ratio: 0.2

Signal Output

Wind Speed: AC volts, 1 Hz per revolution

Azimuth: 10K Ω conductive plastic potentiometer (50 M revolutions).
15 VDC maximum excitation.

Dimensions

Overall height: 32 cm (12.6 in)

Crossarm: 28 cm (11.0 in)

Vane length: 22 cm (8.7 in)

Cup wheel dia: 12 cm (4.7 in)

Mounting: 34 mm (1.34 in) diameter

Weight: 1.0 kg (2.2 lbs)

Ordering Options

Wind Sentry Anemometer and Vane with crossarm

Wind Sentry Anemometer with mounting bracket

Wind Sentry Vane with mounting bracket

Wind Voltage Output Interface

Wind Line Driver Interface

