



MODEL 85000

ULTRASONIC ANEMOMETER



The **Model 85000** Ultrasonic Anemometer is a 2-axis, no-moving-parts wind sensor. It is ideal for general meteorological applications requiring accurate, reliable wind measurement.

The sensor features durable, corrosion-resistant construction with opposing pairs of ultrasonic transducers secured in a streamlined molded frame. The 85000 is fully wind-tunnel tested and calibrated to provide accurate wind measurement over a wide operating range.

The standard sensor includes many useful output options. Analog voltage outputs are provided for wind speed and wind direction. A variety of serial output formats are also available on the standard sensor. This sensor is directly compatible with the Data Logger METEODATA-2000C/3000C serie.

The sensor installs on readily available 1 inch (PS) pipe. Wiring connections are made in a convenient weatherproof junction box; special mounting adapters, connectors and cables are not required.

For extended cold-weather use, Model 85004 features thermostatically controlled heaters in transducer and housing surfaces.

SPECIFICATIONS:

Wind Speed: 0 to 70 m/s (0 to 156 mph)

Resolution: 0.1 m/s

Accuracy: (30 m/s) \pm 2% or 0.1 m/s
(70 m/s) \pm 3%

Wind Direction: 0 to 360 degrees

Resolution: 1 degree

Accuracy: \pm 2 degrees

Serial output:

RS-232 or RS-485

Formats:

ASCII Text

RMYT NM EA SDI-12

Units: m/s, MPH, Knots, Km/hr

Analog Voltage Outputs:

Wind Speed: 0 to 5000 mV

Wind Direction: 0 to 5000 mV

Output signal up-date

From 1Hz to 10 Hz

Factory programmable

Number of transducers

4 transducers (two opposing pairs)

Environmental

Corrosion-resistant

Waterproof enclosure

Power Requirement:

9 to 16 VDC, 30 mA typical

(less than 1mA standby)

Heater Power: (85004) 24VDC, 60W Max.

Operating temperature:

-50 to +50 °C

Dimensions

34cm high x 17cm wide

Weight: 0.7 kg (1.5 lb)

Shipping Weight: 1.6 kg (3.5 lb)

Ordering information

ULTRASONIC ANEMOMETER - VOLTAGE &
SERIAL OUTPUTS

Model

85000

ULTRASONIC ANEMOMETER - HEATED

85004

BIRD WIRE ASSEMBLY

85052