YOUNG

Model 85000 Ultrasonic Anemometer

The YOUNG 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 stream-lined 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. These include ASCII text, RMYT (compatible with YOUNG displays), NMEA and SDI-12 formats.

The sensor installs on readily available 1 inch (IPS) 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) ± 2% or 0.1 m/s
(70 m/s) ± 3%

Wind Direction: 0 to 360 degrees
Resolution: 1 degree
Accuracy: ± 2 degrees

Serial Output:
RS-232 or RS-485

Formats:
ASCII Text
RMYT
NMEA
SDI-12
Units: m/s, MPH, Knots, Km/hr

Analog Voltage Outputs:
Wind Speed: 0 to 5000 mV
Wind Direction: 0 to 5000 mV

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)

CAUTION: The 85000/85004 2D Ultrasonic Anemometer is designed to be mounted vertically with the transducers facing upwards. Mounting the sensor with an inverted orientation exposes the internal circuitry to potential moisture damage, and is not recommended.

Ordering Information — MODEL

ULTRASONIC ANEMOMETER- *VOLTAGE & SERIAL OUTPUTS*	**85000**
ULTRASONIC ANEMOMETER - *HEATED*	**85004**
BIRD WIRE ASSEMBLY	**85052**

CE *Complies with applicable CE Directives*

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