

wind



Model 86000
Ultrasonic Anemometer

Introducing the YOUNG Model 86000 next generation 2D Ultrasonic Anemometer. The sensor offers high performance and low power consumption in a compact size. It is ideal for the most demanding wind sensing applications.

The sensor features durable, corrosion-resistant construction with sensitive ultrasonic transducers secured in a streamlined molded frame. The **86000** 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. 4-20 mA current signals are available for each channel and are well suited for long cable runs or for industrial settings where noise immunity is important. A variety of serial output formats are also available. 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.



Specifications

Wind Speed: 0-70 m/s
 Resolution: 0.01 m/s
 Starting Threshold: <0.01 m/s
 Accuracy: 30 m/s \pm 2% or 0.1 m/s, 70 m/s \pm 3%
 Response Time: < 0.25 seconds

Wind Direction: 0 to 360 degrees
 Resolution: 0.1 degree
 Starting Threshold: < 0.01 m/s
 Accuracy: \pm 2 degrees
 Response Time: < 0.25 seconds

Serial Output: RS232 or RS485
 Formats: ASCII, ASCII polled, NMEA, RMYT
 Baud: 1200, 4800, 9600, 38400
 Wind Units: m/s, knots, mph, kmph
 Wind Format: Speed & Direction or U & V
 Status Indicator: Standard with ASCII & NMEA

Analog Outputs: 0-5000 mV or 4-20 mA
 Analog Wind Scale: 0-100 m/s
 Analog Direction Scale: 0-360 or 0-540 degrees

Output Update Rate: 0.1 to 10 Hz

Power Requirement:
 Sensor: 10-30 VDC < 20 mA typical
 Heater: 24 VDC, 2.5 A (Model 86004 Only)

Environmental:
 Operating Temperature: -50 to +60°C
 Protection Class: IP66

Dimensions: 29 cm high x 11 cm wide
 Weight: 0.4 kg (0.9 lb)
 Shipping Weight: 1.0 kg (2.2 lb)

For extended cold-weather use, Model **86004** features thermostatically controlled heaters in transducer and housing surfaces.



Ordering Information

MODEL

ULTRASONIC ANEMOMETER - CURRENT, VOLTAGE & SERIAL OUTPUT.....**86000**
 ULTRASONIC ANEMOMETER - HEATED**86004**
 ULTRASONIC ANEMOMETER - MARINE VERSION - NMEA SERIAL OUTPUT.....**86106**

CE Complies with applicable CE directives.



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