

200-86000 Ultrasonic Anemometer

The **200-86000 2D Ultrasonic Anemometer** offers high performance, low cost, and compact size. Loaded with standard options, this sensor is ideal for the most demanding sensing requirements. It features durable, corrosion-resistant construction with sensitive ultrasonic transducers secured in a streamlined molded frame. The 200-86000 is fully wind tunnel tested and calibrated to provide reliable, accurate wind measurement.

Standard outputs include analog voltage output and RS232 serial connections. For use in industrial settings where noise immunity is important, calibrated 4-20 mA current and RS485 serial outputs are also included. A variety of serial data formats are provided including ASCII text, RMYT (compatible with RM Young displays), and NMEA for marine use. SDI-12 model also available.

For extended cold weather use, the 200-86004 features thermostatically controlled heaters in transducer and housing surfaces. Wind speed range reduced with the heated model.

The 200-86000 installs on readily available 1-inch (IPS) pipe. Cable wires connect to convenient, reliable terminals in a weather-proof junction box; special mounting adapters, connectors, and cables are not required.

Specifications

Wind Speed: 0 to 75 m/s (0 to 168 mph)

Resolution: 0.01 m/s

Threshold: <0.01 m/s

Accuracy: $\pm 2\% \pm 0.1$ m/s (30 m/s), $\pm 3\%$ (75 m/s)

Response time: < 0.25 seconds

Wind Direction: 0 to 360 degrees

Resolution: 0.1 degree

Threshold: < 0.01 m/s

Accuracy: ± 2 degrees

Response time: < 0.25 seconds

Serial Output: RS232 or RS485

Formats: ASCII, ASCII polled, RMYT, NMEA

Baud: 1200, 4800, 9600, 38400

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

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:

10 to 30 Vdc, <20 mA typical

Environmental:

Operating temperature: -40 to +60 °C

Protection class: IP65

Dimensions: 29cm high x 11cm wide

Weight/Shipping: 0.4 kg (0.9 lb)/1.0 kg (2.2 lb)



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Ordering Information

200-86000	Ultrasonic Anemometer Current, voltage, and serial outputs
200-86004	Ultrasonic Anemometer Heated Current, voltage, and serial outputs
200-86052	Bird Wire Assembly (for use with 200-86004)
200-86106	Ultrasonic Anemometer Marine Version NMEA serial output
200-86000-SDI	Ultrasonic Anemometer SDI-12