

Model 820457

ULTRASONIC WIND SENSOR

Met One's Model 820457 Ultrasonic Wind Sensor features durable, corrosion-resistant construction with sensitive ultrasonic transducers secured in a streamlined molded frame. The 820457 is fully wind-tunnel tested and calibrated to provide reliable, accurate wind measurement.

Standard outputs include analog voltage output and RS-232 serial connections. For use in industrial settings where noise immunity is essential, calibrated 4-20 mA current and RS-485 serial outputs are also included. A variety of serial data formats are available, including ASCII text. SDI-12 model is also available-- please specify at the time of ordering.

For extended cold-weather use, Model 820458 features thermostatically controlled heaters in transducer and housing surfaces. Wind speed range reduced with the heated model.



APPLICATIONS:

- Ambient Air Monitoring
- Environmental Surveys
- Government
- Homeland Security & Military

ORDERING INFORMATION:

- 2D Unheated Sonic P/N: 820457
- Cable Assembly for 820457: 400047
- 2D Heated Sonic P/N: 820458
- Cable Assembly for 820458: 400048
- Mounting Kit: 63633
- 24Vdc Power Supply for 820458 heaters: 10898

Wind Speed

Range:	Heated 0-65 m/s & Unheated 0-75 m/s
Resolution:	0.01 m/s
Starting Threshold:	0.01 m/s
Accuracy:	±2% ± 0.1 m/s (30 m/s); ±3% (65m/s)
Response Time	< 0.25 seconds

Wind Direction

Range:	0 to 360 degrees
Resolution:	0.1 degree
Starting Threshold:	0.01 m/s
Accuracy:	± 2 degrees
Response Time:	< 0.25 seconds

Serial Output:

RS232 or RS485

Formats:

ASCII, ASCII polled, NMEA, RMYT SDI -12

Baud:

1200, 4800, 9600, 19200, 38400

Wind Units:

m/s, knots, mph, kmph

Wind Format:

Speed & Direction or U & V

Status Indicator:

Standard with ASCII & NMEA

Analog Output**Range:** 0-5000 mV or 4-20 mA**Analog Speed Scale:** 0-100 m/s**Analog Direction Scale:** 0-360 or 0-540 degrees**Output Update Rate:**

User Adjustable: 0.1 to 20 Hz

Power Requirement**Sensor:** 10-30 VDC < 20 mA typical**Heater:** 24 VDC, 2.5 A (Model 820458 Only)**Environmental****Operating Temperature:** -40 to +60°C**Protection Class:** IP65**Physical****Dimensions:** 29 cm high x 11 cm wide**Weight:** 0.4 kg (0.9 lb)**Shipping Weight:** 1.6 kg (3.5 lb)

Specifications are subject to change at any time.

