Met One Instruments

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**

Instrument Expert
Original factory packaging
www.dorgean.com

SPECIFICATIONS

Model 820457

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.

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