

AIO 2 Sonic Weather Sensor

The AIO 2 Sonic Weather Sensor is a complete high performance weather sensor using Met One Instruments' proven 2D sonic technology.

This technology provides reference grade accuracy without moving parts and a built in compass used for automatic alignment of the sensor. The temperature and humidity elements are integrated into an IP65 sealed module with a quick disconnect for ease of calibration in the field. The pressure element is precisely calibrated and temperature compensated for outstanding performance. The AIO 2 is designed for surface meteorological applications where accuracy and reliability matter.

Features

- Wind Speed and Direction
- Temperature
- Humidity
- Barometric Pressure
- Rain and Solar Radiation Options
- Rugged all metal housing
- SDI12, RS232, RS485 Outputs
- Met One 7500 Protocol
- Compact 10cm Diameter
- Compass for Automatic Direction Alignment
- Compatible with our Comet Cloud Modem 2

Options

- Model 10600 USB and power interface
- WeatherView software for real time weather display and data recording on a PC
- Universal mounting hardware
- WMO compliant external tipping bucket rain gauge connects simply and allows for correct installation and siting per industry guidelines.
- Solar radiation sensor and/or tipping bucket rain gauge is connected easily and integrate seamlessly into the AIO 2 data record.



Applications

- Ambient Air Monitoring
- Environmental Surveys
- Government Network
- Health & Safety Monitoring

Wind Speed

Operating Range:	0 to 75 m/sec (0 to 168 mph)
Calibrated Range:	0 to 60 m/sec (0 to 134 mph)
Accuracy:	± 0.5 m/sec or 5% of reading ⁽¹⁾
Resolution:	0.1 m/sec
Sensor Type:	Ultrasonic
Threshold:	< 0.2 mps
Response Time:	1 second

Wind Direction

Range:	0° - 360°
Accuracy:	$\pm 5^\circ$ (including Compass)
Resolution:	1.0°
Sensor Type:	Ultrasonic
Threshold:	< 0.2 mps
Response Time:	1 second

Temperature

Range:	-40°C to +60°C (-40°F to +140°F)
Accuracy:	$\pm 0.2^\circ\text{C}$ ⁽²⁾
Resolution:	0.1°C
Sensor Type:	Resistance type
Response Time:	1 second

Relative Humidity

Range:	0 to 100%
Accuracy:	$\pm 3\%$ ⁽³⁾
Resolution:	1.0%
Sensor Type:	Capacitive / Solid State
Response Time:	1 Second

Pressure

Range:	500 to 1100 hPa
Accuracy:	± 0.5 hPa ⁽³⁾ , ± 0.3 Optional (across entire operating range)
Resolution:	0.1 hPa
Sensor Type:	Piezoresistive silicon
Response Time:	1 Second

Alignment Compass

Accuracy:	$\pm 2^\circ$
Resolution:	1°

Electrical

Measurement Rate Output:	1, 2, 5, 15, 30, 60 Hz (user selectable)
Signal Output:	RS-232C, RS-485, SDI-12 (specify at time of order)
Power:	8-36 VDC Supply, 40mA typical @12VDC, option dependant

Environmental

Temperature:	40°C to +60°C (-40 to +140 °F)
Humidity:	0 to 100%

Notes:

1. Whichever is greater. Accuracy valid from 0-60m/sec.
2. 0 to 60C. +/-0.5C from -40C to 0C
3. At 25°C

Specifications are subject to change at any time.