AIO 2 ALL IN ONE WEATHER STATION

FEATURES

- **All-In-One Measurement of Temperature, Relative Humidity, Wind Speed, Wind Direction, and Barometric Pressure**
- **Integrated Sonimometer™ Wind Sensor**
- **Automatic Wind Direction Alignment to Magnetic or True North**
- **Rugged, Reliable, Quick to Deploy**
- **All Metal Construction**
- **Weather Protected Multi-Sensor Design**
- **No Moving Parts**
- **Low Power Consumption**
- **Digital Output**
- **Proven Field-Use History**

The AIO 2 All in One Weather Sensor (P/N 102888) is the next-generation weather instrument that measures temperature, relative humidity, wind speed, wind direction, and barometric pressure in a single compact, rugged unit.

This AIO 2 integrates a unique low-power sonic anemometer, the Sonimometer™, with a multi-element temperature sensor, fast-response capacitive relative humidity sensor, state-of-the-art barometric pressure sensor, and an internal flux-gate compass for automatic alignment of wind direction to magnetic north for quick deployment (true/magnetic North offset is adjustable by the user through software command). The result is a professional grade all-in-one weather station designed for reliability, longevity, and ease of installation.

The small footprint and power efficiency of the AIO 2 make it ideal for remote regions, urban environments, air quality networks, construction/remediation sites, and other network applications

Designed for maximum portability and utility, the AIO 2 is uniquely applicable for rapid deployment and use by one person under all conditions. The unit may be mounted on a tripod or vehicle mast.

Data output is a serial, digital message that can be interfaced to most data logging systems. Software is provided for user interface. Options are offered for wireless communication.

The AIO 2 All in One Weather Sensor is supported by a number of accessories, including carrying cases, a compact quick deploy lightweight tripod, and external power options. Additional complete and custom packages are available for HAZMAT and air quality applications.

SPECIFICATIONS

PERFORMANCE

Wind Speed
Range   0 to 60 m/sec (0 to 168 mph)
Accuracy   ±0.5 m/s or ±5% of reading
Resolution   0.1 m/s

Wind Direction
Range   0° to 360°
Accuracy   ±5° @ wind speed > 2.2 m/s
Resolution   1.0°

Temperature
Range   -40°C to +60°C
               (-40°F to +140°F)
Accuracy   ±0.2°C [2]
Resolution   0.1°C

Relative Humidity
Range   0 to 100%
Accuracy   ±3%
Resolution   1.0%

Pressure
Range   600 to 1100 hPa
Accuracy   ±0.50 hPa [3]
Resolution   0.1 hPa

Precipitation
External Rain Gauge Input
Resolution   0.25 mm or 0.01″, user selectable

ELECTRICAL
Measurement Rate   Output: 1 Hz
Signal Output   RS-232C, RS-485, SDI-12
Power Requirements   8 to 36 VDC;
                     30 mA nominal @ +12 VDC

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

PHYSICAL
Construction   Aluminum and stainless steel
Weight   1.3 kg (2.9 lbs)
Size   266 mm (10.5 in) high by
                113 mm (4.5 in) dia.
Mounting   Mounting and alignment
                adapter vertical ¾-inch pipe
Color   Gloss white powder coat

SHIPPING
Weight   2.3 kg (5.0 lbs)

Notes:
1. Whichever is greater
2. Over the range of 0° to 60°C. ±0.5° from -40° to 0°C.
3. At constant temperature (25°C)

STANDARD ACCESSORIES
- 10523   ¾" IPS Pipe Mount
- 10106   Universal Mounting Arm
- 102455   WeatherView Software
- 10600   Digital Sensor Interface (Provides Wiring Terminals, USB, 12Vdc Supply)

CABLE
- 10624   Sensor Cable (Separate Item)

OPTIONAL FEATURES AND ACCESSORIES
- Support tripod
- Carrying case
- External battery
- Analog converter
- 1″ Pipe Mount (P/N 10489)

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