



WeatherStation® Multisensor – Ultrasonic Instruments for Stationary Platforms

A Compact, Rugged Instrument
for Informed Decision-Making

110WX Multisensor

The WeatherStation®110WX is designed for stationary and deployable weather-monitoring applications. The 110WX provides wind speed and direction, air temperature, and barometric pressure readings. Feature rich and contained in a IPX6-rated†, compact, durable housing, the 110WX is the right component for effective weather data gathering at any site. The 110WX has no moving parts making it trouble-free and insuring a long life of reliability and performance.



Applications:

- Stationary weather monitoring stations
- Agricultural stations
- Construction site monitoring
- Deployable stations



Ultrasonic Wind Measurement

Apparent wind speed and angle with no moving parts



Barometric Pressure

Accurate atmospheric pressure measurement



Temperature

With calculated dew point, wind chill and heat index when RH module is installed



Relative Humidity (optional)

Field serviceable RH sensor with calculated dew point

SPECIFICATIONS

Wind Speed

Range: 0 to 40 m/s (0 to 89 MPH)
Accuracy: 5% at 10 m/s at 4 angles
Resolution: 0.1 m/s
Calculations: User configurable damping

Wind Direction

Range: 0° to 359.9°
Accuracy: ±3° at 10 m/s
Resolution: 0.1°
Calculations: User configurable damping

Air Temperature

Range: -40° to 80°C (-40 to 176°F)
Accuracy: ±1.1°C at 20°C
Resolution: 0.1°C

Relative Humidity (optional)

Range: 0 to 100% RH
Accuracy: ±3% RH at 0 to 90% RH at 20°C
Resolution: 0.1% RH

Barometric Pressure

Range: 300 to 1100 hPa
Accuracy: ±0.5 hPa at 25°C (or better)
Resolution: 0.1 hPa

Operating Temperature Range: -25 to 55°C (-13 to 131°F)

Operating Voltage

Supply Voltage: 9 VDC to 40 VDC
Supply Current (at 12 VDC): <50mA (<0.6 W)
NMEA 2000® Load Equivalency Number (LEN): 1

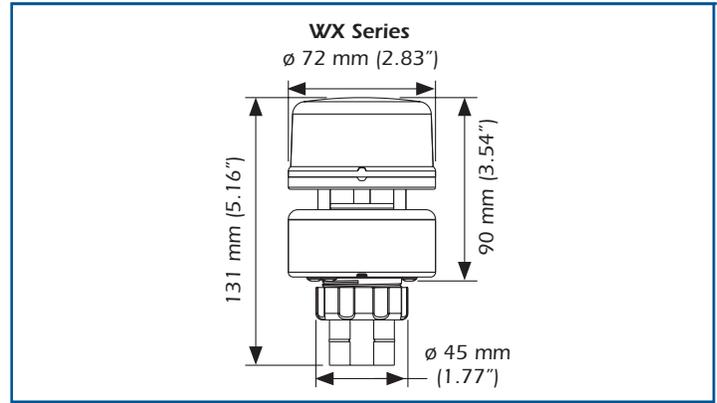
Weight

275 grams (0.6 lbs)

Mounting-thread Size, Base M39: Adapter on cable is standard 1"-14 UNS (3/4" NPT optional)

Certifications and Standards: CE, IPX6 (IPX4 with optional Relative Humidity sensor), RoHS, IEC61000-4-2, IEC60945, IEC60950_1C, IEC60950_22A, EN55022, EN55024, EN14982

DIMENSIONS



COMMUNICATIONS

Available Hardware Interfaces

Serial RS232, Serial RS422, CAN

Available Protocols

NMEA 0183, NMEA 2000

Serial Data Transmission Code

ASCII

Serial Output Rate

1 Hz typical. User selectable. 10 Hz max recommended

PART NUMBERS

110WX: 44-820-1-01, RH, NMEA 0183 (RS422) and NMEA 2000® (CAN Bus)

110WX: 44-823-1-01, NMEA 0183 (RS422) and NMEA 2000® (CAN Bus)

110WX: 44-843-1-01, RH, NMEA 0183 (RS232) and NMEA 2000® (CAN Bus)

110WX: 44-860-1-01, NMEA 0183 (RS232) and NMEA 2000® (CAN Bus)

* Cables sold separately

RH = Relative Humidity



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