



WeatherStation® Multisensor – Ultrasonic Instruments for Measurement of Wind

A Compact, Rugged Instrument
for Informed Decision-Making

150WXS Multisensor

AIRMAR's WeatherStation series provides accurate, site-specific, weather data from a single compact device. As an integral component of a comprehensive weather station, the WeatherStation WXS measures seven critical weather parameters in real-time.

The compact housing features ultrasonic wind and barometric pressure measurements. Plus the solar-radiation shield increases the accuracy of temperature and relative humidity readings. The maintenance-free features of the WeatherStation WXS makes it perfect for stationary mounting locations.



Ultrasonic Wind Measurement

Dynamic True and Apparent wind speed and direction with no moving parts



Barometric Pressure

Accurate atmospheric pressure measurement



Air Temperature

With calculated heat index and wind chill



10 Hz GPS

Position, COG, SOG, time stamping



3-Axis Accelerometer

For pitch and roll



2-Axis Compass

Better than 1° static compass accuracy



Relative Humidity

Field serviceable RH sensor with calculated dew point



Solar Stabilization

Solar radiation shield increases the accuracy and stability of temperature and relative humidity readings

SPECIFICATIONS

Wind Speed

Range: 0-40 m/s
Accuracy: 2 knots RMS @ 20 knots
Resolution: 0.1 m/s
Calculations: User configurable damping

Wind Direction

Range: 0° to 359.9°
Accuracy: $\pm 2.5^\circ$ RMS @ 20 knots
Resolution: 0.1°
Calculations: User configurable damping

Air Temperature

Range: -40° to 80°C (-40 to 176°F)
Accuracy: $\pm 0.3^\circ\text{C}$ at 20°C
Resolution: 0.1°C

Relative Humidity

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

Barometric Pressure

Range: 300 to 1100 hPa
Accuracy: ± 1 hPa @ 25°C
Resolution: 0.1 hPa

Two-axis Compass

Range: 0 to 359.9°
Accuracy: 1° static heading accuracy
Resolution: 0.1°

Pitch and Roll

Measurement Type: MEMS
Range: 60°
Accuracy: $\pm 1^\circ$ in range of $\pm 30^\circ$
Resolution: 0.1°

GPS Position Accuracy: 2.5 m (8') CEP

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): <75 mA (<0.9 W)

Weight

325 grams (0.71 lb)

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

Certifications and Standards: CE, IPX6, RoHS, IEC61000-4-2, IEC60945, IEC60950_1C, IEC60950_22A, EN55022, EN55024, EN14982

Note: Cables sold separately

COMMUNICATIONS

Hardware Interfaces: Serial RS232, Serial RS422, CAN

Data Protocols: Serial – NMEA 0183, CAN – NMEA 2000

Serial Data Transmission Code: ASCII

Serial Output Rate: 1 Hz typical. User selectable. 10 Hz max recommended

PART NUMBERS

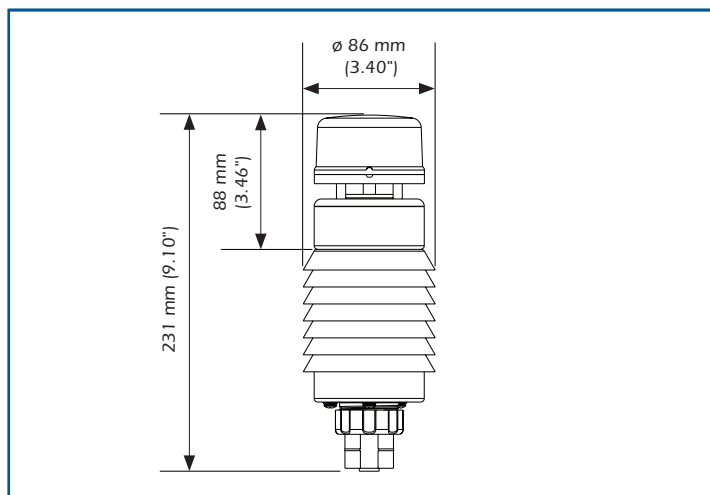
150WXS-RS232-100318

150WXS-RS422-100319

Cables sold separately unless otherwise specified

RH = Relative Humidity

DIMENSIONS



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