Providing the Best-in-Class Solution at a Lower Price

Key Features

• The only WeatherStation that combines up to seven sensors, all with no moving parts, in one compact unit to:
  - improve reliability for superior accuracy and longevity in the field
  - offer true and apparent wind speeds (without additional sensors) with improved wind resolution from 0.5 knots to 0.1 knots
• Other weather stations would take at least three separate sensors to achieve all of the weather data Airmar WeatherStations provide.
• Wind readings are not affected by the common problems known in mechanical anemometers and weather measuring devices like bearing wear, salt and dirt build-up, or bird perching, which can all result in failure or data inaccuracy.
• Each unit is factory calibrated in our wind-tunnel testing lab prior to shipping.
• For a low-cost, the units are easy-to-install either permanently, or as a portable system. They can be installed on a standard pole with 1"-14 UNS or 3/4" NPT threads.
• IPX6 water proof rated.
• Includes a removable humidity sensor that is serviceable in the field and IPX4 water proof rated.
• Offers a new power supply featuring a 50% reduction in current draw for use in remote locations that utilize solar or battery power.
• Wider operating voltage range of 9-40 VDC.
• Includes adjustable unfiltered wind data, available to monitor maximum gust conditions.
• Provides output via a single cable (various lengths available) for power and either RS232 (NMEA 0183) or RS422 (NMEA 0183) and CAN BUS (NMEA 2000®) data interface.
• WeatherCaster™ PC Software included for viewing and customizing data sentences.

VIStAGy’s Guide to

tel: +1.603.673.9570
www.airmar.com

©2013 Airmar Technology Corporation. WX Series 6p 02/05/13

As Airmar constantly improves its products, all specifications are subject to change without notice. All Airmar products are designed to provide high levels of accuracy and reliability, however they should only be used as aids to navigation and not as a replacement for traditional navigation aids and techniques. WeatherStation® and WeatherCaster™ are registered trademarks and trademarks of Airmar Technology Corporation. Other company or product names mentioned in this document may be trademarks or registered trademarks of their respective companies, which are not affiliated with Airmar.

Whether you are trying to improve the efficiency for sprayer applications or monitor maximum gust conditions, the WX Series Ultrasonic WeatherStation® Instruments meet a growing need for real-time, site-specific weather information. These accurate units offer weather specific data to help organizations monitor weather conditions on-site or in remote locations. These all-in-one weather sensors measure apparent wind speed and direction, barometric pressure, air temperature, relative humidity, dew point and wind chill temperature. With the optional internal compass and GPS (available in the 150WX model), true wind speed and direction can also be calculated. The UV stabilized, compact housing is fully waterproof and resistant to chemicals and sunlight. These new units offer a truly best-in-class solution at a better price point than any other weather monitoring system on the market today.
Delivering an Accurate, Affordable, All-In-One Unit for Many Industries

Whether you’re trying to improve the efficiency for sprayer applications or monitor weather conditions in real-time, site-specific weather information is crucial. These ultrasonic sensors offer environmental data to help organizations monitor weather conditions on-site or in remote locations.

These all-in-one weather sensors measure apparent wind speed and direction, barometric pressure, air temperature, relative humidity, dew point and wind chill. With the optional internal compass and GPS (available in the 150WX model), true wind speed and direction can also be calculated. The UV stabilized, compact housing is fully waterproof and resistant to chemicals and sunlight. These new units offer a truly best-in-class solution at a better price point than any other weather monitoring system on the market today.

Providing the Best-in-Class Solution at a Lower Price

Key Features

- The only WeatherStation that combines up to seven sensors, all with no moving parts, in one compact unit to:
  - improve reliability for superior accuracy and longevity in the field
  - offer true and apparent wind speeds without additional expense with improved wind resolution from 0.5 knots to 0.1 knots
- Other weather stations would take at least three separate sensors to achieve all of the weather data Airmar WeatherStations provide.
- Wind readings are not affected by the common problems known in mechanical anemometers and weather measuring devices like bearing wear, salt and dirt build-up or bird perching, which can all result in failure or data inaccuracy.
- Each unit is factory calibrated in our wind-tunnel testing lab prior to shipping.
- For a low-cost, the units are easy-to-install either permanently, or as a portable system. They can be installed on a standard pole with 1”-14 UNS or 3/4” NPT threads.
- IPX6 water proof rated.
- Includes a replaceable humidity sensor that is serviceable in the field and IPX4 water proof rated.
- Offers a new power supply featuring a 50% reduction in current draw for use in remote locations that utilize solar or battery power.
- Wider operating voltage range of 9-40 VDC.
- Includes adjustable unfiltered wind data available to monitor maximum gust conditions.
- Reduces an 100% signal from the sensor to alert if the field and IPX6 water proof rated.
- WX Series 6p
- WX Series Instruments
- AIRMAR’s best-in-class, all-in-one solution for real-time, site-specific weather information.
- VISTAGY’S GUIDE TO
- WX Series: 6p
- WX Series Instruments
- AIRMAR’s best-in-class, all-in-one solution for real-time, site-specific weather information.

About Airmar Technology

Airmar Technology Corporation is a world leader in the design and manufacture of ultrasonic sensor technology for marine and industrial applications. The product line includes advanced ultrasonic transducers, flow sensors, WeatherStation® instruments, and electronic compasses used for a wide variety of applications including fishing, navigation, meteorology, survey, level measurement, process control, and proximity sensing. Established in 1982, Airmar’s headquarters are located in Milford, New Hampshire, with distribution offices in Lake City, South Carolina and Saint Malo, France.
Understanding True and Apparent Wind

Virtually all mechanical and ultrasonic anemometers report apparent wind speed and direction. The Airmar WX Series is unique because it calculates both true and apparent wind speed and direction. These wind readings are the same if the unit is mounted in a fixed location. However, if the WX Series is mounted on a moving vehicle, the apparent wind is the wind you would feel on your hand if you held it out the window while going down the highway. Since the WX Series has a built-in GPS and compass, it calculates the true wind based upon the apparent wind, speed of the vehicle, and compass heading.

True wind information on highway response vehicles can also prove to be very valuable. When enroute to an emergency situation, emergency responders can use the true wind readings to predict wind conditions at the disaster site before they arrive, giving vital information for planning operations and staging apparatus.

Performing Above and Beyond Competitive Products on the Market
Going down the highway. Since the WX Series has a built-in GPS, you would feel on your hand if you held it out the window while mounted on a moving vehicle, the apparent wind is the wind mounted in a fixed location. However, if the WX Series is and direction. These wind readings are the same if the unit is unique because it calculates both true and apparent wind speed and direction. The Airmar WX Series is virtually all mechanical and ultrasonic anemometers report wind conditions at the disaster site before they even arrive, giving vital information for planning operations and staging apparatus.

Understanding True and Apparent Wind

**Apparent Wind** = 60 MPH

**True Wind** = 5 MPH East

Since the WX Series has a built-in GPS, you would feel on your hand if you held it out the window while mounted on a moving vehicle, the apparent wind is the wind mounted in a fixed location. However, if the WX Series is and direction. These wind readings are the same if the unit is unique because it calculates both true and apparent wind speed and direction. The Airmar WX Series is virtually all mechanical and ultrasonic anemometers report wind conditions at the disaster site before they even arrive, giving vital information for planning operations and staging apparatus.

Understanding True and Apparent Wind

**Apparent Wind** = 60 MPH

**True Wind** = 5 MPH East

Virtually all mechanical and ultrasonic anemometers report wind conditions at the disaster site before they even arrive, giving vital information for planning operations and staging apparatus.

Understanding True and Apparent Wind

**Apparent Wind** = 60 MPH

**True Wind** = 5 MPH East

Virtually all mechanical and ultrasonic anemometers report wind conditions at the disaster site before they even arrive, giving vital information for planning operations and staging apparatus.
Performing Above and Beyond Competitive Products on the Market

Understanding True and Apparent Wind

Airmar’s WX Series WeatherStations are the only all-in-one wind sensors to calculate both true and apparent wind speed.

**True Wind**
- 60 MPH
- North @ 5 MPH East

**Apparent Wind**
- 60 MPH
- North @ 60 MPH

Vehicle traveling

True wind information on hazardous response vehicles can also prove to be very valuable. When enroute to an emergency, responders can use the true wind readings to predict the situation, responders can use the true wind readings to predict wind conditions at the disaster site before they even arrive, giving

Wind Speed Range:
- 0 to 110 MPH
- 0 to 78 KTS (40 m/s)

Wind Direction:
- 0° to 360°
- True Heading and Status

* Patent pending

**Airflow Specifications**

- Calculated dew point
- Temperature
- Humidity
- Pressure
- Wind speed
- Wind direction
- Pitch and roll
- GPS (COG/SOG/Position)

**Output Options**

- RS232/CAN BUS
- RS422/CAN BUS

**Dimensions**

- ø 131 mm (5.16")
- ø 75 mm (2.96")
- ø 45 mm (1.77")
- 90 mm (3.54")
- 131 mm (5.16"")

**Configuration Information**

- 10 Hz GPS
- Two-axis solid state compass
- Three-axis solid-state compass
- Three-axis rate gyros
- Barometric pressure sensor

**Accuracy**

- ±0.1° RMS when level—(150WX only)
- ±0.5°—(110WX, 150WX & 200WX)
- ±1°—(150WX & 200WX)
- ±5°—(150WX & 200WX)
- ±1° RMS when level—(150WX only)
- ±0.5°—(110WX, 150WX & 200WX)
- ±0.2°—(110WX, 150WX & 200WX)

**Power Consumption**

- 1.5 VDC to 6 VDC
- 0.1 mbar (0.029 inHg, 0.1 hPa)

**Humidity and Temperature Readings**

- 5% to 95% RH—(110WX, 150WX & 200WX)
- 10% to 95% RH—(110WX, 150WX & 200WX)
- ±1 mbar (±0.029 inHg, ±1 hPa) when altitude correction is available
- ±0.1 mbar (±0.029 inHg, ±0.1 hPa)

**WeatherCaster Software**

- Output options include:
  - Calculated dew point
  - Temperature
  - Humidity

**Weather Station**

- 100WX
- 200WX
- Stationary Applications

**Recommended for**

- Humidity and temperature readings compared to Vaisala® Instruments
- RMS—Root Mean Square, LEN—Load Equivalency Number
- Wind measurement accuracy
- Temperature, and relative humidity readings will be less accurate.
- Calibration
- Better than 1° static with dynamic stabilization*

**Electrical Specifications**

- RS232 or RS422 & CAN
- 3 m (10') with WAAS/EGNOS (95% of the time, SA off)— (150WX & 200WX)
- Temperature, and relative humidity readings will be less accurate.
- Calibration
- Better than 1° static with dynamic stabilization*
- Accuracy
- ±0.1°C (0.1°F)
- ±0.029 inHg, ±0.1 hPa

**Mounting Thread Size on Base:**

- 0.25-20 UNF for 110WX
- 0.345-24 UNF for 150WX
- 0.345-24 UNF for 200WX

**Supply Current (@ 12 VDC):**

- 0.95 A (9 VDC to 40 VDC)
- 0.1 A—110WX
- 0.1 A—150WX
- 0.1 A—200WX
- <600mW (<50 mA) —110WX
- <600mW (<50 mA) —150WX
- <600mW (<50 mA) —200WX

**Mounting Thread Size on Base:**

- ø 45 mm

**Features, Plus:**

- Analog and digital weather information
- Offer one-touch connectivity.
- Customizable to your preferred
t

**Designed in Milford, New Hampshire, USA.**
Providing the Best-in-Class Solution at a Lower Price

Key Features

- The only WeatherStation that combines up to seven sensors, all with no moving parts, in one compact unit to:
  - improve reliability for superior accuracy and longevity in the field
  - offer true and apparent wind speeds (without additional sensors) with improved wind resolution from 0.5 knots to 0.1 knots
- Other weather stations would take at least three separate sensors to achieve all of the weather data. Airmar WeatherStations provide.
- Wind readings are not affected by the common problems known in mechanical anemometers and weather measuring devices like bearing wear, salt and dirt build-up, or bird perching, which can all result in failure or data inaccuracy.
- Each unit is factory calibrated in our wind-tunnel testing lab prior to shipping.
- For a low-cost, the units are easy-to-install either permanently, or as a portable system. They can be installed on a standard pole with 1"-14 UNS or 3/4" NPT threads.
- IPX6 water proof rated.
- Includes a removable humidity sensor that is serviceable in the field and IPX4 water proof rated.
- Offers a new power supply featuring a 50% reduction in current draw for use in remote locations that utilize solar or battery power.
- Wider operating voltage range of 9-40 VDC.
- Includes adjustable unfiltered wind data, available to monitor maximum gust conditions.
- Provides output via a single cable (various lengths available) for power and either RS232 (NMEA 0183) or RS422 (NMEA 0183) and CAN BUS (NMEA 2000®) data interface.
- WeatherCaster™ PC Software included for viewing and customizing data sentences.

About Airmar Technology

Airmar Technology Corporation is a world leader in the design and manufacture of ultrasonic sensor technology for marine and industrial applications. The product line includes advanced ultrasonic transducers, flow sensors, WeatherStation® instruments, and electronic compasses used for a wide variety of applications, including fishing, navigation, meteorology, survey, level measurement, process control, and proximity sensing. Established in 1982, Airmar’s headquarters are located in Milford, New Hampshire, with distribution offices in Lake City, South Carolina and Saint Malo, France.

©2013 Airmar Technology Corporation.