

Transducers • NMEA Sensors & Accessories • WeatherStation<sup>®</sup> Instruments GPS & Heading Sensors • Transducer Accessories

# **Distributor Catalogue**



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# **AIRMAR® EMEA Distributor Catalogue**

## **About Airmar® EMEA**

Airmar<sup>®</sup> EMEA, located in Saint-Malo, France, distributes Airmar<sup>®</sup> Technology Corporation's line of transducers for fishfinding and instruments, NMEA sensors and accessories, WeatherStation<sup>®</sup> instruments, GPS and heading sensors, and marine electronic accessories throughout Europe, the Middle East, and Africa.

This 450 square meter (4,844 square foot) distribution center houses full product inventory and offers same day shipping. We also have an on-site product showroom and in-house training facility for manufacturers and distributors. If you are interested in training classes please contact us for more information.

## **Our Mission**

Our mission is to supply our customers with quality products and to provide exceptional technical support.

## **Ordering Information**

### **Minimum Order**

We have a minimum shipping order of €10.00.

#### **Placing Orders**

When ready to place your order, call +33 (0)2 23 52 06 48. Please have your order ready before placing your call. Your cooperation is appreciated. If you are unsure of your exact requirements please call for help in ascertaining your needs.

#### Returns

In returning any sensor which the buyer regards as defective, the buyer must state the amount to be returned and receive a Returned Materials Authorization (RMA) number from Airmar prior to returning the sensor. Upon receipt of the returned products, Airmar, at its election, will repair, replace or issue credit, within 30 days after receipt at Airmar of the returned products. Transportation charges to Airmar on warranty returns must be prepaid by the customer. Return surface transportation charges will be prepaid by Airmar.

Airmar will inform the buyer in writing of any rejected warranty claims and the reasons for the denied claim.

### **Warranty Information**

See inside back cover for more information.

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### WeatherStation<sup>®</sup> Instruments



### Delivering an Accurate, Affordable, All-in-One Unit for Many Industries



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.

#### **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 windtunnel 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 VHF mount with 1"-14 UNS threads.



- IPX6 water proof rated.
- Includes a removeable 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<sup>®</sup>) data interface.
- WeatherCaster™ PC Software included for viewing and customizing data sentences.



#### WeatherCaster<sup>™</sup> Software



Included with all of the WX Series WeatherStation models, AIRMAR's WeatherCaster<sup>™</sup> Software puts your own personal weatherman on your PC 24 hours a day. Available with analog and digital weather information, this software is easy-to-use, customizable to your preferred settings, and allows for plug and play connectivity.



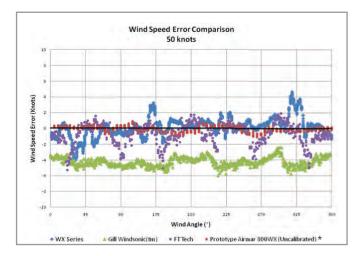
## SPECIALTY PRODUCTS

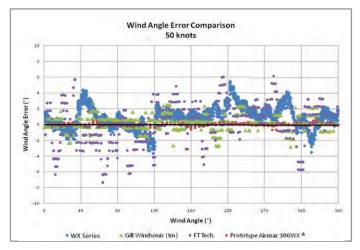
### **Understanding True and Apparent Wind**

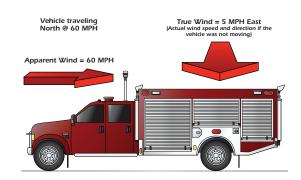
Virtually all mechanical and ultrasonic anemometers report apparent wind speed and direction. The Airmar<sup>®</sup> WX Series is unique because it calculates both true and apparent wind speed and direction. These wind readings are the same if the unit is mounted in a fixed location. However, if the 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 hazardous response vehicles can also prove to be very valuable. When enroute to an emergency situation, responders can use the true wind readings to predict 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







Airmar's WX Series WeatherStations are the only all-in-one unit to offer true and apparent wind speeds without additional sensors.



#### AIRMAR's Test Tunnel

Each WeatherStation Instrument is factory calibrated in a wind tunnel at our state-of-the-art facility located in Milford, New Hampshire, USA.

## WeatherStation<sup>®</sup> Instruments

100WX, 110WX, 150WX, 200WX

# SPECIALTY PRODUCTS

### 100WX, 110WX, 150WX, 200WX

### **Offering Many Product Models to** Satisfy Multiple Weather Needs



### **Apparent Wind Models**

#### **Recommended for Stationary Applications**

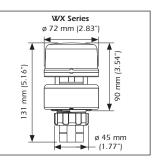
#### 100WX

- Apparent wind speed and direction
- Ultrasonic wind readings up to 90 MPH/78 KTS (40 m/s)
- Barometric pressure
- Air temperature
- Calculated wind chill temperature
  - Output options include:
  - NMEA 0183 (RS422) - NMEA 0183 (RS232)

#### 110WX

Includes all 100WX base model features, plus:

- Optional field-serviceable relative humidity - Calculated dew point
- Calculated heat index Optional heater and upper ring
- Output options include:
- NMEA 0183 (RS422)/NMEA 2000® (CAN BUS) - NMEA 0183 (RS232)



### **Apparent and True Wind Models**

#### **Recommended for Moving Vehicle** Applications

#### 150WX

- Includes all 110WX model features, plus:
- True wind speed and direction
- 10 Hz GPS (COG/SOG/Position)
- Three-axis solid state compass
- Three-axis accelerometer for pitch and roll
- Output options include: - NMEA 0183 (RS422)/NMEA 2000®
  - (CAN BUS) - NMEA 0183 (RS232)

#### 200WX

Includes all 150WX model features, plus:

- Three-axis solid-state compass with dynamic stabilization\*
- Better than 1° static compass accuracy
- Best-in-class 2° dynamic compass accuracy Three-axis rate gyros provide rate-of-turn data
- Best-in-class pitch and roll accuracy

## **Specifications**

-			
Wind Speed Range	0 knots to 78 knots (0 MPH to 90 MPH, 0 m/s to 40 m/s)	Air Temperature Accuracy—	$\pm 1.1^{\circ}\text{C}$ ( $\pm 2^{\circ}\text{F})^{*}$ @>4 knots wind (>4.6 MPH wind) (>2 m/s wind)
Wind Speed Resolution	0.1 knot (0.1 MPH, 0.1 m/s)	Barometric Pressure Range	300 mbar to 1100 mbar (24 inHg to 33 inHg, 800 hPa to 1100 hPa)
Wind Speed Accuracy @ 0°C to 55°C (32°F to 131°F), No Precipitation**	Low Wind Speeds—0 knots to 10 knots; RMS error of 1 knot +10% of reading (0 MPH to 11.5 MPH; RMS error of 1.1 MPH + 10% of reading) (0 m/s to 5 m/s; RMS error of 0.5 m/s +10% of reading)	Barometric Pressure Resolution	0.1 mbar (0.029 inHg, 0.1 hPa)
	High Wind Speeds—10 knots to 78 knots; RMS error of 2 knots or 5% RMS, whichever is greater (11.5 MPH to 90 MPH; RMS error of 2.3 MPH 5% RMS whichever is greater) (5 m/s to 40 m/s; RMS error of 1 m/s 5% RMS, whichever is greater)	Barometric Pressure Accuracy	$\pm 1$ mbar (±0.029 inHg, $\pm 1$ hPa) when altitude correction is available
Wind Speed Accuracy in Wet Conditions**	5 knots RMS (5.7 MPH RMS, 2.5 m/s RMS)	Operating Temperature Range	-25°C to 55°C (-13°F to 131°F)
Wind Direction Range	0° to 360°	Relative Humidity Range	10% to 95% RH—(110WX, 150WX & 200WX)
Wind Direction Resolution	0.1°	Relative Humidity Accuracy	±5% units RH—(110WX, 150WX & 200WX)
Wind Direction Accuracy in wet conditions** (8° RMS Typical)	>8 knots (>9.2 MPH, >4 m/s)	GPS Position Accuracy	3m (10') with WAAS/EGNOS (95% of the time, SA off)—(150WX & 200WX)
Wind Direction Accuracy @ 0°C to 55°C (32°F to 131°F),	Low Wind Speeds—5° RMS tyipcal >4 knots to 10 knots (4.6 MPH to 11.5 MPH, 2 m/s to 5 m/s)	Supply Voltage	9 VDC to 40 VDC
No Precipitation**	High Wind Speeds—2° RMS typical >10 knots (>11.5 MPH, >5 m/s)	Supply Current (@12 VDC):	<600mW (<50 mA) —100WX, <750mW (<60 mA) —110WX, <1.1W (<90 mA) —150WX, <1.7W (<140 mA) —200WX
Compass Accuracy	1° RMS when level—(150WX only), 1° static heading accuracy; 2° dynamic heading accuracy—(200WX only)	Weight	300 grams (0.8 lb)
Pitch and Roll Range/Accuracy	±50°/<1°—(150WX & 200WX)	Communication Interface	RS422 & CAN
Air Temperature Range	-40°C to 55°C (-40°F to 131°F)	Mounting Thread Size on Base	1″-14 UNS
Air Temperature Resolution	0.1°C (0.1°F)	Certifications and Standards (Pending)	CE, IPX6 (Relative Humidity/IPX4), RoHS, IEC61000-4-2, IEC60945, IEC60950_1C, IEC60950_22A, EN55022, EN55024, EN15014982

RMS—Root Mean Square, LEN—Load Equivalency Number Humidity and temperature readings compared to Vaisala® Instruments \*When the wind speed is less than 2 m/s (4.6 MPH) and/or air temperature is below 0°C (32°F), wind, temperature, and relative humidity readings will be less accurate. \*\*Wet conditions include moisture, rain, frost, dew, snow, ice and/or sea spray in the wind channel.



# WeatherStation<sup>®</sup> Instruments with 60-Watt Heater

110WX, 150WX, 200WX with Heater

SPECIALTY PRODUCTS

### 110WX, 150WX, 200WX with Heater



150WX NMEA 2000°

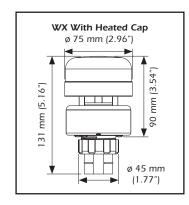
### WX Series WeatherStation<sup>°</sup> **Instruments with 60-Watt Heater**

The WX Series WeatherStation instruments meets a growing need for real-time, site-specific weather information.

Available with a 60-watt heater to accommodate for environments where icing can occur, these all-in-one weather sensors offer a best-in-class solution at a better price point than any other weather monitoring system on the market today.

- Apparent wind speed and direction
- Ultrasonic wind readings up to 90 MPH/78 KTS (40 m/s)
- Barometric pressure
- Air temperature
- Calculated wind chill temperature
- Provides output via a single cable (various lengths available) for power and either RS232 (NMEA 0183) or RS422 (NMEA 0183) and CANbus (NMEA 2000<sup>°</sup>) data interface

All the benefits of the WX Series plus heater capabilities!



## **Replacement Parts**





Connector Collar

Cable Extension Adaptor



200WX

NMEA 2000°

# 150WX to a PC

When connecting the 150WX to a PC only, a USB converter is required to use the WeatherCaster<sup>™</sup> PC Software. The WeatherStation<sup>®</sup> Instrument attaches to the USB converter via a plug-in cable and a 1.8 m (6') USB lead, which then outputs data to the PC. The USB also includes a 1.8 m (6') power cord for supplying required battery voltage.

## WX Series—WeatherStation<sup>®</sup> Instruments with 60-Watt Heater

# **Specifications**

Wind Speed Range	0 knots to 78 knots (0 MPH to 90 MPH, 0 m/s to 40 m/s)	Barometric Pressure Resolution	0.1 mbar (0.029 inHg, 0.1 hPa)
Wind Speed Resolution	0.1 knot (0.1 MPH, 0.1 m/s)	Barometric Pressure Accuracy	$\pm 1$ mbar (±0.029 inHg, $\pm 1$ hPa) when altitude correction is available
Wind Speed Accuracy @ 0°C to 55°C (32°F to 131°F), no precipitation*	Low Wind Speeds—0-10 knots; 1 knot RMS +10% of reading (0 MPH to 11.5 MPH; 1.1 MPH + 10% of reading) (0 m/s to 5 m/s; 0.5 m/s + 10% of reading)	Relative Humidity Range***	10% to 95% RH—(110WX, 150WX & 200WX)
	High Wind Speeds—10-78 knots; 2 knots RMS or 5%, whichever is greater (11.5 MPH to 90 MPH; 2.3 MPH or 5%, whichever is greater) (5 m/s to 40 m/s; 1 m/s or 5%, whichever is greater)	Relative Humidity Accuracy*	±5% units RH—(110WX, 150WX & 200WX)
Wind Speed Accuracy in wet conditions**	5 knots RMS (5.7 MPH RMS, 2.5 m/s RMS)	GPS Position Accuracy:	3 m (10') with WAAS/EGNOS (95% of the time, SA off)—(150WX & 200WX)
Wind Direction Range	0° to 360°	Operating Temp. Range	-25°C to 55°C (-13°F to 131°F)
Wind Direction Resolution	0.1°	Heater Operating Temp. Range	-40°C to 55°C, Heater cycles on when sensor reaches 1°C
Wind Direction Accuracy @ 0°C to 55°C (32°F to 131°F), no precipitation***	Low Wind Speeds—5° RMS typical 4 -10 knots (4.6 MPH to 11.5 MPH, 2 m/s to 5 m/s) High Wind Speeds—2° RMS typical >10 knots (>11.5 MPH, >5 m/s)	Supply Voltage	9 VDC to 40 VDC
Wind Direction Accuracy in wet conditions** (8° RMS Typical)	>8 knots (9.2 MPH, >4 m/s)	Heater Supply Voltage	24 VDC
Compass Accuracy	1° RMS when level—(150WX only), 1° static heading accuracy; 2° dynamic heading accuracy—(200WX only)	Supply Current @ 24 VDC	<750mW (<30 mA) —110WX <1.7W (<70 mA) —200WX <1.1W (<45 mA) —150WX
Pitch and Roll Range / Accuracy	±50° / <1°—(150WX & 200WX)	Heater Supply Current @ 24 VDC	<60W (2.5 A)
Air Temperature Range***	-40°C to 55°C (-40°F to 131°F)	Weight	300 grams (0.8 lb)
Air Temperature Resolution	0.1°C (0.1°F)	Communication Interface	R5422 & CAN
Air Temperature Accuracy	±1.1°C (±2°F)* @ >4 knots wind (>4.6 MPH wind) (>2 m/s wind)	Mounting Thread Size on Base	1″-14 UNS
Barometric Pressure Range	300 mbar to 1100 mbar (24 inHg to 33 inHg, 800 hPa to 1100 hPa)	Certifications and Standards (Pending)	CE, IPX6 (Relative Humidity/IPX4), RoHS, IEC61000-4-2, IEC60945

RMS—Root Mean Square

\*When the wind speed is less than 2 m/s (4.6 MPH) and/or air temperature is below 0°C (32°F), wind, temperature, and relative humidity readings will be less accurate.

\*\*\*Temperature and Relative Humidity report invalid during heater operation.

<sup>\*\*</sup>Wet conditions include moisture, rain, frost, dew, snow, ice and/or sea spray in the wind channel.

# WeatherStation® App

OnSiteWX App

# SPECIALTY PRODUCTS



### OnSiteWX App provides WeatherCaster<sup>™</sup> functionality at your fingertips

Airmar is pleased to launch the OnSiteWX app which will make much of the functionality of our WeatherCaster" PC software available on iPhone, iPad and iPod smart phones and tablets running iOS 6.1 and newer. By displaying data sent from an NMEA 2000° or NMEA 0183 network over a WiFi adapter connected to the network, OnSiteWX gives you easy access to data at sea or on land on your hand-held mobile device 24 hours a day. OnSiteWX is easy-to-use, customizable to your preferred settings, and allows for connectivity to many popular WiFi adapters.

#### Features:

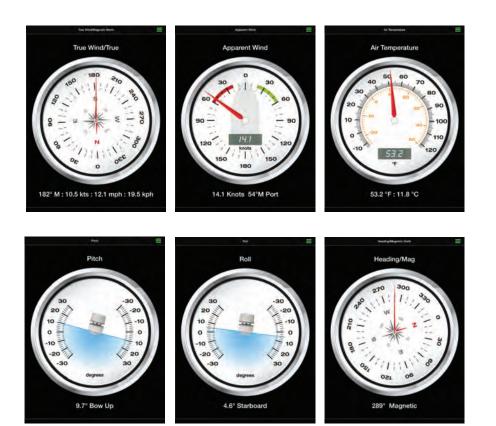
- Displays data from Airmar WeatherStation<sup>®</sup> instruments and Smart<sup>®</sup> transducers
- Custom pages include just the gauges you need

- All pages can be switched on or off, and the order in which they are displayed can be changed
- Gauges can be viewed in white, black or night themes
- Gauges can be shown as analog or digital versions
- Displays can be in US or metric units
- Tachometers can have a maximum of 4000 or 6000 rpm
- Speedometers can have a range of 0-10, 0-20 or 0-60 knots
- Works with DMK Box, Chetco SeaSmart, ShipModul MiniPlex, GoFree WiFi-1, Digital Yacht WLN10, and Digital Yacht NavLink WiFi adapters
- Contains a demonstration mode that plays back the log of a fishing trip

For NMEA 2000<sup>°</sup> networks with single or dual engine interfaces, additional engine, fuel and tank gauges are available through an in-app purchase.

This app is for the iPad, iPad Mini, iPhone5 and iPod Touch Gen5.

Available in the Apple App Store by searching for "Airmar", "WeatherStation" or "WeatherCaster"





### What's New in Version 2.2

Version 2.2 adds support for the Navico/ Lowrance/Simrad GoFree WiFi adapter and for the Digital Yacht WLN10 and NavLink adapters. Historical data is available for selected readings in bar graph form, and the data streaming in from the adapters can be seen in raw or NMEA format.



Custom pages include just the gauges you need, when you need them!

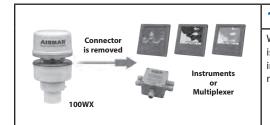




### 100WX WeatherStation® Instrument Protocol is NMEA 0183 / RS422

Many marine instruments currently available in the market cannot interpret and display all of the NMEA sentences that the Ultrasonic WeatherStation® is capable of outputting. For this reason, each WeatherStation® Instrument is supplied with a Windows® based software program that is completely customizable and capable of displaying all of the data from the WeatherStation® Instrument head. An optional USB converter allows the WeatherStation® Instrument data to be effortlessly converted and sent to the PC. An available USB/ NMEA combiner allows simultaneous display of the WeatherStation<sup>®</sup> Instrument data on both a PC, an NMEA capable instrument, and up to three additional NMEA input devices to a single NMEA/USB output. As an example, an Airmar<sup>\*</sup> Smart<sup>™</sup> Sensor can be connected to the combiner so that depth, speed, and water temperature, as well as all WeatherStation<sup>®</sup> Instrument functions, can be output on a single USB and/or NMEA data line.

## 100WX Connections—NMEA 0183 Only



### 100WX to NMEA 0183 Instruments

When using the 100WX with NMEA 0183 Instruments, the connector is removed and the cable is wired to the instrument input or a combiner/multiplexer. The 100WX will output to any NMEA instrument. A multiplexer such as Actisense<sup>\*</sup> or NoLand can be used to output the data to multiple displays.



### 100WX to a PC

When connecting the 100WX to a PC only, a USB converter is required. The WeatherStation<sup>\*</sup> Instrument attaches to the USB converter via a plug-in cable and a 1.8 m (6') USB lead, which then outputs data to the PC. The USB converter also includes a 1.8 m (6') power cord for supplying required battery voltage.



### 100WX to a PC and an NMEA 0183 Device

When simultaneous connection to both a PC and an NMEA device is preferred, a USB/NMEA combiner is required. The WeatherStation<sup>®</sup> Instrument attaches to the USB/NMEA combiner via a plug-in cable. The combiners' included 1.8 m (6') USB lead outputs the data to a PC. The installer supplies the desired length NMEA output cable, and a battery power is supplied to the included power cord. Up to three additional NMEA devices can be brought into the USB/NMEA combiner, such as an Airmar<sup>®</sup> Sensor. The data is combined and available to both the USB and NMEA outputs.



## **100WX to a Furuno NMEA Display or NavNet Device**

When using the WeatherStation<sup>\*</sup> Instrument with a Furuno device, a direct-connect interface cable is supplied. One end of the cable plugs into the 100WX and the other end includes a 7-pin Furuno connector. The 100WX is powered via the Furuno display.



## WeatherStation Programming Kit

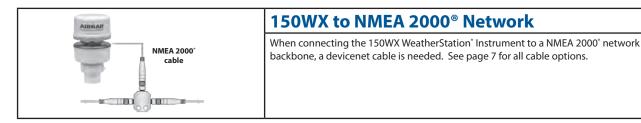
The WeatherStation programming kit is a shop tool designed to allow installers to customize NMEA sentences and update the WeatherStation software from a PC before it is installed on the vessel.

Kit Includes: USB converter with software, power and USB cable, 1 m (3') standard WeatherStation cable, and 0.3 m (1') adapter that allows a Furuno cable to plug into USB converter. WeatherStation® Instruments

150WX, NMEA 0183 & NMEA 2000®

# SPECIALTY PRODUCTS

## 150WX Connections—NMEA 0183 and NMEA 2000®





# 150WX to a Furuno NMEA 0183 Display or NavNet Device

When using the WeatherStation<sup>\*</sup> Instrument with a Furuno NMEA 0183 device, a direct-connect interface cable is needed. One end of the cable plugs into the PB200 and the other end includes a 7-pin Furuno connector. The 150WX is powered via the Furuno Display.



### 150WX to NMEA 0183 Instruments

When using the 150WX with NMEA 0183 Instruments, the 8-pin connector is removed and the cable is wired to the instrument or a combiner/multiplexer. The 150WX will output to any NMEA instrument. A multiplexer such as Actisense<sup>®</sup> or NoLand can be used to output the NMEA 0183 data to multiple displays.



# 150WX to both NMEA 0183 and NMEA 2000<sup>®</sup> Networks

When simultaneously connecting the 150WX to both NMEA 2000° and NMEA 0183 networks, a combination cable kit is required. This kit contains either a 15 m (50') or 30 m (100') combination cable, splitter box, 3M connectors, and a 6 m (20') devicenet cable for connecting to the NMEA 2000° network.



### 150WX to a PC

When connecting the 150WX to a PC only, a USB converter is required to use the WeatherCaster<sup>™</sup> PC Software. The WeatherStation<sup>°</sup> Instrument attaches to the USB converter via a plug-in cable and a 1.8 m (6') USB lead, which then outputs data to the PC. The USB also includes a 1.8 m (6') power cord for supplying required battery voltage.



## 150WX to a PC and an NMEA 0183 Device

When simultaneous connection to both a PC and an NMEA device is preferred, a USB/NMEA combiner is required. The WeatherStation<sup>®</sup> Instrument attaches to the USB/NMEA combiner via a plug-in cable. The combiner's included 1.8 m (6') USB lead outputs the data to a PC. The installer supplies the desired length NMEA output cable, and battery power is supplied to the included power cord. Up to three additional NMEA devices can be brought into the USB/NMEA combiner, such as an Airmar<sup>®</sup> Sensor. The data is combined and available to both the USB and NMEA outputs.



	15 m (50') NMEA 0183 & NMEA 2000® Cable	
AIDMAD	30 m (100') NMEA 0183 & NMEA 2000® Cable	Dimensions
	Allows the sensor data to be shown on both NMEA 0183 devices and NMEA 2000° networked instruments simultaneously. For WeatherStation° Instrument, GPS Receiver, and Heading Sensor. Contains: NMEA 0183 and NMEA 2000° cable, 3M connectors, Junction Box, and 6 m (20') devicenet cable with molded NMEA 2000° male connector.	101.6 mm (4.00") 57.5 mm (2.27")

# NMEA 0183 USB Converter

WS-USB	Dimensions
Airmar's converter allows the NMEA 0183 data coming from the PB150, LB150, PB200, 110WX, G2183, H2183, and GH2183 sensors to be displayed on a PC via an available USB port. This will allow the sensor's data to be viewed in the WeatherCaster™ PC Software or other PC based navigation software. A 1.8 m (6') USB and 1.8 m (6') power cable are included. Mounting Dimensions: 76 mm x 51 mm (3 5/8" x 2")	75 mm (2.97") 92 mm (3.62") 92 mm (3.62") 40 mm (1.59")

# U200 USB Gateway NMEA 2000®

WS2-USB	Dimensions
Airmar's converter allows the NMEA 2000° data coming from the PB200, 110WX, G2183, H2183, and GH2183 sensors to be displayed on a PC via an available USB port. This will allow the sensor's data to be viewed in the WeatherCaster <sup>™</sup> PC Software or other PC based navigation software. A 1.8 m (6') USB cable and a 6 m (20') NMEA cable and	75 mm (2.97") 52 mm (2.05") 92 mm (3.62")
WeatherCaster PC Software are included.	40 mm (1.59″)
Mounting Dimensions: 76 mm x 51 mm (3 5/8" x 2")	<u> </u>



NMEA 0183 & NMEA 2000®

# SPECIALTY PRODUCTS

# 100WX, 110WX, 150WX, 200WX, G2183, H2183, and GH2183 Cable Options

NMEA 0183 Cables—Airmar <sup>®</sup> Connector		
Airmar <sup>i</sup> connector	(15 m / 49′)	
	(25 m / 82′)	
	(35 m / 115′)	
	(45 m / 148′)	
CX-128	(Replacement 8-Pin Connector CX-128)	

Furuno <sup>®</sup> NMEA 0183 Cables—Furuno <sup>®</sup> 7-Pin Connector			
$\sim$ 1	(0.3 m / 1'—Airmar° to Furuno° Pigtail Adaptor)		
Furuno <sup>®</sup> 7-pin connector			

NMEA 2000 <sup>®</sup> Cables—5-Pin DeviceNet (Male)		
~ 1	(6 m / 20′)	
	(10 m / 33′)	
DeviceNet connector	(30 m / 100′)	

Combination NMEA 0183/NMEA 2000 <sup>®</sup> Cable Kits			
	15 m (50') NMEA 0183 & NMEA 2000 <sup>®</sup> Cable		
AIRMAR	30 m (100') NMEA 0183 & NMEA 2000® Cable		
	Allows the sensor data to be shown on both NMEA 0183 devices and NMEA 2000° networked instruments simultaneously. For WeatherStation° Instrument, GPS Receiver, and Heading Sensor. Contains: NMEA 0183 and NMEA 2000° cable, 3M connectors, Junction Box, and 6 m (20') devicenet cable with molded NMEA 2000° male connector.	101.6 mm (4.00") 57.5 mm (2.27") (5.00")	

## WeatherStation<sup>®</sup> Instruments

## G2183

#### SPECIALTY PRODUCTS

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### G2183



Version

The G2183 is a high-accuracy, NMEA, WAAS/ EGNOS, 10 Hz GPS antenna. It scores high in superior sensitivity for quick signal acquisition, reliable position accuracy, and accurate speed and course-over-ground readings. The G2183 can connect to both NMEA 0183 and NMEA 2000° networks that may be installed on the vessel, as the unit outputs both protocols simultaneously. It features a compact size that is easy to flush-mount, pole-mount, or railmount. The G2183 is designed for all marine environments, as the IPX6 waterproof housing can withstand virtually any condition Mother Nature throws at it.

### • WAAS/EGNOS 10 Hz GPS

• Provides:

Deck-Mount

Version

- Latitude and Longitude
- Course Over Ground (COG)
- Speed Over Ground (SOG)
- Time and Date
- Magnetic Variation
- Outputs NMEA 0183 and NMEA 2000°
- IPX6 waterproof enclosure
- · Available as a combination GPS/Heading Sensor (GH2183)

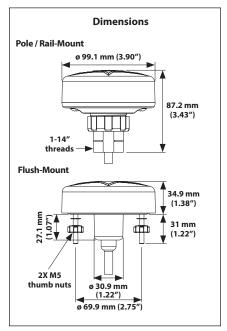
## **Replacement Parts**



Connector Collar



**Cable Extension** Adaptor



### G2183—NMEA GPS Sensor

### **Specifications**

Supply Voltage	9 VDC to 40 VDC	Cold Start Acquisition	<52 seconds
Supply Current	<80 mA @ 12 VDC	GPS Position Accuracy	3 m (10') with WAAS (95% of the time, SA off)
GPS Satellite Tracked	14-channel (maximum)	NMEA 2000° Load Equivalency Number (LEN)	2
GPS Satellite Acquired	51 maximum	Certifications and Standards	CE, IPX6, RoHS, IEC60945
WAAS / EGNOS Satellites Tracked	Any	Operating Temp. Range	-25° C to 55° C
GPS-Fix Update Rate	10 x per second	Storage Temp. Range	-30° C to 70° C

### NMEA 0183 Sentence Structure

**\$GPDTM**.... Datum Reference \$GPGGA .... GPS Fix Data \$GPGLL..... Geographic Position— Latitude & Longitude \$GPGSA..... GNSS DOP and Active Satellite

**\$GPGSV**..... Satellite in View \$GPRMC.... Recommended Minimum GNSS \$GPVTG ..... COG and SOG \$GPZDA..... Time and Date

## NMEA 2000° Support PGNs

127258 ..... Magnetic Variation 129025 ..... Position, Rapid Update 129026 ..... COG and SOG, Rapid Update 129029 ..... GNSS Position Data 129033 ..... Time and Date

129044 ...... Datum 129538 ..... GNSS Control Status 129539 ..... GNSS DOPs 129540 ..... GNSS Sats in View

129541 ..... GPS Almanac Data