

Ultrasonic WeatherStation

Sensor Functions

True and apparent wind speed and direction

Barometric pressure

Air and wind chill temperatures

Relative humidity

Dew point temperature

GPS, Compass

Accelerometer

Sensing a change in the weather.



Provides Seven Essential Weather Readings With No Moving Parts!

The Airmar Ultrasonic WeatherStation informs you of instantaneous changes in the weather. With our new, intuitive PC software, you have your own personal weatherman on-board the boat 24 hours a day, 7 days a week!

While at home, log on to your vessel's computer to see the current weather conditions at the boat.

Before leaving the dock, anticipate weather fronts by checking the wind speed and direction, temperature and barometric pressure. Check the weather history graphs as the Airmar Weatherstation takes readings from the previous day, even while the PC is turned off!

While underway, the true wind data can be sent to the autopilot to correct course, and get you to your destination more quickly and efficiently than ever before.

While docking, true wind data displayed on the On-board PC or chartplotter will make docking your vessel in high wind situations a breeze.

The easy-to-use PC software has multiple screen views and backgrounds to fit your needs. The wind tunnel-tested, compact sensor with removable cable makes for a simple installation. The built-in GPS can serve as a primary position source or backup to your electronics suite.



Detail of the digital screen



WeatherStation Connection Diagrams

PC connection



PC and NMEA device connection



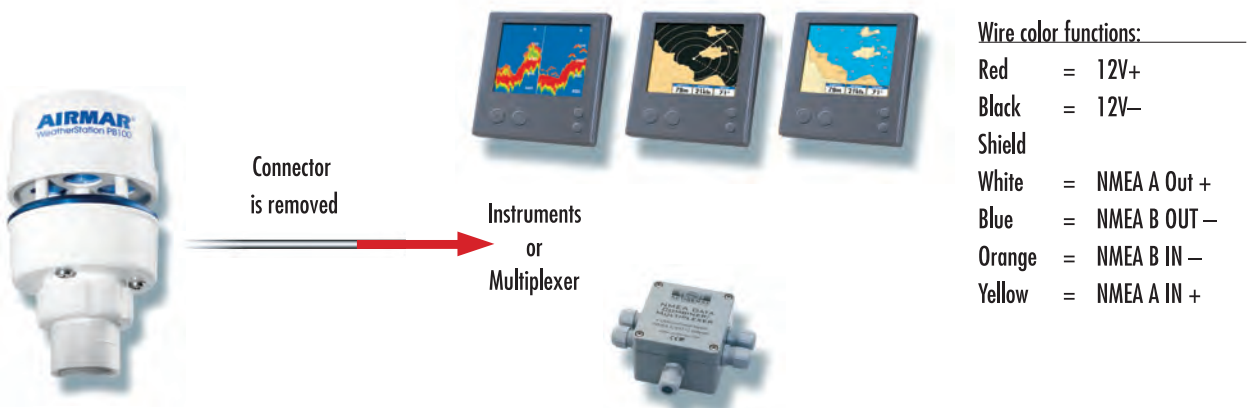
PC and Furuno RD-30 connection



Furuno RD-30 connection



NMEA device or Multiplexer connection



Ultrasonic WeatherStation

Technical Information

Specifications*

| | | | |
|----------------------------|-------------------|------------------------------|------------------------------|
| Wind Speed Range | 0.5 to 99.5 knots | Barometric Pressure Range | 850-1150 mb (25"– 34" Hg) |
| Wind Speed Resolution | 0.1 knot | Barometric Pressure Accuracy | +/- 1.5% |
| Wind Direction Resolution | 1° | Relative Humidity Range | 10-95 % RH |
| Wind Direction Sensitivity | +/- 1.5° | Relative Humidity Accuracy | +/- 5% RH |
| Temperature Range | -30° C to 50° C | Supply Voltage | 10–16 VDC |
| Temperature Accuracy | +/- 1.5° C | Weight | 285 grams |
| Compass Sensing | +/- 1° typically | | |

*WeatherStation reading accuracy can be degraded below 0°C

Options

- **Optional combiner interface allows the WeatherStation to be displayed simultaneously on both a PC and NMEA device**
- **Sailboat version (available 2006) incorporates accelerometer and mounted Windex® indicator with LED lighting for night viewing**



Data Output Protocol

NMEA 0183 Sentence Structure

| | |
|--------|-------------------------------|
| SWIMWV | Wind Speed and Angle |
| SWIMWD | Wind Direction and Speed |
| SWIMDA | Meteorological Composite |
| SWIXDR | Wind Chill Temperature |
| SGPGGA | GPS Fix Data |
| SGPGLL | Geographic Position L/L |
| SGPRMC | Recommended Minimum GNSS |
| SGPTG | COG and SOG |
| SHCHDG | Heading, Deviation, Variation |

NMEA 2000® Supported PGN's

| | | | |
|--------|---------------------------|--------|---------------------|
| 60928 | ISO Address Claim | 129044 | Datum |
| 126996 | Product Information | 129538 | GNSS Control Status |
| 126998 | Configuration Information | 129539 | GNSS DOPs |
| 126464 | PGN List | 129540 | GNSS Sats in View |
| 130306 | Wind Data | | |
| 130311 | Environmental Parameters | | |
| 127250 | Vessel Heading | | |
| 127258 | Heading Variation | | |
| 128259 | Speed, Ground Referenced | | |
| 129029 | GNSS Position Data | | |

Dimensions

