

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



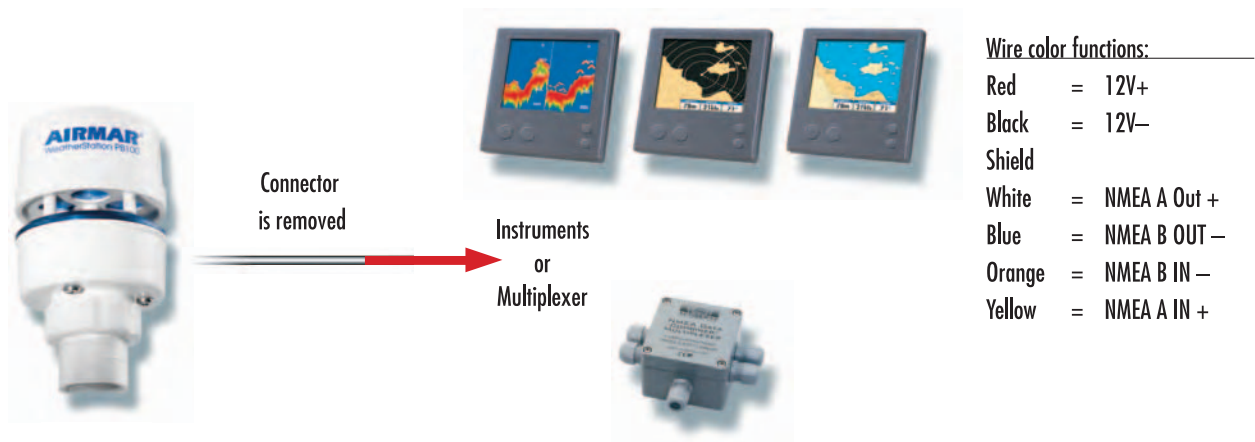
PC and Furuno RD-30 connection



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**



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
SGPVTG	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

