

# LB150

Accurate weather monitoring for all your *land based applications*



- True wind speed and direction
- Apparent wind speed and direction
- Barometric pressure
- Air temperature
- Wind chill temperature
- Heat index temperature
- Relative humidity
- Dew Point temperature
- Measures wind speed and direction ultrasonically
- Wind calibration traceable to NIST
- Internal WAAS GPS
- Two-axis, solid-state compass
- Three-axis accelerometer provides pitch and roll information
- RS485 and NMEA 0183 output
- WeatherCaster™ Software
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- —
- —
- Very easy installation and two-year warranty
- Maintenance-free operation—no moving parts
- Applications—Environmental monitoring

# PB150

Your all-in-one *recreational marine* weather solution



- True wind speed and direction
- Apparent wind speed and direction
- Barometric pressure
- Air temperature
- Wind chill temperature
- —
- —
- —
- Measures wind speed and direction ultrasonically
- Wind calibration traceable to NIST
- Internal WAAS GPS
- Two-axis, solid-state compass
- Three-axis accelerometer provides pitch and roll information
- NMEA 0183 output
- WeatherCaster™ Software
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- —
- Very easy installation and two-year warranty
- Maintenance-free operation—no moving parts
- Applications—Recreational powerboats

# PB200

Precise marine data you need—*Wind, Weather, Heading & Navigation*



- True wind speed and direction
- Apparent wind speed and direction
- Barometric pressure
- Air temperature
- Wind chill temperature
- —
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- —
- Measures wind speed and direction ultrasonically
- Wind calibration traceable to NIST
- Internal WAAS GPS
- Three-axis, solid-state compass
- Three-axis accelerometer provides stabilized pitch and roll information in dynamic conditions
- Outputs NMEA 0183 and NMEA 2000® data simultaneously
- WeatherCaster™ Software
- Better than 1° compass accuracy in static conditions
- Best-in-class 2° compass accuracy in dynamic conditions
- Yaw rate gyro provides rate of turn data
- Very easy installation and two-year warranty
- Maintenance-free operation—no moving parts
- Applications—Larger powerboats, sailboats, and commercial vessels



Wind Speed Range	<ul style="list-style-type: none"> <li>• 0 knots to 80 knots</li> <li>• 0 MPH to 92 MPH</li> <li>• 0 m/s to 40 m/s</li> </ul>	•	•	•
Wind Speed Resolution	<ul style="list-style-type: none"> <li>• 0.1 knot</li> <li>• 0.1 MPH</li> <li>• 0.1 m/s</li> </ul>	•	•	•
Wind Speed Accuracy @ 0°C to 55°C (32°F to 131°F), no precipitation**	<p><b>Low Wind Speeds</b> {</p> <ul style="list-style-type: none"> <li>• 1 knot +10% of reading RMS from 0 knots to 10 knots</li> <li>• 1.1 MPH +10% of reading RMS from 0 MPH to 11.5 MPH</li> <li>• 0.5 m/s +10% of reading RMS from 0 m/s to 5 m/s</li> </ul> <p><b>High Wind Speeds</b> {</p> <ul style="list-style-type: none"> <li>• 2 knots or 4% RMS from 10 knots to 80 knots, whichever is greater</li> <li>• 2.3 MPH or 4% RMS from 11.5 MPH to 92 MPH, whichever is greater</li> <li>• 1 m/s or 4% RMS from 5 m/s to 40 m/s, whichever is greater</li> </ul>	•	•	•
Wind Speed Accuracy in wet conditions**	<ul style="list-style-type: none"> <li>• 5 knots RMS</li> <li>• 5.7 MPH RMS</li> <li>• 2.5 m/s RMS</li> </ul>	•	•	•
Wind Direction Range	0° to 360°	•	•	•
Wind Direction Resolution	0.1°	•	•	•
Wind Direction Accuracy @ 0°C to 55°C (32°F to 131°F), no precipitation**	<p><b>Low Wind Speeds</b>—6° RMS typical from {</p> <ul style="list-style-type: none"> <li>• 4 knots to 10 knots</li> <li>• 4.6 MPH to 11.5 MPH</li> <li>• 2 m/s to 5 m/s</li> </ul> <p><b>High Wind Speeds</b>—3° RMS typical from {</p> <ul style="list-style-type: none"> <li>• &gt;10 knots</li> <li>• &gt;11.5 MPH</li> <li>• &gt;5 m/s</li> </ul>	•	•	•
Wind Direction Accuracy in wet conditions**	8° RMS typical for <ul style="list-style-type: none"> <li>• &gt;8 knots</li> <li>• &gt;9.2 MPH</li> <li>• &gt;4 m/s</li> </ul>	•	•	•
Compass Accuracy—Static Heading no Magnetic Interference	See Model Information	1° RMS when level	1° RMS when level	1° RMS when level 2° RMS for pitch and roll angles up to 30° 3° RMS for pitch and roll angles up to 45°
Compass Accuracy—Dynamic Conditions***	2° RMS for pitch and roll angles up to 30°	N/A	N/A	•
Air Temperature Range	-25°C to 55°C (-13°F to 131°F)	•	•	•
Air Temperature Resolution	0.1°C (0.1°F)	•	•	•
Air Temperature Accuracy*	±1°C (±1.8°F) @ <ul style="list-style-type: none"> <li>• &gt;4 knots wind</li> <li>• &gt;4.6 MPH wind</li> <li>• &gt;2 m/s wind</li> </ul>	•	•	•
Barometric Pressure Range	850 mbar to 1150 mbar (25 inHg to 34 inHg, 850 hPa to 1150 hPa)	•	•	•
Barometric Pressure Accuracy	±20 hPa (±20 mbar, ±0.59 inHg) when altitude correction is available	•	•	•
Relative Humidity Range	10% to 95% RH	•	N/A	N/A
Relative Humidity Accuracy*	±4% units RH	•	N/A	N/A
Operating Temperature Range	-25°C to 55°C (-13°F to 131°F)	•	•	•
Supply Voltage	9 VDC to 16 VDC	•	•	•
Weight	285 grams (0.7 lb)	•	•	•
Supply Current	See Model Information	<150 mA	<150 mA	<200 mA
Sensor Baud Rate (NMEA 0183 only)	4800 bps can be increased to 38,400 bps with a command	•	•	•
NMEA 2000® Load Equivalency Number (LEN)	See Model Information	N/A	N/A	13
Thread Size on Base	See Model Information	1"-14 UNS and 3/4" NPT	1"-14 standard marine mount	1"-14 standard marine mount
Certifications and Standards	See Model Information	CE, RoHS	CE, RoHS	CE, IPX6, RoHS, IEC 60945

RMS—Root Mean Square

\*When the wind speed is less than 4 knots (4.6 MPH) and/or air temperature is below 0°C (32°F), wind and temperature readings will be less accurate.

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

Humidity and temperature readings compared to Vaisala™ Instruments

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.

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