

WeatherStation® Instruments

LB150



PB150



PB200



Accurate weather monitoring of 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
- Very easy installation and two-year warranty
- Maintenance-free operation—no moving parts
- Applications—Environmental monitoring

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
- Very easy installation and two-year warranty
- Maintenance-free operation—no moving parts
- Applications—Recreational powerboats

Precise marine data you need—Wind, Weather, Heading, and Navigation

- 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
- Three-axis solid-state compass
- Three-axis accelerometer provides pitch and roll information
- Outputs both NMEA 0183 and NMEA 2000®
- 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—Large powerboats and commercial vessels

WeatherCaster™ Software

- Your own personal weatherman on your PC
- Analog and digital weather information
- Easy-to-use and customize
- Plug and play connectivity



FUNCTIONS	SPECIFICATIONS			LB150	PB150	PB200
Wind Speed Range	▪0 knots to 80 knots	▪0 MPH to 92 MPH	▪0 m/s to 40 m/s	●	●	●
Wind Speed Resolution	▪0.1 knot	▪0.1 MPH	▪0.1 m/s	●	●	●
Wind Speed Accuracy @ 0°C to 55°C (32°F to 131°F), No Precipitation**	Low Wind Speeds ▪0 knots to 10 knots ; ±1 knot +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 High Wind Speeds ▪10 knots to 80 knots; ±2 knots or 5% RMS, whichever is greater ▪11.5 MPH to 92 MPH; ±2.3 MPH or 5% RMS, whichever is greater ▪5 m/s to 40 m/s; ±1 m/s or 5% RMS, whichever is greater			●	●	●
Wind Speed Accuracy in Wet Conditions**	▪5 knots RMS	▪5.7 MPH RMS	▪2.5 m/s RMS	●	●	●
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**	Low Wind Speeds (6° RMS typical)			●	●	●
	▪4 knots to 10 knots	▪4.6 MPH to 11.5 MPH	▪2 m/s to 5 m/s			
	High Wind Speeds (3° RMS typical)			●	●	●
	▪>10 knots	▪>11.5 MPH	▪>5 m/s			
Wind Direction Accuracy in Wet Conditions (8° RMS typical) **	▪>8 knots	▪>9.2 MPH	▪>4 m/s	●	●	●
Compass Accuracy	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°
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)*	▪>4 knots wind	▪>4.6 MPH wind	▪>2 m/s wind	●	●	●
Barometric Pressure Range	850 mbar to 1150 mbar (25 inHg to 34 inHg, 850 hPa to 1150 hPa)			●	●	●
Barometric Pressure Resolution	1.1 mbar (0.032 inHg, 1.1 hPa)			●	●	●
Barometric Pressure Accuracy	±20 mbar (±0.59 inHg, ±20 hPa) when altitude correction is available			●	●	●
Relative Humidity Range	See Model Information			10% to 95% RH	N/A	N/A
Relative Humidity Accuracy*	See Model Information			±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	<220 mA
Sensor Baud Rate (NMEA 0183 Only)	4,800 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 UNS standard marine mount	1"-14 UNS standard marine mount
Certifications and Standards	See Model Information			CE, RoHS	CE, RoHS	CE, IPX6, RoHS, IEC60945

*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 will be less accurate
 **Wet conditions include moisture, rain, frost, dew, snow, ice and/or sea spray in the wind channel

RMS—Root Mean Square
 Humidity and temperature readings compared to Vaisala™ Instruments