

DX900+ MultiLog Sensor for Racing and Sailing



DX900+ and CAST app

Electromagnetic Speed Sensor – No Paddlewheel Maintenance

Features

- Measures transverse and longitudinal speed to instantaneously calculate leeway angle and speed-through-water with no latency or additional input
- Measures reverse speed and side speed (which can be helpful for very light wind conditions and quick maneuvers on powerboats like docking)
- Outputs dual axis speed, water temperature, and hull attitude with no moving parts
- Outputs heel and trim in addition to leeway
- Connects wirelessly to AIRMAR CAST™ app for easy speed calibration and configuration
- Stores configuration within the device and delivers calibrated data to onboard displays
- Retrofitting is easy – retractable insert fits most existing 51 mm (2") P617V AIRMAR thru-hull housings
- No paddlewheel to clean or maintain. No moving parts to break or wear out.

Electromagnetic Speed – How it Works

A small electromagnetic charge is generated between the four metal posts on the face of the DX900+. As water passes between the posts, it creates voltage which can be measured and converted to speed. The speed is calculated regardless of the direction of the water flow allowing for the accurate measurement in 360 degrees.



Electromagnetic measurement of water flow in 360° immediately calculates speed and leeway



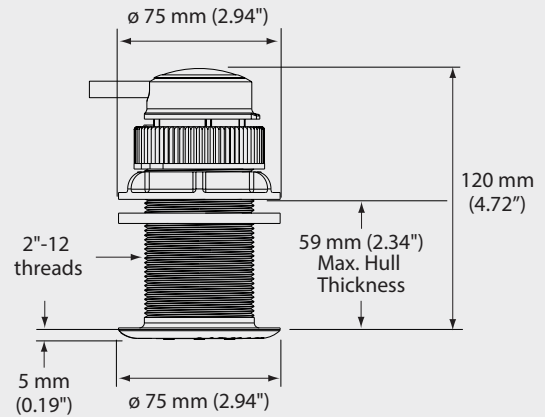


CAST™ App Features

- DX900+ has wireless connectivity to the AIRMAR CAST™ app on iOS and Android devices.
- Calibrate the speed in a simple, intuitive way regardless of the instrument brand or model that is on board.
- DX900+ stores calibration and configuration and delivers the data to the NMEA network.



DIMENSIONS



P717V Housing*

*Low-profile, plastic or stainless steel housings available. Also retrofits to P617V housing.

SPECIFICATIONS

Transverse Speed Range	± 6 knots
Longitudinal Speed Range	± 60 knots
Accuracy of Transverse and Longitudinal Speed	+/- 0.1 knots for speed under 10 knots +/- 1% for speed above 10 knots
Display Resolution	0.01 knots
Outputs	NMEA 0183 (ST)
Configurable data update rate	up to 10 Hz
Operating Temperature Range	-15°C to 55°C (5°F to 131°F)
Water Temperature Accuracy	+0.5°C (+1.0°F)
Supply Voltage	9 VDC to 16 VDC
Average Power Consumption	2.5W (ST)
Sensor Cable Length	6m (ST)
Blanking Plug	Yes
Weight (Sensor, box and cable)	2.25 lbs.

Note: The sensing pins in contact with the water are made from very high quality alloy, allowing very stable measurements and high resistance to corrosion.

NMEA 0183 TRANSMITTED SENTENCES

SENTENCE	DESCRIPTION	ON BY DEFAULT FOR EM LOG ST	MAXIMUM LENGTH (CHARS)
\$YXMTW	Sea Water Temperature	✓	20
\$VMVBW	Dual Ground/ Water Speed	✓	35
\$VWVHW*	Speed Thru Water	✓	30
\$VWVLW*	Distance Thru Water	✓	45
\$YXXDR(T)	Transducer Measurements: Board Temp. and Voltage	☐	43
\$YXXDR(B)	Transducer Measurements: Vessel Attitude	✓	43
\$VMNLA	Nautical Leeway Angle	✓	19

✓ = supported and enabled by default

☐ = supported but not enabled by default

(*) = TalkerID is VM when these sentences are output by EM Log products.

(**) = Proprietary sentence sent from Em Log DST Electronics Box to the Insert (on by default)

www.airmar.com



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