

The Smart Alternative!

Airmar's New ST800 and ST850 Smart™ Sensors feature embedded micro-electronics. Speed and temperature signals are processed inside the sensor and can be displayed on any radar, chart plotter, or device that accepts NMEA 2000® data.

Minimize Your Drag

The ST850 is Airmar's standard, thru-hull, speed and temperature sensor. The plastic P617V, bronze B17, and stainless steel SS577 outer housing options are available to meet all hull requirements. These low-profile housings are nearly flush and minimize drag with only 5 mm (3/16") extending outside the hull.

Eliminate Turbulence

The plastic P217 and bronze B119 countersunk flush outer housings are easy-to-install. The plastic P314 and bronze B21 outer housing options have a traditional beveled-edge for flush mounting. Flush-mount housings eliminate turbulence for accurate readings at high-speeds. They are the optimal choice for installation in high-speed powerboats and racing sailboats.

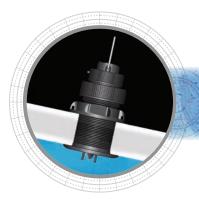
Smart[™] Sensors

Speed and Temperature Thru-Hull Transducer

Features

- Speed and temperature
- Plastic, bronze, or stainless steel housings available
- Retractable housing with water valve
- ST800—Retrofits into Airmar P120 and B120 housings
- ST850—Retrofits into Airmar P17 and B17 housings
- 6 m (20') NMEA 2000 cable
- Devicenet connector
- Speed Range: 2 knots to 45 knots (2 MPH to 52 MPH)





ST800, ST850

Technical Information

SPECIFICATIONS

Weight:

—0.7 kg (1.4 lb)—Plastic —1.3 kg (2.8 lb)—Bronze —1.6 kg (3.5 lb)—Stainless Steel

Speed Range: 2 knots to 45 knots (2 MPH to 52 MPH)

Acoustic Window: Urethane
Hull Deadrise: Up to 22°
Data Update Rate: 1 per second
Minimum Depth Range: 0.5 m (1.6')
Maximum Depth Range: Up to 100 m (330')

Pressure Rating: 3 m (10')

Pulse Rate: 20,000 p/nm* (5.6 Hz per knot)—*p/nm = pulses per nautical mile

Supply Voltage: 9 VDC to 16 VDC

Supply Current: 200 mA

Standard Cable Length: 6 m (20') NMEA 2000 cable **Temperature Sensor Accuracy:** ±0.5°C (±1.8°F)

Temperature Sensor Range: -10°C to 40°C (14°F to 104°F) NMEA 2000® Load Equivalency Number (LEN): 4

CE Regulation: Complies to IERC945

DATA OUTPUT PROTOCOL

NMEA 0183 Sentence Structure

\$VWVHW...... Speed **\$VWVLW**..... Distance

\$YXMTW...... Water Temperature

NMEA 2000® Supported PGNs

59392......ISO Acknowledgement **600928**.....ISO Address Claim

126208......Acknowledge Group Function **126464**......Transmit PGN List Group Function **126464**......Received PGN List Group Function

126996...... Product Information

128259...... Speed (Speed Water Reference)

128275..... Distance Log

130310...... Environmental Parameters (Water Temperature) 130311...... Environmental Parameters (Water Temperature)

DIMENSIONS ST800 P120 Plastic, B120 Bronze ø 75 mm (2.94")2-12" 125 mm threads (4.92") ø 75 mm 5 mm (2.94'')(0.20'')**ST850** P617V Plastic, B17V Bronze, and SS577 Stainless Steel ø 78 mm (3.08'')30 mm (1.19'')2-12" tainless Steel Bronze and threads mm 49") Plastic ø 51 mm (2.00") ø 75 mm (2.94") 5 mm (0.20")



