

#### 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, bronze, and stainless steel 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

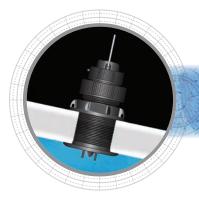
The plastic P217 and bronze B119 countersunk flush outer housings are easy-to-install. The plastic P314 and bronze B21 outer housing options have a traditional beveled-edge for flush mounting. Flush-mount housings eliminate turbulence for accurate readings at high-speeds. They are the optimal choice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

# Thru-Hull Speed & Temperature Smart<sup>™</sup> Sensors

## **Features**

- Speed and temperature
- NMEA 2000® or Analog output options
- Retractable plastic, bronze, or stainless steel housings with valve sleeve
- ST800—Retrofits into Airmar P120 and B120 housings
- ST850—Retrofits into Airmar P17 and B17 housings
- 6 m (20') NMEA 2000 cable, 9 m (30') Analog cable
- Devicenet connector or NMEA 2000 version
- Speed Range: 2 knots to 45 knots (2 MPH to 52 MPH)





# ST800, ST850

**DIMENSIONS** 

# **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 Pressure Rating: 3 m (10')

Pulse Rate: 17,000 p/nm\* (4.8 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, 9 m (30') Analog

**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): 2

**CE Regulation:** Complies to IERC60945

#### **DATA OUTPUT PROTOCOL**

#### **Analog Paddlewheel Format**

### 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) 130312...... Environmental Parameters (Water Temperature)

# **ST800** P120 Plastic, B120 Bronze (2.94'')and 2-12" 125 mm threads onze (4.92") ø 75 mm 5 mm (2.94'')(0.20'')**ST850** P17 Plastic, B17 Bronze, and SS577 Stainless Steel ø 75 mm (2.94'')30 mm (1.19'')2-12 Stainless Steel **Bronze and** threads mm .49") 89 Plastic ø 51 mm (2.00") ø 75 mm (2.94") 5 mm (0.20")



