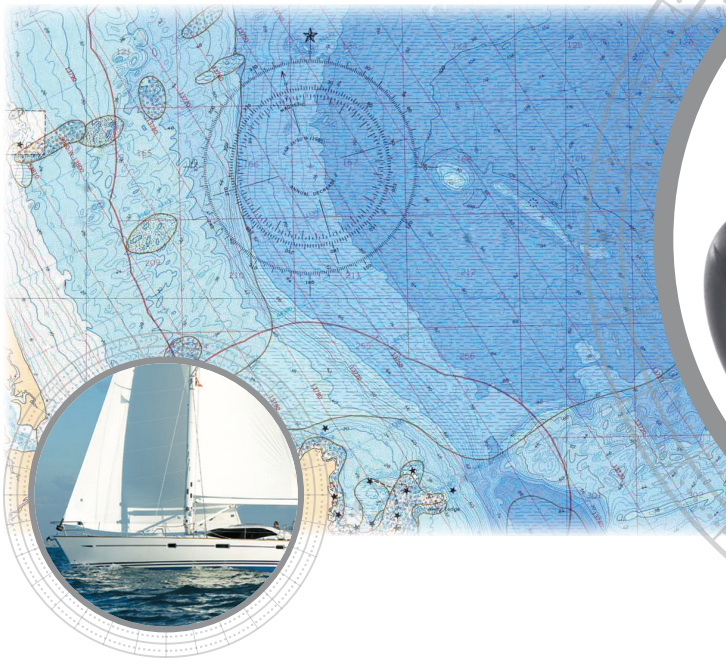


# ST800 ST850



## 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™ Sensors

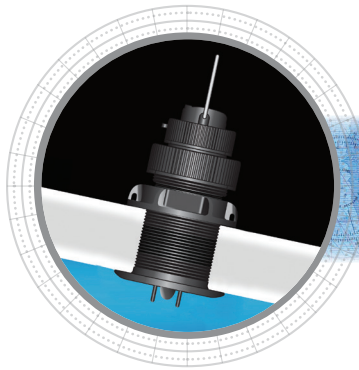
### Features

- Speed and temperature
- NMEA2000® 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)



*Sensing Technology*

[www.airmar.com](http://www.airmar.com)



# 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

**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:**  $\pm 0.5^{\circ}\text{C}$  ( $\pm 1.8^{\circ}\text{F}$ )

**Temperature Sensor Range:**  $-10^{\circ}\text{C}$  to  $40^{\circ}\text{C}$  ( $14^{\circ}\text{F}$  to  $104^{\circ}\text{F}$ )

**NMEA 2000® Load Equivalency Number (LEN):** 2

**CE Regulation:** Complies to IERC60945

### DATA OUTPUT PROTOCOL

#### Analog Paddlewheel Format

OR

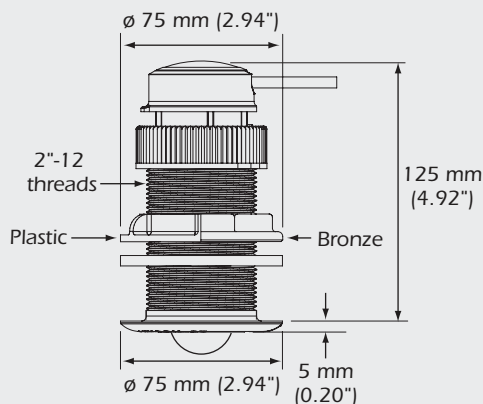
#### NMEA 2000® Supported PGNs

- 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)

### DIMENSIONS

#### ST800

**P120 Plastic  
B120 Bronze**



#### ST850

**P17 Plastic, B17 Bronze**

