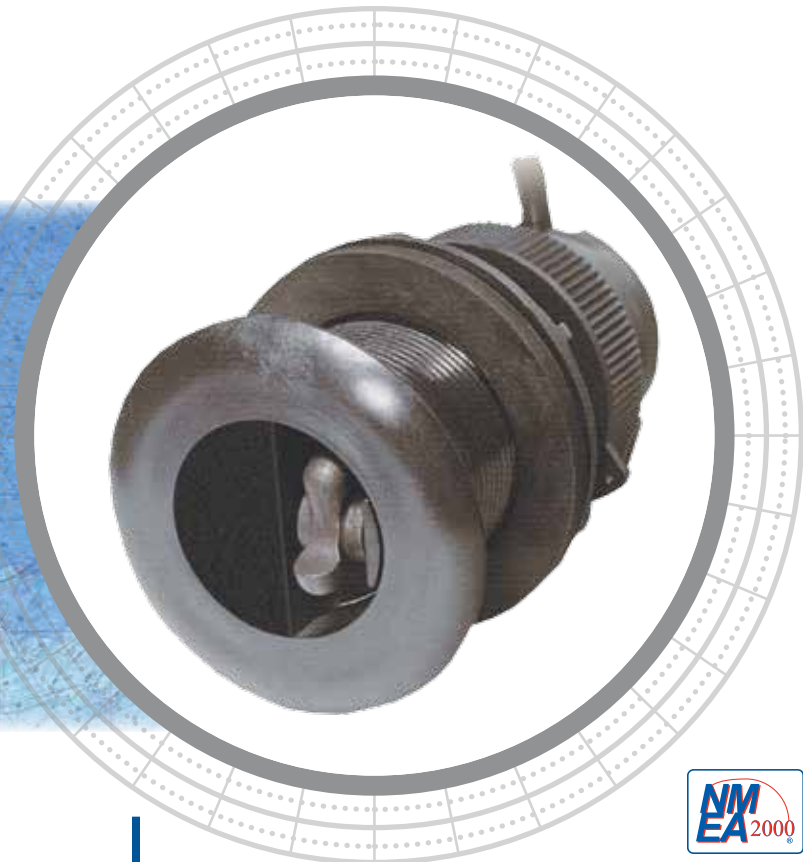
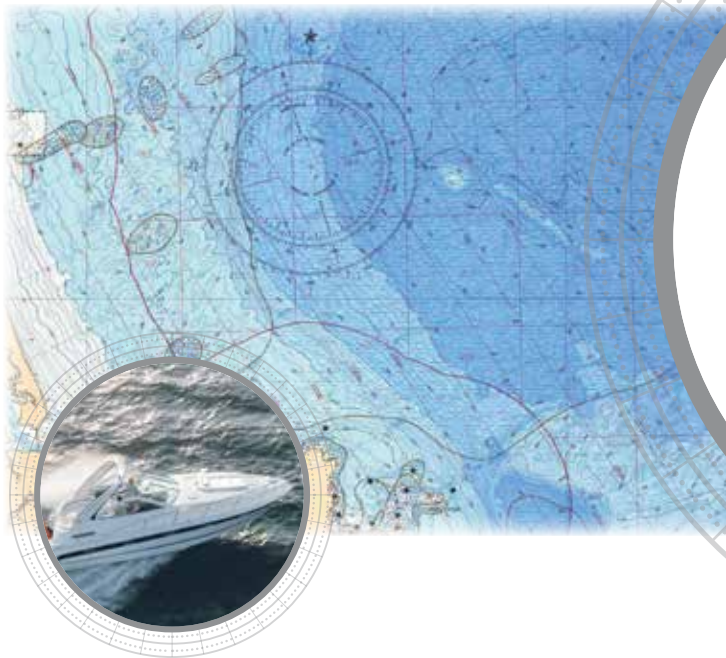


# DST800



## The Smart Alternative!

Airmer's DST800 Smart™ Sensor features embedded micro-electronics. Depth, speed, and temperature signals are processed inside the sensor and can be displayed on any radar, chart plotter, or device that accepts NMEA 0183 or NMEA 2000® data. The 235 kHz frequency prevents mutual interference with other echosounders on the vessel.

## Single Choice for Depth, Speed, and Temperature!

The DST800 is the market's first Retractable TRIDUCER® Multisensor offering depth, speed, and temperature in a single, 51 mm (2") fitting. Only one hole through the hull simplifies the installation—an attractive feature for boat builders and boat owners alike.

## Three-In-One

Patented, speed-signal-processing enhancements provide excellent paddlewheel accuracy below 5 knots (6 MPH) and smooth linear output at all vessel speeds. The transducer's wide, fan-shaped, port-starboard beam is able to find bottom even when installed on steep deadrise hulls or heeling sailboats. You also get true water-temperature readings with the DST800's reliable temperature sensor.

## Valve Closes the Gap!

Airmer's innovative housing design incorporates the popular self-closing valve. When a transducer insert is removed, the valve minimizes water flow into the boat.

## Thru-Hull TRIDUCER® Multisensor Smart™ Sensor

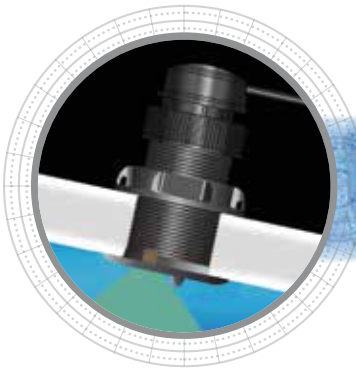
### Features

- The all-in-one Smart Sensor
- Depth, speed, and temperature in one compact housing
- Available in NMEA 0183 and NMEA 2000® versions
- 235 kHz frequency prevents mutual interference with other echosounders on the vessel
- Plastic, bronze, or stainless steel housings available
- Fast-response temperature sensor provides  $\pm 0.2^{\circ}\text{C}$  ( $\pm 0.1^{\circ}\text{F}$ ) accuracy
- Available as a Smart Sensor at 235 kHz or an analog output sensor operating at either 200 kHz or 235 kHz
- Available in low-profile, countersunk, or beveled-edge housings



*Sensing Technology*

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



## Technical Information

### 235 kHz-F NMEA 0183 / NMEA 2000®

<b>Number of Elements and Configuration</b>	□	
<b>Beamwidth (@-3 dB)</b>	10° x 44°	
<b>RMS Power (W)</b>	60 W	100 W

### SPECIFICATIONS

#### Weight:

- 0.9 kg (2.0 lb)—Plastic
- 1.6 kg (3.5 lb)—Bronze
- 1.9 kg (4.2 lb)—Stainless Steel

**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 70 m (230')—NMEA 0183
- Up to 100 m (330')—NMEA 2000

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

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

#### Supply Voltage:

- 10 VDC to 25 VDC—NMEA 0183
- 9 VDC to 16 VDC—NMEA 2000

#### Supply Current:

- <40 mA—NMEA 0183
- <200 mA—NMEA 2000

#### Standard Cable Length:

- 10 m (33')—NMEA 0183
- 6 m (20') devicenet—NMEA 2000

**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 IERC60945

### DATA OUTPUT PROTOCOL

#### NMEA 0183 Sentence Structure

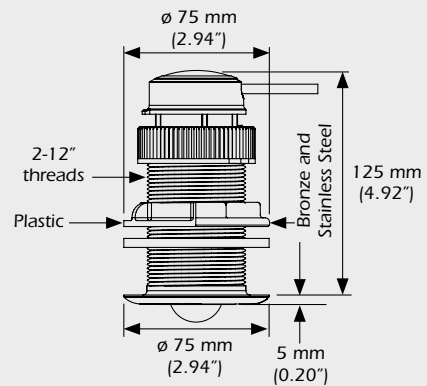
- \$SDBT, DDPT... Depth
- \$VW/VHW..... Speed
- \$VWLW..... Distance
- \$XMTW..... Water Temperature

#### 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)
- 128267..... Water Depth (With Transducer Offset)
- 128275..... Distance Log
- 130310..... Environmental Parameters (Water Temperature)
- 130311..... Environmental Parameters (Water Temperature)
- 130312..... Environmental Parameters (Water Temperature)

### DIMENSIONS

P617V Plastic, B617V Bronze, and SS617V Stainless Steel



B17V Bronze

