

#### The Smart Alternative!

Airmar'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!

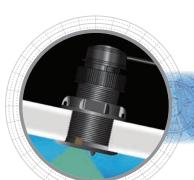
Airmar's innovative housing design incorporates the popular self-closing valve. When a transducer insert is removed, the valve minimizes water flow into the boat.



# Thru-Hull TRIDUCER® Multisensor Smart<sup>TM</sup> 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 intrference with other echosounders on the vessel
- Plastic, bronze, or stainless steel housings available
- Fast-response temperature sensor provides ±0.2°C (±0.1°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





### **Technical Information**

235 kHz-F NMEA 0183 / NMEA 2000®		
Number of Elements and Configuration		
Beamwidth (@-3 dB)	10° x 44°	
RMS Power (W)	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

\$SDDBT, DDPT... Depth \$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) **128267**...... Water Depth (With Transducer Offset)

**128275**...... Distance Log

130310..... Environmental Parameters (Water Temperature) 130311..... Environmental Parameters (Water Temperature) 130312..... Environmental Parameters (Water Temperature)

TECHNOLOGY CORPORATION

# Sensing Technology



## **DIMENSIONS** P617V Plastic, B617V Bronze, and SS617V Stainless Steel ø 75 mm and Steel 2"-12 125 mm threads (4.92")Plastic ø 75 mm 5 mm (2.94")(0.20") **B17V Bronze** ø 78 mm (3.08")30 mm (1.19")2"-12 threads 89 mm (3.49")ø 75 mm 5 mm (2.94")(0.20")

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