**DST800**

**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.

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**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 ±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
**235 kHz-F NMEA 0183 / NMEA 2000®**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Elements and Configuration</td>
<td></td>
</tr>
<tr>
<td>Beamwidth (@-3 dB)</td>
<td>10° x 44°</td>
</tr>
<tr>
<td>RMS Power (W)</td>
<td>60 W</td>
</tr>
<tr>
<td></td>
<td>100 W</td>
</tr>
</tbody>
</table>

**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 (32')—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)

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