

ULTRASONIC SPEED SMART™ SENSORS

UST800/UST850 and UDST800 Smart™ Sensors

Ultrasonic Smart™ Sensor for Cruising and Racing

AIRMAR's new Ultrasonic speed sensors just turned your maintenance time into more cruising time... and made your boat smarter too. Ultrasonic speed and temperature (UST800/UST850) or ultrasonic speed, depth and temperature (UDST800) in one single housing with no moving parts makes these sensors a high precision, low maintenance solution for power and sail boats of all types and sizes. Say goodbye to paddlewheel maintenance and hello to Ultrasonic Smart™ technology, from the company who invented the Smart Sensor.

Features:

- Ultrasonic speed, depth and temperature in one housing with no moving parts. Speed and temp also available.
- Advanced filtering and sampling rates for increased accuracy at all speeds – data update rate up to 10 x per second
- Adapts automatically to boat speed, water depth and water clarity keeping speed accuracy consistent.
- Perfect for salt and fresh water usage.
- Easily retrofits into most AIRMAR 2" housings



Improved Performance

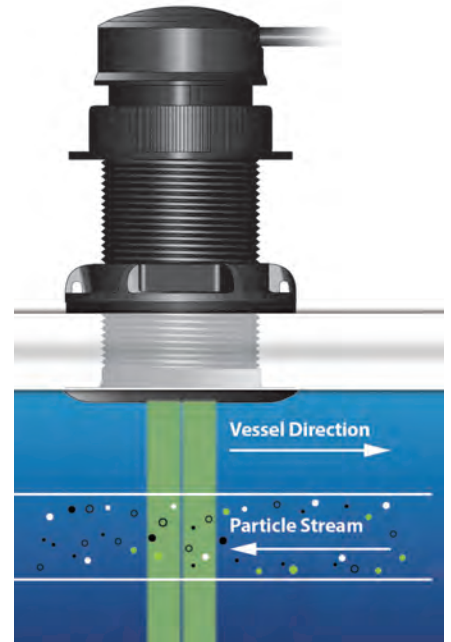
Paddlewheel Maintenance... a thing of the past

With an ultrasonic speed sensor, paddlewheel maintenance becomes a thing of the past. Enjoy the performance advantage of ultrasonic speed which updates faster and provides maintenance-free reliability all season. AIRMAR's ultrasonic speed sensors feature patented Adaptive Signal Processing which provides unmatched speed sensitivity that adjusts to the speed, depth and water clarity. All this with no paddlewheel to pull and maintain...AIRMAR just turned your maintenance time into more cruising time!

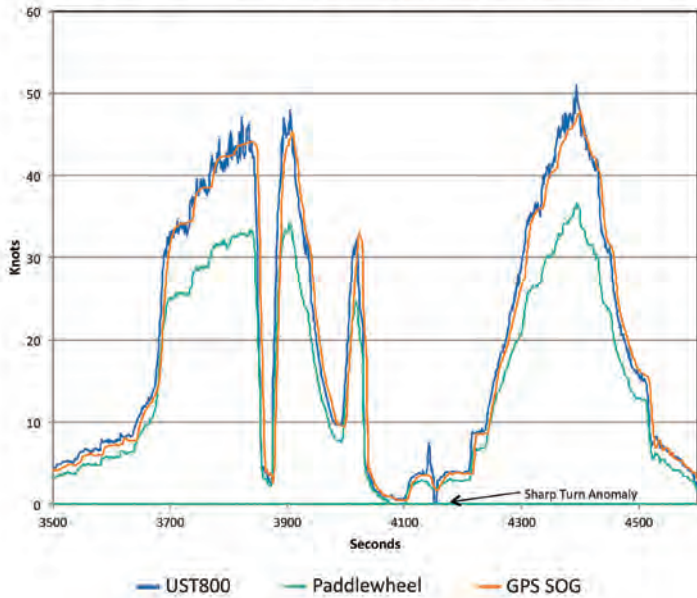
Precise Ultrasonic Speed Calculation – How It Works

UST and UDST models feature AIRMAR's patented adaptive digital processing which calculates speed up to 22 times every second, automatically adjusting to boat speed, water depth and water clarity.

Ultrasonic speed is a tried and true method for accurate speed-through-water in both salt and fresh water. Utilizing two ultrasonic transducers, our sensor measures the time it takes for particles in the water to travel between them. From this measurement, an accurate speed-through-water is determined. This translates into the most reliable and accurate ultrasonic speed sensors on the market—at a very competitive price.



Ultrasonic Beats paddlewheel for Speed Accuracy and Responsiveness



Fast Response Water Temperature

With accuracy of +0.5°C (+1.0°F) searching for optimum swimming and fishing temperatures becomes easy.

Water Temperature Range

-4°C to 40°C (24.8°F to 104°F)

Speed Range

0.1 to 50 knots (57 MPH)

Available Outputs

UST800/UST850: NMEA 2000®

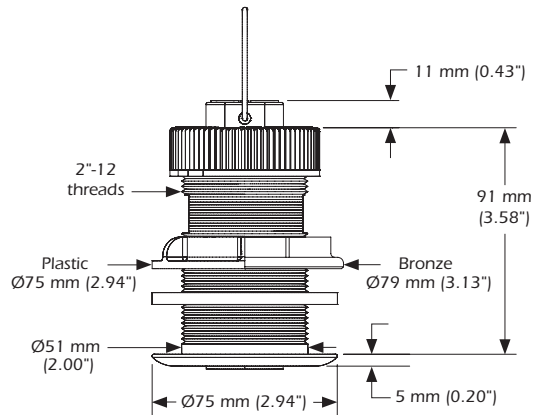
UDST800: NMEA 2000®

Simple Installation and Easy Maintenance

Only one hole through the hull simplifies the installation—an attractive feature for boat builders and boat owners alike.

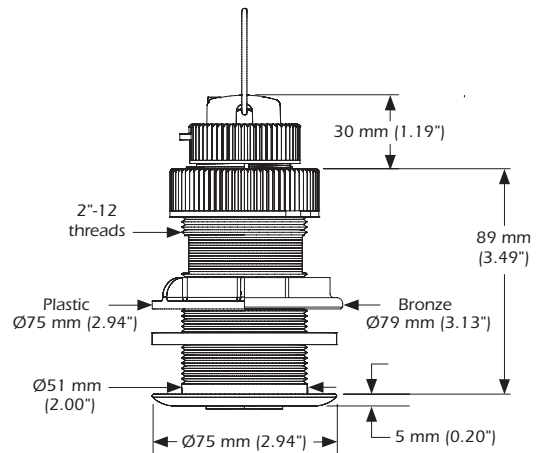
UST800

P120 Plastic, B120 Bronze



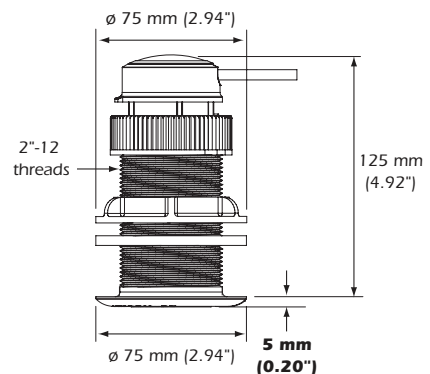
UST850

P17 Plastic, B17 Bronze
P617V Plastic



UDST800

P617V Plastic



UST800/UST850 and UDST800 SMART™ SENSORS

SPECIFICATIONS

Correlation Speed Sensor Transmitting Frequency	4.5 MHz
Pulse Repetition Frequency	0.5 kHz to 12 kHz (varies with speed)
Speed Range	0.1 to 50 knots (57 MPH)
Available Outputs	NMEA 2000®
Water Temperature Range	-4°C to 40°C (24.8°F to 104°F)
Water Temperature Accuracy	+0.5°C (+1.0°F)
Depth (UDST800)	235 kHz
Power Rating	100 W
Depth Range (UDST800)	Minimum Depth .6 m (2'), Maximum Depth 100 m (328')
Supply Voltage	9 VDC to 16 VDC
Supply Current	80 mA - 200 mA, Average 125 mA @12VDC
Thru-Hull Housing Material	Plastic (bronze or stainless steel optional)
Thru-Hull Housing Diameter	51 mm (2")
Sensor Material	Plastic insert
Blanking Plug	Yes
Weight	1.4 kg (3 lb)—Plastic, 1.8 kg (4 lb)—Bronze
CE Compliant	Yes
NMEA 2000 Load Equivalency Number (LEN):	LEN of 7 (UST800/UST850), LEN of 8 (UDST800)
Retrofit	UST800: Retrofits into AIRMAR P120, B120 housings UST850: Retrofits into AIRMAR P17, B17, P617V housings UDST800: Retrofits into AIRMAR P617V

PROCESSOR BOX CONFIGURATIONS



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UST800/UST850/UDST800_rO 8/16/21

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