

# ULTRASONIC SPEED SMART SENSOR

NEW  
for 2026

## TriSonic™ Smart™ Sensor

Photo courtesy of Nordhavn

### Airmar's Most Capable Ultrasonic Speed Instrument Ever....

AIRMAR's new TriSonic Smart Sensor combines a depth sensor, ultrasonic speed sensor, water temperature and heel and trim data into one sensor. It delivers unmatched reliability and accuracy without the need for paddlewheel maintenance. Its ultrasonic speed solution features no moving parts, eliminating cleaning or wear concerns, making it a high-precision, low-maintenance option for power and sailboats of all sizes. The TriSonic Smart Sensor, along with the CAST™ app, simplifies the calibration of speed-through-water. The free CAST app provides calibration options that were previously available only through costly PC-based software. Embrace Ultrasonic Smart technology and leave paddlewheel maintenance behind, brought to you by the innovators of the Smart™ Sensor.

#### Features:

- TriSonic Smart Sensor combines:
  - Ultrasonic speed (no paddlewheel)
  - Depth
  - Water temperature
  - Heel and trim data
- No paddlewheel or moving parts to maintain or replace.
- Provides NMEA 2000® output of calibrated data to every instrument and MFD on the network
- Advanced speed filtering and sampling rates for enhanced accuracy at all speeds, with data updating up to 5 times per second.
- Patented Adaptive Signal Processing – adjusts to boat speed, water depth, and water clarity for consistent speed accuracy.
- Suitable for both saltwater and freshwater use.
- Easily retrofits into most existing AIRMAR 2" housings.
- Connects wirelessly to Airmar's CAST app, offering user-friendly benefits:
  - Simplifies speed calibration through your mobile device.
  - Offers basic and advanced speed calibration with the ability to manually enter speeds for multiple heel angles and up to 10 different speeds, a feature previously available only through costly PC software.

# Say Goodbye to the Paddlewheel

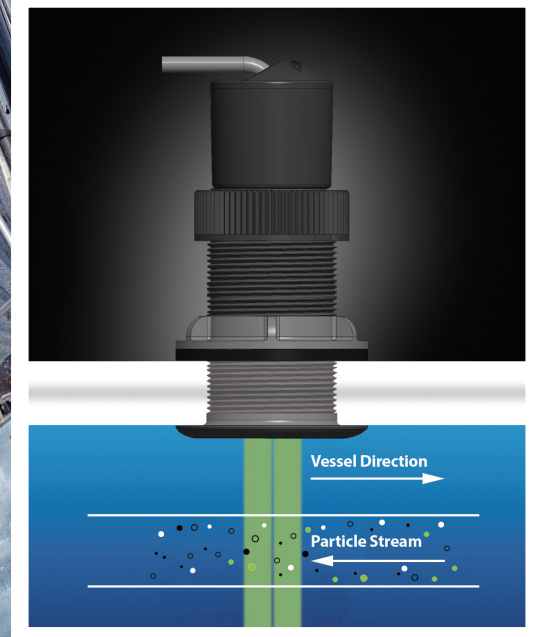
## Say Goodbye to Paddlewheel Maintenance!

With AIRMAR's ultrasonic speed sensor, the hassle of paddlewheel upkeep is eliminated. Enjoy the convenience of a high-performance ultrasonic speed sensor that updates data faster and offers maintenance-free reliability throughout the season. AIRMAR's sensors utilize patented Adaptive Signal Processing, providing unparalleled speed sensitivity that adapts to your speed, depth, and water clarity—all without the need for maintaining a paddlewheel. AIRMAR has transformed your maintenance time into more time for cruising!

## Precise Ultrasonic Speed Calculation – How It Works:

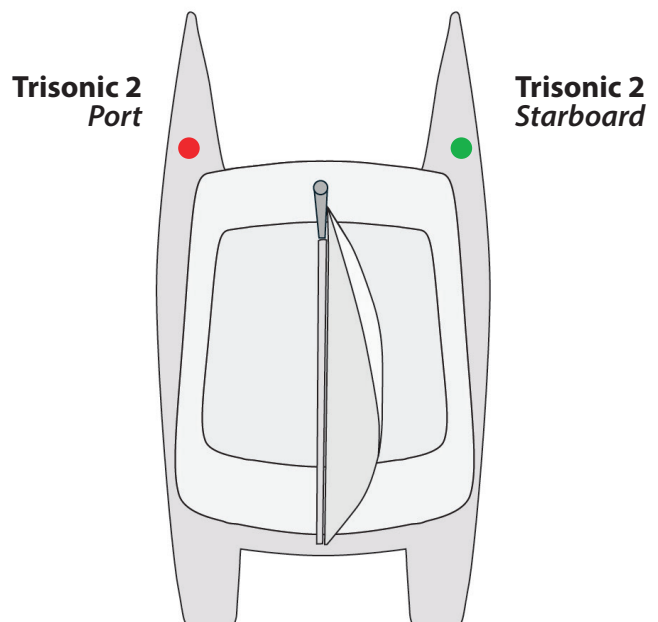
Ultrasonic speed measurement is a proven method for delivering precise speed-through-water data in both salt and freshwater environments. By utilizing two ultrasonic transducers, the sensor measures the time it takes for particles in the water to move between them, thereby determining an accurate speed-through-water. This technology ensures that AIRMAR's ultrasonic speed sensors are the most reliable and precise on the market, offered at a highly competitive price.

The TriSonic Smart Sensor employs AIRMAR's patented adaptive digital processing technology, which automatically adjusts to varying boat speeds, water depths, and water clarity to calculate speed.



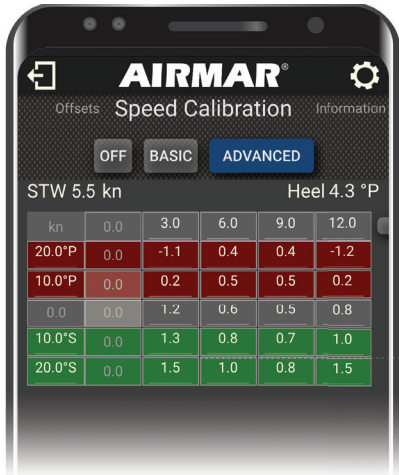
## Looking for a Dual-Hull Solution?

TriSonic and TriSonic Smart 2 Sensors can be combined to optimize speed and depth performance by seamlessly switching between sensors based on the boat's heel angle. Each TriSonic Smart Sensor includes an attitude sensor to measure the heel angle and determine which hull is the lowest in the water. The sensors communicate seamlessly to choose the lowest sensor which is typically in the least aerated water, ensuring the most reliable ultrasonic speed and depth readings. Both can also report independently for awareness of depth under each hull... great for navigating shallow waters and harbors.

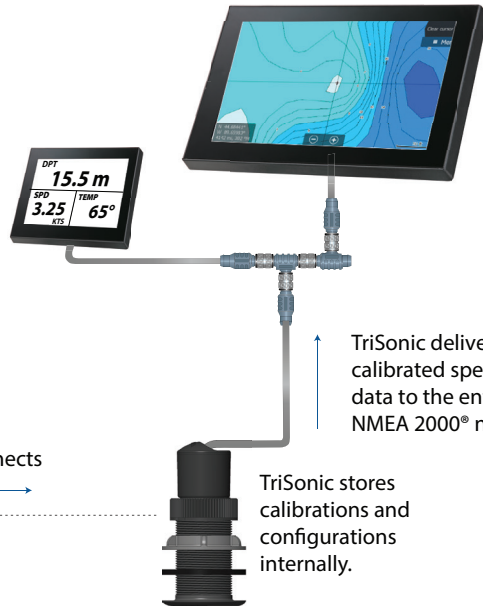




Use the Airmar CAST™ app to calibrate speed at multiple heel angles and numerous speeds for optimal performance.



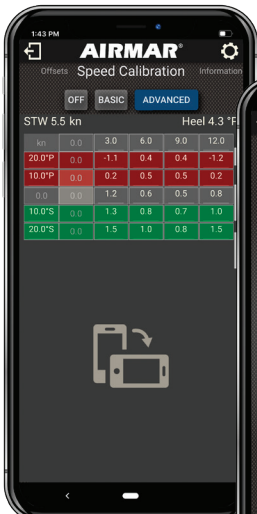
Wirelessly connects



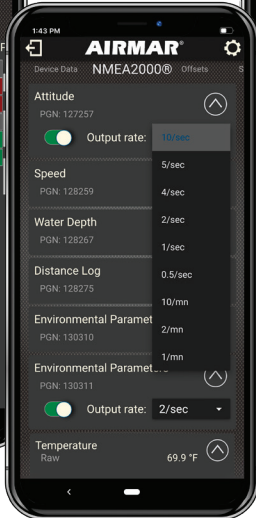
TriSonic delivers calibrated speed data to the entire NMEA 2000® network.

TriSonic stores calibrations and configurations internally.

Calibrate speed at 5 heel angles and up to 10 speeds



Configure outputs



Display data / gauges



Calibrate basic or heel compensated speeds with TriSonic connectivity



Configure offsets and calibrate attitude



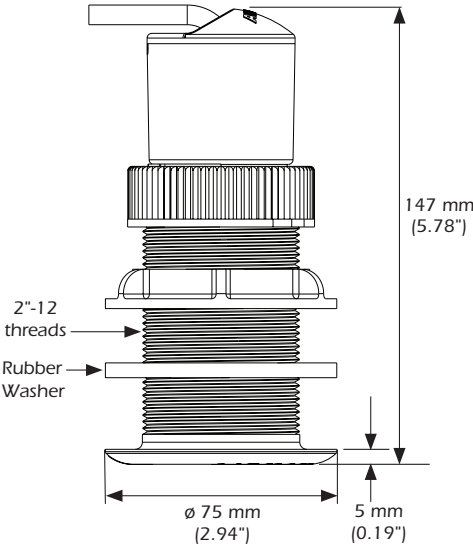
CAST connects to TriSonic, DST820, 300WX, DX900+, and SmartBoat Modules



# TriSonic Smart Sensors

| SPECIFICATIONS             |                                                      |
|----------------------------|------------------------------------------------------|
| Speed Range                | 0.1 to 35 knots (40 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 Frequency            | 235 kHz                                              |
| Wireless Protocol          | Bluetooth Low Energy (BLE)                           |
| Wireless Range             | Up to 30 feet depending on mount location            |
| Power Rating               | 100 W                                                |
| Depth Range                | 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 / Stainless Steel optional)          |
| Thru-Hull Housing Diameter | 51 mm (2")                                           |
| Blanking Plug              | Yes                                                  |
| LEN                        | 6                                                    |

## DIMENSIONS



©2024 AIRMAR Technology Corporation

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

TRISONIC\_rF 06/04/26

As AIRMAR constantly improves its products, all specifications are subject to change without notice. All AIRMAR products are designed to provide high levels of accuracy and reliability, however they should only be used as aids to navigation and not as a replacement for traditional navigation aids and techniques. Smart™ is a trademark of Airmar Technology Corporation. Other company or product names mentioned in this document may be trademarks or registered trademarks of their respective companies, which are not affiliated with AIRMAR.

