



NBOSI Launches Integrated CTD Sensor

Mar 04, 2024 08:20 GMT

## NBOSI Launches Integrated CTD Sensor ahead of Oceanology International 2024

**East Falmouth, Massachusetts, 4 March 2024** - Neil Brown Ocean Sensors, Inc. (NBOSI), a pioneer in research-quality conductivity-temperature sensors for mobile marine platforms, launches its latest innovation ahead of Oceanology International in London. The new integrated CTD Sensor promises to redefine underwater data collection, addressing an increasing demand for smaller, more capable unmanned underwater vehicles (UUVs) in various industries.

The UUV landscape is undergoing a transformative shift, driven by technological advancements, artificial intelligence (AI), and machine learning (ML). As vehicles are getting smaller, while growing in numbers and enhancing their capabilities, there is an increasing demand for compact, affordable, yet highly accurate sensors. This demand is unprecedented and continuously expanding.

NBOSI has been at the forefront of this evolution since 2004, specializing in sensors for mobile marine platforms, capitalizing on the company's 120 years of combined field experience specific to the ocean environment. The company's response to industry trends aligns with the global growth forecast for the UUV market, projected to reach \$8.14 billion by 2030.

The integrated CTD sensor represents a leap forward in UUV technology, offering a compact, palm-sized design that provides research-quality temperature, salinity, depth, and sound speed measurements. Dr. Dave Fratantoni, NBOSI's CEO, highlights the advantages of the new sensor, emphasizing “simplified maintenance, faster recalibration, and superior data quality.”

Key advantages of NBOSI's integrated CTD sensor include streamlined installation and maintenance. By eliminating the internal electronics board, NBOSI has made sensor integration, routine calibration, spares management, and field replacement a breeze, reducing operational complexities for UUV fleets.

Customers can get direct sound speed and ocean density data in real-time with the precision pressure sensor, ensuring accurate data without burdening the vehicle's CPU.

The rugged and large-aperture flow-through design of the sensor not only offers class leading hydrodynamic performance, but also eliminates the need for an energy-consumptive and noise-producing pump.

Design flexibility has been built in from the start with certain sensor variants featuring a bulkhead connector on the cell. This provides end-users with greater vehicle and systems design freedom, and operational flexibility, optimizing UUV deployments for maximum efficiency. As a further bonus, the new integrated CTD sensor maintains identical form factors and dimensions to existing NBOSI CT sensors, ensuring backward-compatibility.

Over the past 18 months NBOSI has contributed to cutting-edge projects globally, from mine-hunting vehicles in Japan to deep brine pool studies in the Gulf of Mexico. The company's technology is a critical component of the HII REMUS 300, foundational for the US Navy's Lionfish SUUV program.

Looking ahead, Fratantoni expresses confidence in NBOSI's ability to adapt to the evolving needs of the industry: "As UUVs continue to shrink in size, NBOSI's compact sensors are poised to play a crucial role in meeting the industry's demands. The company's commitment to strategic focus and sensor versatility establishes NBOSI as a key player in the rapidly expanding UUV industry", he concluded.

The launch of the integrated CTD sensor ahead Oceanology International 2024 marks a significant milestone for NBOSI, reinforcing its position as a leader in underwater technology. The company invites industry professionals to get in touch to discuss the future of underwater data collection.

Contact NBOSI to arrange a meeting at Oceanology International 2024.

ENDS

**Additional information for image - 503 configuration:**

The NBOSI integrated CTD is available in several configurations, including both rectangular and cylindrical form factors. All are available with a user-specified bulkhead connector, a potted cable pigtail or with a custom-designed through-hull penetrator.

**High-profile customers include:** HII, OceanServer, Mitsubishi Heavy Industries, Offshore Sensing AS, leidos, Woods Hole Oceanographic Institution, L3Harris, Liquid Robotics.

For more information about NBOSI, please visit <https://www.nbosi.com/> or contact:

Dave Fratantoni  
NBOSI  
dave@nbosi.com

or

Silke Braham  
Saltwater Stone  
[s.braham@saltwater-stone.com](mailto:s.braham@saltwater-stone.com)

---

### **About NBOSI:**

NBOSI is a leading provider of cutting-edge marine technology solutions, specializing in the design and manufacture of advanced sensors supporting ocean research, industry and defense. With a commitment to excellence and customer satisfaction, NBOSI empowers scientists and engineers with reliable, high-performance tools designed to meet the unique requirements of the growing fleet of unmanned underwater and surface vehicles.

NBOSI, Neil Brown Ocean Sensors, Inc. was founded in 2003 by Woods Hole Oceanographic Institution (WHOI) scientist Dr. Ray Schmitt, and WHOI engineers Bob Petitt and Neil Brown. Their goal was to develop a new generation of Conductivity-Temperature-Depth (CTD) sensor technology specifically tailored to the unique requirements of mobile ocean platforms. Since its inception, NBOSI has successfully delivered hundreds of sensors to researchers and vehicle manufacturers worldwide, establishing a strong presence in the industry. The company's sensors are widely recognized and trusted, and are offered as standard equipment by market-leading vehicle manufacturers.

### **Contacts**



**Silke Braham**  
PR Account Manager  
PR & Communications  
[s.braham@saltwater-stone.com](mailto:s.braham@saltwater-stone.com)  
+44 (0)1202 669244