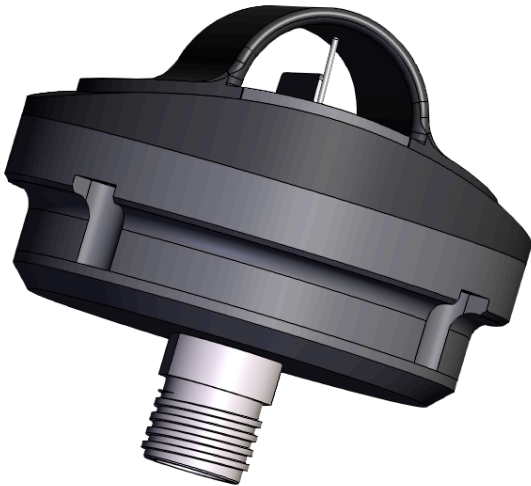


MODEL 503 CTD

TEMPERATURE • SALINITY • DEPTH • SOUND SPEED • DENSITY

NBOSI’s latest CTD combines miniaturized precision electronics with a compact and rugged sensor body to deliver real-time, research-quality ocean data in an easy-to-integrate package. With no interior dry volume required, initial installation, routine calibration and spares inventories are streamlined.

The two-piece cylindrical design (sensor + shroud) facilitates a low-profile hydrodynamic installation in a flooded hull segment. The shroud can be adapted to match a range of hull diameters. Available cabled with a user-defined connector, with a bulkhead connector or with a custom through-hull penetrator engineered to fit your platform.



TECHNICAL SPECIFICATIONS

Physical

Diameter	3.000 in (76.2 mm)
Height	2.000 in (50.8 mm) ¹
Assumed Hull Diameter	7.5 in (190.5 mm) ²
Housing	Plastic, fully potted
Max Depth	6750 dbar (9800 psi) ³
Weight (air)	Approx. 232 g ⁴
Weight (water)	Approx. 150 g ⁴
Connections	Power (2), Data (2)

¹ Not including bulkhead connector or hull penetrator
² Shroud design can be adapted for other hull diameters
³ Assumes selection of compatible-range pressure sensor
⁴ Varies with customer-selected connector or penetrator

Electrical

Input Power	4.5 VDC to 28 VDC
Power Consumption	12 mA / 60 mW @ 5V 13 mA / 156 mW @ 12V

Communications and Sampling

Protocol	RS-232, 8-N-1
Speed	9600 to 115,200 baud
Recursive Filtering	0 to 9 samples
Sample Output Rate	Standard 5 Hz Configurable 0.5 Hz - 10 Hz

Temperature

Standard Range	0°C to 30°C
Extended Range	-5°C to 60°C
Initial Accuracy	0.002°C
Resolution	0.0001°C
Time Constant	0.4 s

Conductivity

Standard Range	0 to 60 mS/cm
Initial Accuracy	0.005 mS/cm
Resolution	0.0001 mS/cm
Electrodes	99.95% pure platinum

Pressure

Sensor	Keller PA 7LD
Available Ranges	30 to 10,000 dbar
Initial Accuracy	0.15% of full-scale
Overpressure	4 x pressure range

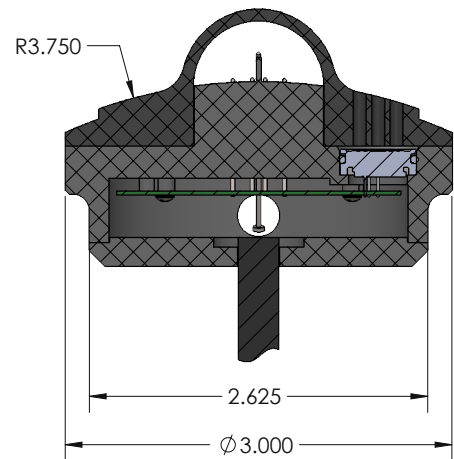
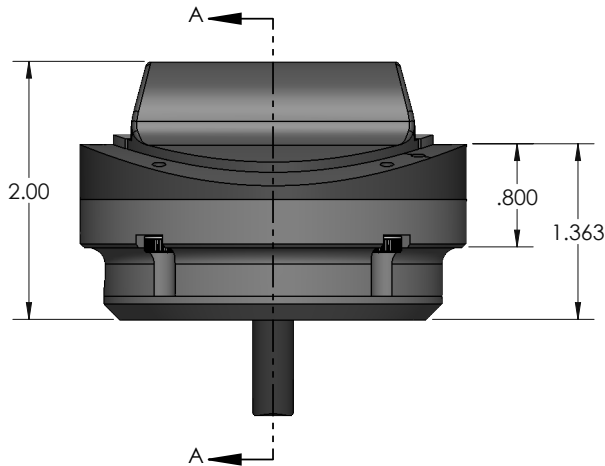
Options

Modular Connectors	Impulse MKS(W)-307 Impulse IE55-1206 SubConn MC Others On Request
Hull Penetrator	Custom Engineered

THE CTD FOR YOUR AUV
SMALL. ACCURATE. RUGGED. RELIABLE.



MODEL 503 CTD



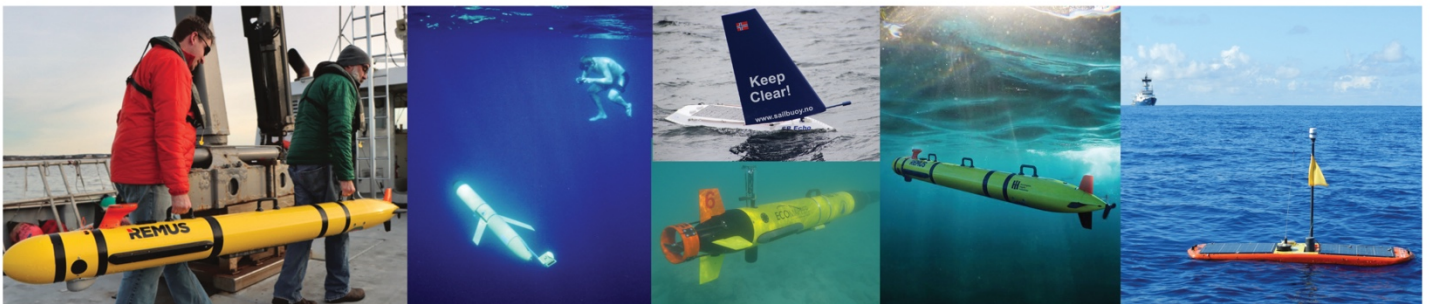
SECTION A-A

Available in multiple configurations:

- Bulkhead connector
- Cabled with user-defined connector
- Custom through-hull penetrator

Shroud can be modified to match hull diameter.

Since 2004 NBOSI has delivered nearly 1000 sensor systems to leaders in ocean research, industry and defense.



NBOSI

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