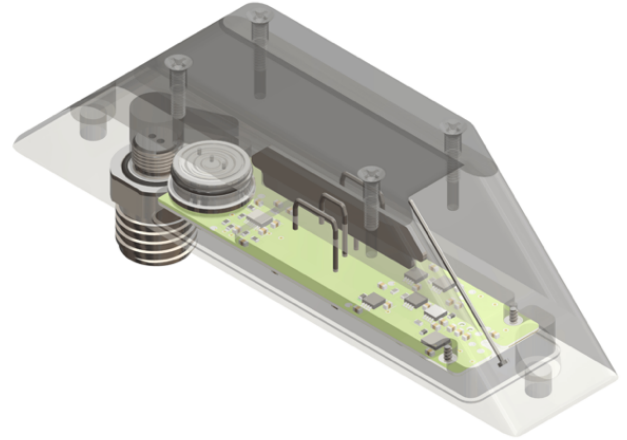


MODEL 501 CTD

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.

Available with one of several modular bulkhead connectors or with a custom through-hull penetrator engineered to fit your platform.



TECHNICAL SPECIFICATIONS

Physical

Length	5.400 in (137.2 mm)
Width	1.159 in (29.4 mm)
Height	1.550 in (39.4 mm) ¹
Housing	Plastic, fully potted
Max Depth	6750 dbar (9800 psi) ²
Weight (air)	Approx. 220 g ³
Weight (water)	Approx. 140 g ³
Connections	Power (2), Data (2)

¹ Not including bulkhead connector or hull penetrator

² Assumes selection of compatible-range pressure sensor

³ 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

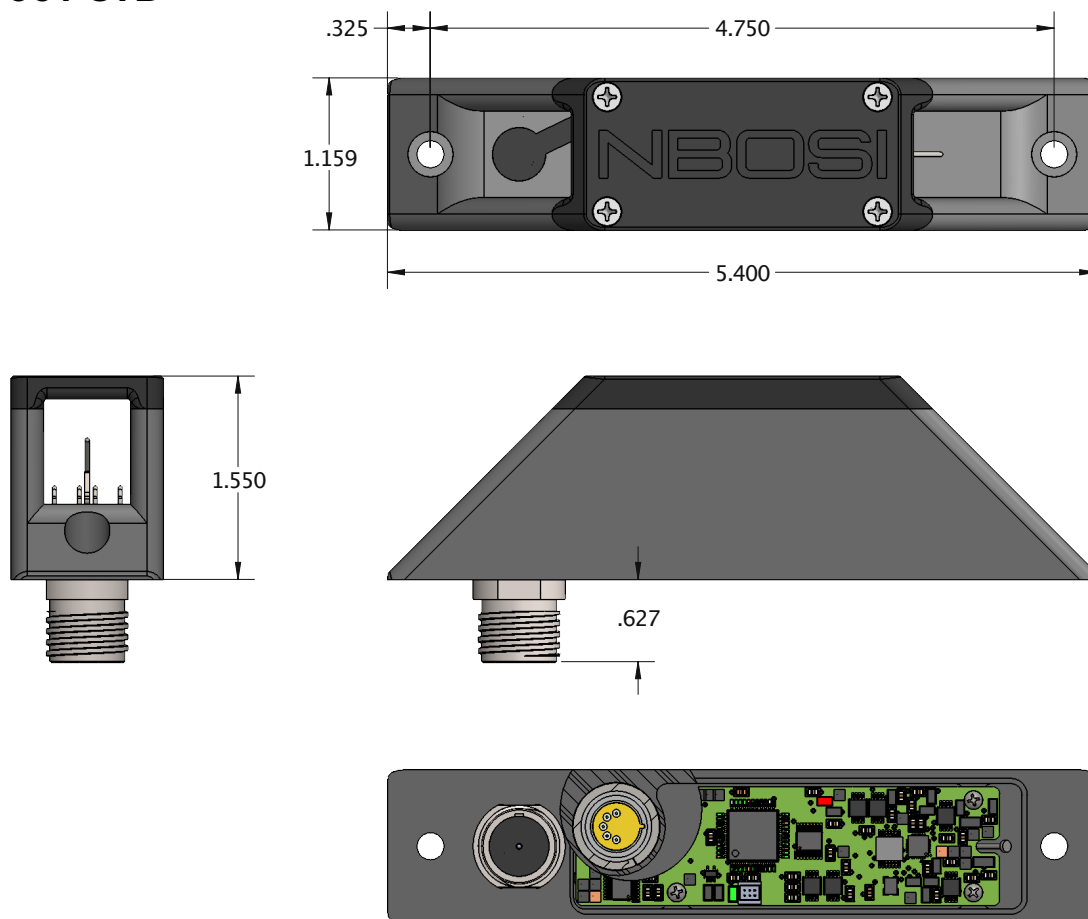
Sensor	Keller PA 7LD
Available Ranges	30 to 10,000 dbar
Initial Accuracy	0.15% of full-scale
Overpressure	4 x pressure range

Options

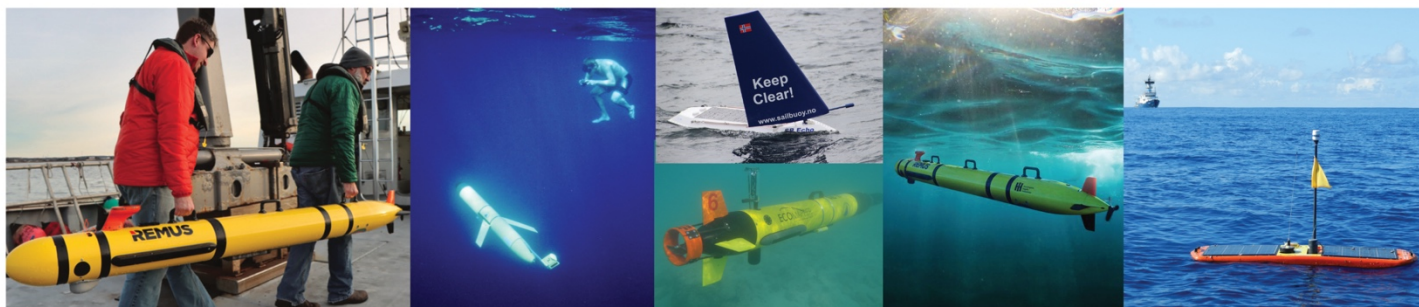
Modular Connectors	Impulse MKS(W)-307 Impulse IE55-1206 SubConn MC Others On Request
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Hull Penetrator	Custom Engineered
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MODEL 501 CTD



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

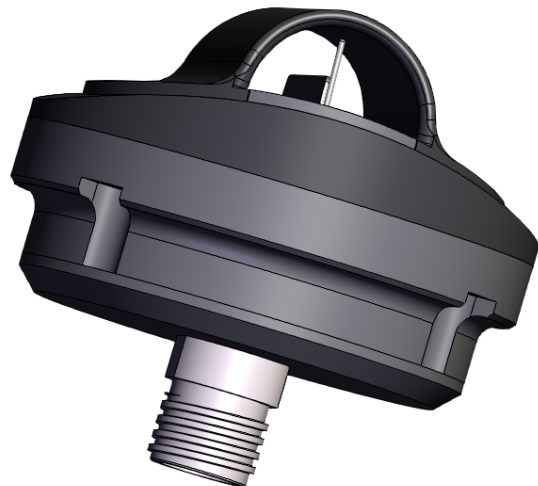


MODEL 503 CTD

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 19,200 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

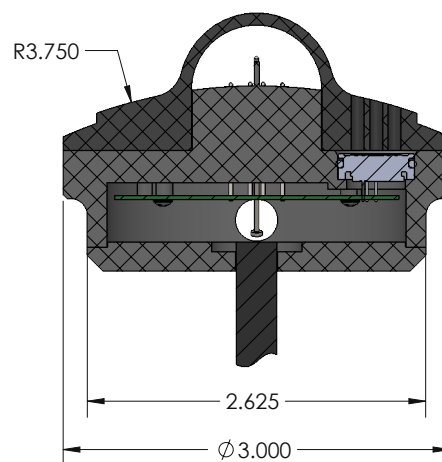
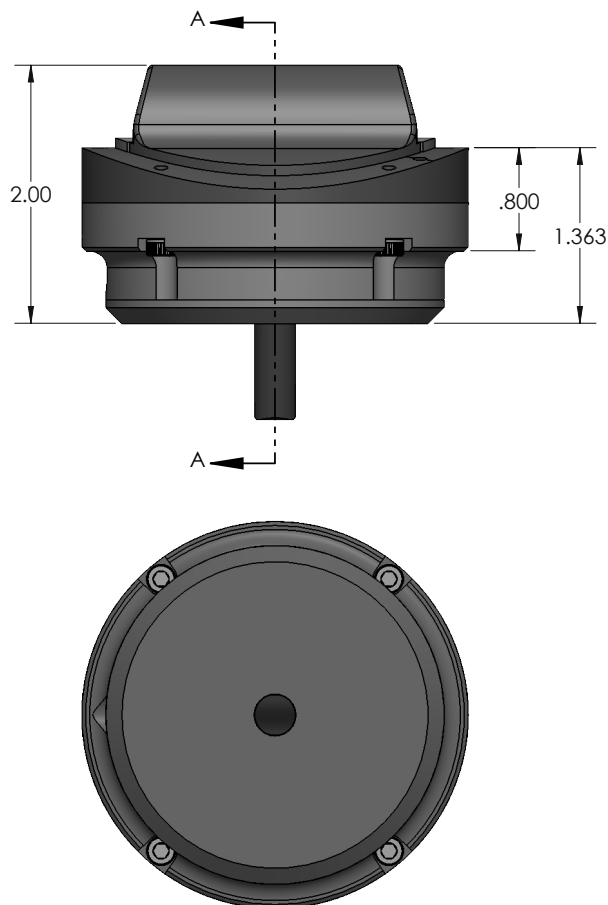
Pressure

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

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.

