

SBE 61

DEEP ARGO CTD

Overview

The SBE 61 Deep Argo CTD is an evolution of the SBE41/41CP Argo CTD designed for deployments to 7000 m, with improved overall measurement quality and stability to meet the needs of deep ocean research. Each SBE 61 is chosen from an extended calibration history, ensuring stable electronics and minimal drift in the field. The hardware interface and many commands have been carried over to make integration into existing SBE 41/41CP-based products easier.

Features

Proven SBE 41 CTD Temperature, Conductivity, and Pressure sensors with improved electronics provide stability for multi-year deployments

Shielded conductivity electronics backfilled with dry gas for improved stability

Long-term factory calibration in our state-of-the-art facility ensures higher accuracy with minimal drift

Pump-controlled TC-Ducted flow over the temperature and conductivity sensor minimizes salinity spiking

U-shaped flow path prevents ingestion of surface contaminants

Carefully engineered anti-foul protection extends deployment duration

RS-232 communications



Components

- Internal-field conductivity cell permits use of TC Duct and minimizes noise
- Aged and pressure-protected thermistor has a long history of exceptional accuracy and stability
- 7000 m pressure sensor with 4-point temperature compensation
- Continuous pump
- Titanium housing

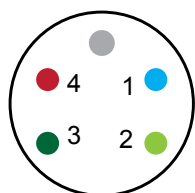
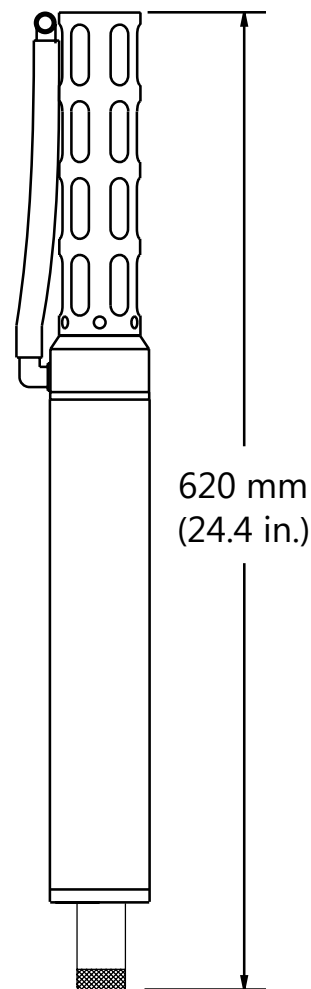
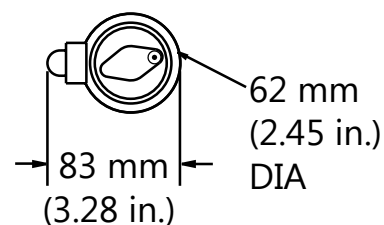
Field Specifications

The specifications below represent the expected performance of the instrument when deployed in the field. Under controlled circumstances in a lab, we would expect the instrument to outperform these specifications.

We have chosen to display field specifications to give our users a true measure of how Sea-Bird Scientific instruments perform in harsh environments and applications. It is critical to keep this in mind when comparing specifications with instruments from other manufacturers.

Measurement Range	
Conductivity	0 to 7 S/m
Temperature	-5 to 35 °C
Pressure	0 to 7000 m
Initial Accuracy	
Conductivity	± 0.0002 S/m
Temperature	± 0.001 °C
Pressure	± 4.5 dbar from 0-7000 m
Typical Stability	
Conductivity	0.002 S/m over 10 years
Temperature	0.0002 °C per year
Pressure	0.8 dbar / year
Resolution	
Conductivity	0.00005 S/m
Temperature	0.0001 °C
Pressure	0.002% of full scale range
Power Consumption (12 V)	
Idle: 8-10 mA Sleep: 10 µA Profiling: 20 mA	
External Power	8 - 14 VDC
Housing, Depth Rating, & Weight	Titanium, 7000 m, 2.8 kg in air

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MCBH-4MP

RS-232 Only

Pin	Signal
1	Common
2	RS-232 data receive
3	RS-232 data transmit
4	Auxiliary power in (8-14 VDC)