


# CTD Probe with Carousel Water Sampler

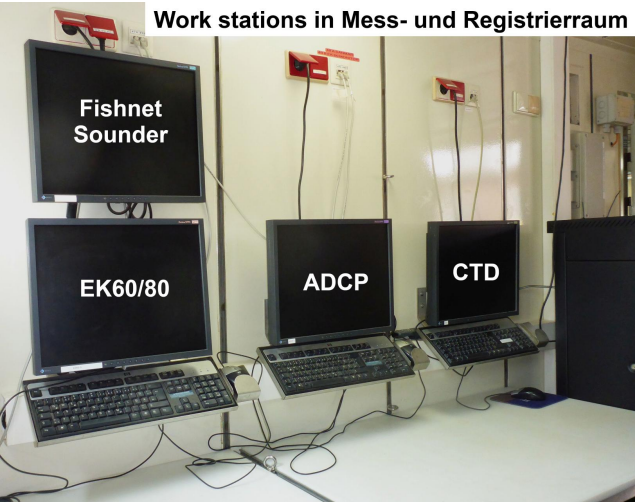
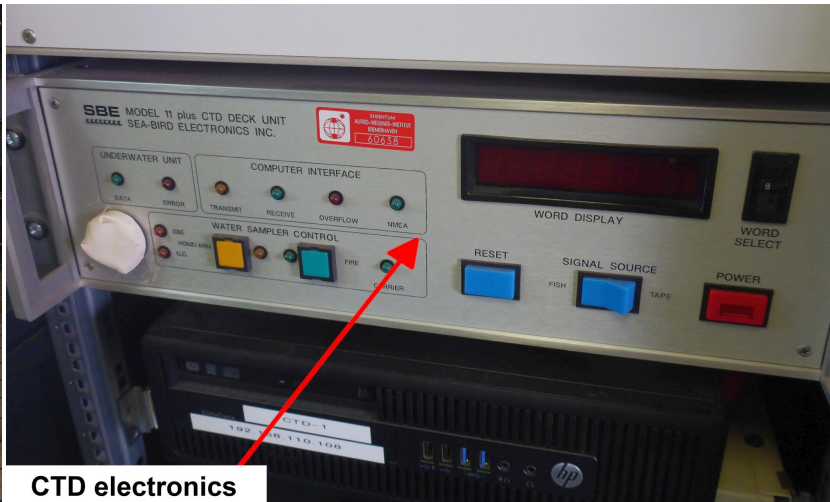
**Attention:**

Please note that operations of the CTD (Conductivity-Temperature-Depth) watersampler requires experienced scientific staff on board. The system is not operated by the ship's crew. Announce operations with the CTD watersampler to AWI-Logistics prior to the cruise and clarify the data transfer after the cruise.

## Summary

The CTD probe measures conductivity and temperature along a vertical transect through the water body. The measured parameter are used to calculate the salinity of the water. Additionally, up to 24 water samples can be taken in different water depths during the CTD measurements. A fluorometer, an oxygen sensor and a transmissiometer are attached to the CTD as well. The system is operational up to 2000m water depth.

Manufacturer	Seabird
Model	SBE911plus mit SBE32
Serial No.	SBE11P S/N: 11P52063-0792
Type	CTD
REGISTRY-Link	<a href="#">REGISTRY (2361)</a>



## Contacts

Name	Institution	Role
Sandra Tippenhauer	Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research	Editor

## Components

The CTD system consists of the underwater unit SBE 9plus, the deck unit SBE 11plus V2 and the carousel water sampler SBE32 which is equipped with free flow water samplers manufactured by Hydro-Bios. The CTD is outfitted with a double set of temperature (SBE 3plus) and conductivity (SBE 4C) sensors that are calibrated regularly. Additionally, an altimeter, a transmissometer, an oxygen sensor and a fluorometer may be attached to the CTD unit and operated to water depths of 6000m.

On the CTD data acquisition PC in the Messraum following software is installed: acquisition software Seasave (Version V7\_19), SBE Data processing software, ManageCTD software packet for cleansing and conversion of the data and Ocean Data View (ODV) for visualization.

Under the table in the Messraum a frame with four backup bottles is installed.

Name	Model	Serial Number	REGISTRY-Link
FI Chla Wetlabs FLRTD		1365	<a href="#">REGISTRY (5907)</a>
SBE32 water sampler	SBE32	n/a	<a href="#">REGISTRY (2363)</a>
SBE3plus temperature sensor		4918	<a href="#">REGISTRY (5856)</a>
SBE3plus temperature sensor		5110	<a href="#">REGISTRY (5859)</a>
SBE4 conductivity sensor		3810	<a href="#">REGISTRY (5878)</a>
SBE4 conductivity sensor		3827	<a href="#">REGISTRY (8506)</a>
SBE43 oxygene sensor	SBE43	n/a	<a href="#">REGISTRY (4123)</a>
SBE43 oxygene sensor		2007	<a href="#">REGISTRY (5884)</a>
SBE5 pump		4297	<a href="#">REGISTRY (5893)</a>
SBE5 pump		5228	<a href="#">REGISTRY (5894)</a>
Transmissiometer Wetlabs C-Star		435	<a href="#">REGISTRY (5915)</a>

## Position

<b>Info</b>	The CTD unit is usually stored on the main deck. Electronics and the computer for operation are installed in the Mess- und Registrierraum.
<b>X</b>	0.0 (no unit given) (no description given)
<b>Y</b>	0.0 (no unit given) (no description given)
<b>Z</b>	0.0 (no unit given) (no description given)

## Data logging, storage and archiving

### Logged parameters

Parameter	O2ARegistry Output Type	Unit
conductivity	conductivity	S/m
water temperature	water temperature	°C
oxygen content	oxygen	ml/l
pressure	pressure	dbar
fluorescence	fluorescence	V
distance to sea floor	distance	m
transmission	transmission	%

**Central geographical ship's position and time standard**

**Rawdata storage on board**

**Data archiving on land**

## Documentation

- [CTD\\_SBE911\\_brochure](#) (Factsheet, 522 kB)
- [CTD\\_SBE911\\_manual](#) (User Manual, 5 MB)
- [SBE 11plus V2 deck unit](#) (User Manual, 3 MB)
- [SBE 9plus CTD](#) (User Manual, 6 MB)