



### Pressure sensor for longterm measurement of conductivity, temperature and water level

- **Application**  
Surface water, Groundwater
- **Measurement technology**  
Vented pressure cell and 4-electrode graphite conductivity cell
- **Parameters measured**  
Waterlevel, Temperature, Conductivity
- **Product Highlights**  
Measures and stores water level, temperature, and conductivity data
- **Measurement range**  
Water level: 0 ... 4, 10, 20, 40, and 100 m Conductivity: 0.001...2.000 mS/cm, 0.10...100.00 mS/cm
- **Accuracy**  
 $\pm 0,05$  % FS
- **Internal data logger**  
Yes

The OTT CTD is an integrated sensor and datalogger for measurement of water level, temperature, and conductivity in groundwater and surface water applications. It features a robust ceramic measuring cell for long term accuracy and has outputs for

# Technical Data

## OTT CTD Sensor

salinity and total dissolved solids (TDS). Its built in datalogger manages and stores all measurements at user-programmable intervals.

|                           |                 |
|---------------------------|-----------------|
| Lifetime (@ 1 h interval) |                 |
| with Lithium-batteries    | ≥5 years        |
| with Alkaline-batteries   | ≥1.5 years      |
| Interface                 | Infrared (IrDA) |

### Datalogger

**Memory** 4 MB

**Amount of values** approx. 500,000

**Measurement interval** 5 sec ... 24 h

**Storage interval** 5 sec ... 24 h

**Installation** ≥ 1"

**Material** ABS, POM, stainless steel 1.4539 (904 L)

### Weight

**Com unit (incl. bat)** approx. 0.410 kg

**Sonde** approx. 0.430 kg

### Dimensions

**Com unit L x Ø** 400 mm x 22 mm

**Sonde L x Ø** 317 mm x 22 mm

**Max system length** 1.5 ... 200 m ±1 % ±5 cm

**Storage temperature** -40 ... +85 °C

### Protection class

**Com unit** IP67 (water column max. 2 m, duration max. 24 h)

**Sonde** IP68

### Water level measurement

**Measurement range:** 0 ... 4 m, 10 m, 20 m, 40 m, 100 m

**Resolution:** 0.001 m / 0.1 cm / 0.01 ft / 0.1 inch  
/ 0.0001 bar / 0.001 psi

**Accuracy:** ± 0.05 % FS

**Units:** m, cm, ft, inch, bar, psi

**Temperature compensated operating range** -5 ... +45 °C (icefree)

### Temperature measurement

#### 2-3

We reserve the right to make technical changes and improvements without notice. V-27/06/2019  
OTT Hydromet GmbH, Germany

# Technical Data

## OTT CTD Sensor

|                    |                |
|--------------------|----------------|
| Measurement range: | -25 ... +70 °C |
| Resolution:        | 0.01 °C        |
| Accuracy:          | ± 0.1 °C       |

### Conductivity measurement Measurement range selectable

|                      |   |
|----------------------|---|
| Measurement range 1: | 0.001 ... 2.000 mS/cm                           |
| Resolution:          | 0.001 mS/cm                                     |
| Accuracy:            | ±0.5 % of measurement value; (min ±0.001 mS/cm) |
| Units:               | mS/cm / µS/cm                                   |

|                      |  |
|----------------------|--|
| Measurement range 2: | 0.1 ... 100 mS/cm                              |
| Resolution:          | 0.01 mS/cm                                     |
| Accuracy:            | ±1.5 % of measurement value; (min ±0.01 mS/cm) |
| Units:               | mS/cm  |

|                        |   |
|------------------------|---|
| <b>Electrical data</b> |   |
| Power supply           | Lithium or Alkaline batteries<br>3 x 1.5 V battery (LR6-AA, FR6-AA) |