

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**
  ±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

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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

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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

Electrical data	
Power supply	Lithium or Alkaline batteries 3 x 1.5 V battery (LR6·AA, FR6·AA)

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