



Product Range

- _ Reliable measurements
- _ Quality components
- _ Low energy consumption
- _ Easy data retrieval

OTT ground water measurement Practical measuring devices



OTT Orpheus Mini

Ground Water Data Logger



OTT CTD

Ground Water Data Logger
with conductivity measuring cell



Features/Benefits

- _ Capacitive ceramic pressure cell – robust, precise and with long-term stability
- _ Quality, salt-water resistant, stainless steel housing
- _ Low energy requirements
- _ Fast battery change without tools – the probe remains in the water
- _ Easy installation – adapter plates for wells from 1"
- _ Remote transfer via GSM/SMS/ GPRS with OTT ITC

The OTT Orpheus Mini is designed primarily for use in observation wells or wellhead shafts, but also provides reliable data in numerous level measurement sites in surface waters. Due to its quality components, it is particularly tough and long-lived.

A pressure probe measures the hydrostatic pressure of the water column above the measuring cell and uses this to determine the water level. In the process it compensates for influences from temperature or air pressure variations – the integrated temperature sensor and the pressure compensation capillary in the probe cable provide the necessary conditions.

The measurement data are automatically saved in the integrated datalogger. They can be transferred via the infrared interface to a laptop or Pocket PC. The convenient operating program assists the process. Remote transfer via SMS, GMS or GPRS/IP-Com is also easy to implement with the OTT ITC top cap.



Features/Benefits

- _ For environmental checks in ground and surface water
- _ Corrosion and salt-water resistant housing material
- _ 4-electrode conductivity measuring cell
- _ Convenient software for all important operating steps
- _ Can be equipped for remote transfer with OTT ITC without additional wiring
- _ Simple installation in observation wells from 1"

For monitoring conductivity, the OTT CTD has the right solution. Thanks to the integrated conductivity measuring cell, it not only measures the water level and temperature, but also provides indicator values for the presence of potential pollutants.

The voltage drop in the flowing water is measured with the conductivity measuring cell. From voltage drop, current strength and temperature, a microprocessor calculates the value for the specific conductivity. From this it infers the salinity and the total dissolved solids (TDS).

From the capacitive ceramic pressure cell to the quality stainless-steel housing – all components of the OTT CTD are designed to also resist adverse environmental conditions.

Reading out data and parameterization on-site is convenient via the infrared interface. And with the help of the OTT ITC top cap, the CTD can quickly be equipped for remote data transfer. That can also be done after installation and requires no additional wiring.



Technical Data

Measuring ranges, pressure	0 ... 4 m, 0 ... 10 m, 0 ... 20 m, 0 ... 40 m, 0... 100 m water column
Accuracy, pressure	0.05% FS
Longterm stability	±0.1%/year FS
Measuring range, temp.	-25 °C ... +70 °C (ice-free)
Accuracy, temperature	±0.5 °C; optional ±0.1 °C
Power supply	3 x 1.5 V LR6/FR6-cells, Alkaline or Lithium type
Lifetime	≥5 years (Lithium); >1.5 years (Alkaline)
Memory	4 MB (approx. 500,000 measur. values)
Sample/Storage interval	1 second ... 24 hours
Interface	Infrared (IrDA)
Material of casing	ABS, stainless steel (DIN 1.4539, 904 L)



OTT ITC – for quickly implementing remote transfer of groundwater data

Technical Data

Measuring range/Accuracy pressure and temperature	see Orpheus Mini
Measuring range, conductivity	0.001 ... 2.000 mS/cm
Accuracy, conductivity	0.10 ... 100.00 mS/cm ±0,5 % FS ±1,5 % FS
Power supply/Lifetime	see Orpheus Mini
Memory	4 MB (approx. 500,000 measur. values)
Sample/Storage interval	5 seconds ... 24 hours
Interface	Infrared (IrDA)
Material of casing	ABS, stainless steel (DIN 1.4539, 904 L)



Remote data transfer with OTT ITC



OTT Thalimedes

Shaft Encoder with Data Logger



OTT KL 010

Contact Gauge

Features/Benefits

- _ Can be used flexibly: in observation wells from 4", in float shafts or as an upgrade for mechanical level recorders
- _ Compact design
- _ Low energy consumption – up to 15-month operation with only one 1.5 V C-type cell
- _ Simple operation
- _ Display for reading measurements and parameters
- _ Remote data transfer systems can be connected via RS-232 (e.g. OTT ITC)

The float-operated OTT Thalimedes is suitable for continuous water level measurement both in ground and surface water. Installed in float shafts or observation wells from 4", it provides low-cost, reliable measurements. Also in combination with existing recorders, it makes the output of digital data possible with little effort.

The float pulley moves via a float-cable counterweight system with even the smallest changes in water level. The position of the float pulley is converted to an electronic signal and saved in the integrated data logger, at intervals you can set.

Wireless data transfer is possible to a laptop or Pocket PC with the infrared interface. The RS-232 interface allows connection to remote data transfer systems, such as the OTT ITC top cap.



Features/Benefits

- _ Mobile measurement in well-head shafts, observation wells, tanks, boreholes and with pump tests
- _ For depths up to 750 meters
- _ Impact-resistant, light drum
- _ Stable measuring tape
- _ Easily read division into m, dm and cm
- _ Optional: KL 010 TM with integrated temperature sensor and display

The OTT KL 010 Contact Gauge is perfectly designed for depth calculation in the field. Indestructible, lightweight and simple to operate it is built to give years of accurate check measurements.

The probe is let down with a hand crank, e.g. into an observation well or borehole. As soon as it touches the water surface, a signal sounds and the signal lamp lights up: The distance between water surface and reference level can now be read on the measuring tape.

Additional function: Water temperature

If the water temperature is needed, the OTT KL 010 TM model offers a temperature sensor as well. Letting down the probe in stages allows the creation of a temperature profile. The temperatures measured can be easily read from the integrated display.



Technical Data

Measuring range, adjustable	±19.999 m / ±199.99 m / ±199.99 ft
Maximum measuring error	±0.002 m / ±0.002 m / ±0.0066 ft
Measuring range, temp.	-20 °C ... +70 °C
Power supply	1 x 1.5 V C-type cell, Alkaline
Measured value memory	EEPROM (approx. 500,000 measured values)
Sample/Storage interval	1 minute ... 24 hours
Interfaces	RS-232/SDI-12; Infrared (IrDA)
Data logger	
Material of casing	Plastic, IP 68
Dimensions L x Ø	244 mm x 47 mm
Encoder unit	
Material:	Plastic, IP 54
Dimensions L x W x H	82 mm x 82 mm x 34 mm



OTT Thalimedes combined with the OTT R20 strip chart level recorder

Technical Data

Measuring tape	Polyethylen, white
Accuracy	0.1 % FS
Tape drum	Special plastic, high strength, resistant to low temperatures
Frame	Cast aluminium, plastic coated
Power supply	4 x 1.5 V C-type cells; Alkaline
Lifetime	≥ 12 months
Probe body	Non rusting steel, nickel-plated brass
Measuring range KL 010	15 m ... 750 m (12 levels)
Measuring ranges KL 010 TM	
Depth	25 m ... 500 m (8 levels)
Temperature	-5 °C ... +60 °C



Mobile measurement with the OTT KL 010



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