



Pressure level transducer with datalogger for longterm groundwater monitoring

- **Application**
Surface water, Groundwater
- **Measurement technology**
Vented pressure cell
- **Parameters measured**
Waterlevel/Pressure, Water temperature
- **Product Highlights**
Measures and stores water level and temperature data
- **Measurement range**
0 ... 4, 10, 20, 40, and 100 m
- **Accuracy**
 $\pm 0.05\%$ FS
- **Internal data logger**
Yes

The OTT Orpheus Mini is an integrated pressure sensor and datalogger for level measurement in surface and groundwater applications. It features a robust ceramic measuring cell for long term accuracy and its built in datalogger manages and stores all measurements at user-programmable intervals.

Technical Data

OTT Orpheus Mini Water Level Logger



Waterlevel measurement

Measuring ranges	0 ... 4 m, 10 m, 20 m, 40 m, 100 m
Accuracy, pressure sensor	± 0.05 % FS
Resolution, pressure sensor	0.01 % FS

Temperature measurement

Measuring range temperature	-25 °C ... +70 °C (ice-free)
Accuracy temperature	± 0.5 °C
Resolution temperature	0.1 °C

Electrical data

Power supply	3 x 1.5 V LR6-cells Alkaline- or Lithium-type
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Lifetime (at 1 h reading interval)

with Lithium batteries	min. 5 years
with Alkaline batteries	min. 1.5 years (high quality battery types)

Interface	Infrared (IrDA)
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Data Logger

Memory	4 MB non-volatile
Number of measured values	approx. 500,000
Reading interval	1 second ... 24 hours
Storage interval	1 second ... 24 hours

Logging type - selectable	linear, logarithmic - free programmable (logging table) for pumping tests , event triggered delta data logging
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Installable in well pipes	≥ 1"
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System length	1.5 ... 200 m ±1% ±5 cm (cable length incl. communication unit/pressure probe)
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Material	ABS, POM, 904 L (DIN 1.4539)
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Weight

Communication unit (incl. batteries)	approx. 0.410 kg
Pressure probe	approx. 0.300 kg

Dimensions

Communication unit L x Ø	400 mm x 22 mm
Pressure probe L x Ø	195 mm x 22 mm

Operating Conditions

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Technical Data

OTT Orpheus Mini Water Level Logger



Temperature-compensated working range	-5 °C ... +45 °C (ice-free)
Storage temperature	-40 °C ... +85 °C
Operating Temperature	-20 °C ... +70 °C
Humidity	100 %

Type of protection	
Communication unit	IP67 (immersion depth max. 2 m duration of immersion max. 24 h)
Pressure probe	IP68

EMV limits	IEC61326/EN61326 are compliant with EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 55022 class B
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