



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

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|-----------------------------|------------------------------------|
| 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

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

Electrical data

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

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

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|-----------|-----------------|
| Interface | Infrared (IrDA) |
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Data Logger

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

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|---------------------------|--|
| 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

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

Dimensions

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|--------------------------|----------------|
| 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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We reserve the right to make technical changes and improvements without notice. V-28/04/2024

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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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