



Groundwater level and conductivity sensor with built-in datalogger and telemetry

- **Application**
Surface water, Groundwater
- **Measurement technology**
Vented pressure cell and 4-electrode graphite conductivity cell
- **Parameters measured**
Waterlevel/Pressure, Water temperature, Conductivity
- **Product Highlights**
Measures, stores, and transmits 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 ecoLog 800 is a self-contained system for measurement of water level, temperature, and conductivity in groundwater and surface water applications. The ecoLog 800 features a complete in-well solution for groundwater measurement and flexible remote data transmission options.

Technical Data

OTT ecoLog 800 Water Level Logger



| Water level measurement | |
|-------------------------|--|
| Measuring range | 0 ... 4 m, 10 m, 20 m, 40 m, 100 m |
| Accuracy | ±0.05 % FS |
| Long-term stability | ±0.1 % / year FS |
| Resolution | 0.001 m / 0.1 cm / 0.01 ft / 0.1 inch / 0.0001 bar / 0.001 psi |
| Units | m, ft, inch, bar, psi, Pascal |

| Temperature measurement | |
|-------------------------|-------------------|
| Measuring range | -25 °C ... +70 °C |
| Accuracy | ±0.1 °C |
| Resolution | 0.01 °C |
| Units | °C, °F |

| Conductivity measurement | |
|--------------------------|--|
| Measuring range | 0 ... 2000 µS/cm |
| Accuracy | ±1 µS/cm or ±0.5 % of measured value (whichever is higher) |
| Resolution | 1 µS/cm |
| Units | µS/cm, mS/cm |

| | |
|-----------------|---|
| Measuring range | 0.1 ... 100 mS/cm |
| Accuracy | ±0.01 mS/cm or ±1.5 % of measured value (whichever is higher) |
| Resolution | 0.01 mS/cm |
| Unit | mS/cm |

Electrical data

| Power supply | |
|-----------------|--|
| Alkaline C cell | 2 x 1.5 V (only for version with GSM/GPRS-Modem) |
| Lithium type | 1 x 3.6 V/13 Ah or 1 x 3.6 V/26 Ah |

| Battery life (hourly measurement, one Lithium battery (26 Ah)) | |
|--|-----------|
| Lithium battery (26 Ah) | >10 years |
| Alkaline batteries (only for version with GSM/GPRS-Modem) | > 1 year |

| | |
|-------------------------|--|
| Modem | GSM/GPRS 900/1800, 850/1900 MHz GSM/GPRS; UMTS/HSPA+ 900/1800, 850/1900 MHz; 800/850, 900, AWS 1700, 1900, 2100 MHz |
| Antenna | Built-in; robust and weather-proof, external antenna optionally available (SMA-m) |
| Communication interface | Infrared (IrDA) |

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Technical Data

OTT ecoLog 800 Water Level Logger



| Data logger | |
|---------------------------|---------------------------------------|
| Measured value memory | 4 MB, approx. 500,000 measured values |
| Sampling/storage interval | 5 seconds ... 24 hours |

| Installation | |
|---------------|---|
| System length | $\geq 2''$ 2.0 m ... 200 m $\pm 1\% \pm 5$ cm (cable length incl. communication unit and pressure probe) |

| Dimensions L x Ø | |
|--------------------|----------------|
| Probe | 317 mm x 22 mm |
| Communication unit | 520 mm x 50 mm |

| Weight | |
|--------------------|-----------------------------------|
| Probe | Approx. 0.43 kg |
| Communication unit | Approx. 0.92 kg (incl. batteries) |

| Housing material | |
|--------------------|--------------------------------------|
| Probe | Stainless steel (DIN 1.4539, 904 L?) |
| Communication unit | Aluminium, PA-GF |

| Environmental conditions | |
|--------------------------|---------------------|
| Operating temperature | -30 °C ... +85 °C |
| Storage temperature | - 40 °C ... + 85 °C |

| Type of protection | |
|--------------------|------|
| Probe | IP68 |
| Communication unit | IP67 |

| EMC limits | |
|---|--|
| Acc. to EC 204/108/EC, ETSI EN 301 486-1/-7, EN 61326-1 EN 60950-1:2006 + A11:2009 + A1:2010 | |

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