



Water level sensor with built-in datalogger for surface and groundwater applications

- **Application**
Surface water, Groundwater
- **Measurement technology**
Vented pressure cell
- **Parameters measured**
Waterlevel/Pressure, Water temperature
- **Product Highlights**
Measures, stores, and transmits water level and temperature data
- **Accuracy**
 $\pm 0.05\%$ FS
- **Internal data logger**
Yes

The OTT ecoLog 500 is a complete system for water level and temperature measurement. Designed for full deployment inside groundwater wells as well as surface water applications, the OTT ecoLog 500 offers data and alarm message transmission options via SMS, HTTP, FTP and e-mail, giving users flexible remote data access from their office.

Water level measurement

Measuring ranges	0 ... 4 m, 10 m, 20 m, 40 m, 100 m
------------------	------------------------------------

Technical Data

OTT ecoLog 500 Water Level Logger



Pressure resolution	0.01 % FS
Pressure accuracy	±0.05 % FS
Long-term stability	±0.1 % / year FS

Temperature measurement	
Measuring range	-25 °C ... +70 °C
Temperature resolution	0.1 °C
Temperature accuracy	± 0.5 °C; higher accuracy optionally available

Electrical data	
Power supply	Lithium cells, 3.6 V/13 Ah or Lithium cells, 3.6 V/26 Ah

Battery life @ 1 h measurement interval & one transmission per week	
Lithium-battery, DD	approx. 10 years
Alkaline batteries, CC (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, weather-proof, external antenna optionally available
Interface at site	Infrared (IrDA)

Memory	4 MB, approx. 500,000 measured values
Sampling/storage interval	5 seconds ... 24 hours

Installation	≥ 2"
--------------	------

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

Dimensions L x Ø	
Communication unit	520 mm x 50 mm
Probe	195 mm x 22 mm
System length	2 ... 200 m ±1 % ±5 cm (Cable length incl. communication unit and pressure probe)

Material	
Communication unit	Aluminium, PA-GF
Sonde	Stainless steel (DIN 1.4539, 904 L)

2-3

We reserve the right to make technical changes and improvements without notice. V-12/12/2024

OTT Hydromet GmbH, Germany



Technical Data

OTT ecoLog 500 Water Level Logger



Weight	
Communication unit (w/o. batteries)	approx. 0.920 kg
Probe	approx. 0.300 kg

Type of protection	
Communication unit	IP67
Probe	IP68

EMC limits	According to EG 204/108/EG, ETSI EN 301 486-1/-7, EN 61326-1 EN 60950-1:2006 + A11:2009 + A1:2010
------------	---