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an OTT HydroMet brand



### Applications

Groundwater
Surface water
Water quantity
Flood warning
Water quality

# All-in-One Level Logger & Telemetry Solution

## Reliable data for water level, temperature, and conductivity

**Intuitive, wireless local operation using LinkComm software via Bluetooth Low Energy (BLE)**

**Connection to smart phones, tablets, and PCs operating with Android, iOS, or Windows 10**

**Insight into water quality with temperature and optional conductivity measurements**

**Vented pressure probe to compensate for changes in barometric pressure**

**Reliable long term operation via intelligent power management and a robust ceramic pressure cell**

**Low maintenance intervals of up to 10 years battery and up to >2 years desiccant functionality**

**Remote monitoring via cellular communication with integrated modem**

## Save time by managing less equipment

The ecoLog 1000 is an all-in-one instrument with a water level sensor, logger, and modem built-in. It requires no additional tools for maintenance or battery replacement. Installation and maintenance become easy with no need for additional cables or dongles. This minimizes your total cost of ownership and guarantees you won't spend unnecessary time or energy setting up or relearning your equipment.

## Monitor basic water quality parameters

Gain a better understanding of water quality at your site by measuring temperature and conductivity with a rugged and accurate, 4-electrode conductivity measuring cell. This addition enables conductivity derived parameters such as Total Dissolved Solids (TDS) and salinity.

## Reduce field visits by eliminating data gaps

The ecoLog 1000 has reliable system up-time and accurate measurements in every data transmission. This wealth of continuous data, sent through either HTTP(S), MQTT(S), FTP(S), or SMS keeps you better informed before field visits, so each future visit is faster and more efficient. Additionally, configure and monitor your data completely remotely with cellular communication.

## Connect with variety of devices/software

The logger is simple to operate using just a smart phone or PC via integrated Bluetooth Low Energy (BLE). It integrates with LinkComm software which allows for remote configuration and diagnostics of your station.

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| WATER LEVEL | Measuring range | 0 ... 4 m water column / 0 ... 0.4 bar* | 0 ... 13 ft water column / 0 ... 5.8 psi* |
|---|---|---|---|
| | | 0 ... 10 m water column / 0 ... 1 bar | 0 ... 33 ft water column / 0 ... 14.5 psi |
| | | 0 ... 20 m water column / 0 ... 2 bar | 0 ... 66 ft water column / 0 ... 29 psi |
| | | 0 ... 40 m water column / 0 ... 4 bar | 0 ... 131 ft water column / 0 ... 58 psi |
| | | 0 ... 100 m water column / 0 ... 10 bar | 0 ... 328 ft water column / 0 ... 145 psi |
| | Resolution | 0.001 m / 0.1 cm / 0.0001 bar | 0.01 ft / 0.1 inch / 0.001 psi |
| | Accuracy (linearity + hysteresis) | ± 0.05 % full scale | |
| | Long-term stability (linearity + hysteresis) | ± 0.1 %/a full scale | |
| | Units | m / cm / bar | ft / inch / psi |
| | Pressure sensor | Ceramic / temperature compensated | |
| | Temperature-compensated operating range | -20°C (ice free)...+70°C / -5 °C (ice-free) ... +45 °C* | -4°F (ice free)...+158°F / +23 °F (ice-free) ... +158 °F* |
| TEMPERATURE | Measuring range | -25 °C ... +70 °C | -13 °F ... +158 °F |
| | Resolution | 0.01 °C | 0.02 °F |
| | Accuracy | ± 0.05°C / ± 0.1 °C* | ± 0.03°F / ± 0.2 °F* |
| | Units | °C | °F |
| CONDUCTIVITY (OPTIONAL) | Measuring range | 5 ... 100 000 µS/cm | |
| | Calibrated range | +5 °C ... 45 °C | +41 °F ... +113 °F |
| | Resolution | 1 µS/cm (5 ...2000 µS/cm) · 0.01 mS/cm (0.10 ...100.00 mS/cm) | |
| | Accuracy | ±0.5 % of measured value (at least ± 1 µS/cm) (5 ...2000 µS/cm) | |
| | | ±1.5 % of measured value (at least ±0.01 mS/cm) (0.10 ...100.00 mS/cm) | |
| | Units | mS/cm · µS/cm | |
| POWER | Power supply | 3.6 V / 26 Ah - Lithium power pack with connector | |
| | Battery life time - configuration depending | > 10 years @ average temperature of 20 °C/68 °F, 1 hour sampling and 1 transmission per day (> 5 years with conductivity variant) | |
| RTC CLOCK | Accuracy | ± 26 s / month (at 25 °C) / < ± 3 s using SNTP | ± 26 s / month (at 77 °F) / < ± 3 s using SNTP |
| COMMUNICATION | Cellular 4G/2G (EU) | LTE Cat-1; B3 (1800 MHz), B8 (900 MHz), B20 (800 MHz); GSM, GPRS, EDGE; 900 MHz, 1800 MHz | |
| | Cellular LTE-M (Cat-M1; Global) | B1, B2, B3, B4, B5, B8, B9, B10, B12, B13, B17, B18, B19, B20, B25, B26, B27, B28, B66 | |
| | Local communication | Bluetooth Low Energy (BLE) 5.0 - up to 10 m (free line of sight) | |
| MEASUREMENT | Measured values | Water pressure & temperature | RSSI / Signal strength |
| | | Conductivity (optional) | PBAT / Power consumption battery |
| | | Supply voltage | Logger Humidity |
| | Derived values | Water level / depth to water | Salinity & Total Dissolved Solids (optional) |
| | Sample/storage interval | 5 s / 10 s* ... 24 h | |
| DATA TRANSMISSION | Interval | 1 min ... 1/week, 15 min ... 1/week for SMS | |
| | IP COM | FTP, FTPS, HTTP, HTTPS (TLS 1.2), MQTT, MQTTS | |
| DATA MEMORY | Measurement memory | 28 MB (approx. 1,000,000 values) | |
| ENVIRONMENTAL | Temperature range, operating | -30 °C ... +85 °C | -22 °F ... +185 °F |
| | Temperature range, storage | -40 °C ... +85 °C | -40 °F ... +185 °F |
| | Humidity | 5% ... 95 % (non-condensing) | |
| | IP rating logger unit | IP 67 (flood-proof up to 1 week / 1 m water column) | |
| | IP rating pressure probe | IP68 | |
| DIMENSIONS | Logger unit | LxD: 525 x 50 mm (2") | LxD: 20.7 x 2.0 inch |
| | Pressure probe | LxD: 195 x 22 mm (<1"), 317 mm x 22 mm* | LxD: 7.7 x 0.9 inch, 12.5 x 0.9 in* |
| | System length | 0 ... 200 m (> 200 m on request) | 0 ... 656 ft (> 656 ft on request) |
| WEIGHT | Logger unit incl. battery pack | ~ 900 g | ~ 31.7 oz |
| | Pressure probe | ~ 650 g, 430 g* | ~ 22.9 oz, 15.2 oz* |
| | Pressure probe cable | ~ 55 g/m, 82 g/m* | ~ 0.51 oz/ft, 0.9 oz/ft* |
| MATERIAL | Pressure probe housing | Stainless steel 1.4539 (904 L) | |
| | Logger housing | Aluminum / PA-GF | |
| | Cable jacket | PUR | |
| REGULATORY | FCC / IC / CE / ACMA | CE FC IC | |
| | PTCRB | According to NAPRD03 | |
| | Provider certifications | Verizon Open Development Certification, AT&T IoT Device Certification | |

*Device variant with integrated conductivity sensor
Please check website for country availability.

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