Groundwater Solution

Secure Web-Based Data Hosting Solutions

Hydromet Cloud provides secure real-time data access from almost anywhere in the world via hydrometcloud.eu and the Hydromet Cloud Mobile App. This includes the backend infrastructure to receive, ingest, decode, process, display, and store measurement data from nearly any remote Hydromet monitoring station via a cloud-based data hosting platform. Hydromet Cloud provides a secure web-page for users to view their data graphically, on a map or in tabular and report forms. Conversely, if you prefer to do your own processing, Hydromet Cloud delivers raw data (as it is transmitted by the station) using a dedicated, secure download page, updated immediately as your data arrives.

Data communication and
data management

OTT ecoLog 500 – cost effective measurements

Cost-effective, robust, and flexible

- Self-contained system incorporating all components that are necessary for measuring, storing, and remotely transmitting groundwater data
- Completely installed into observation well or wellhead shaft and well-protected from damage or vandalism
- Built-in remote transmission using Push operation – eliminates reading the memory on site
- Flexible remote transmission options (SMS, HTTP, FTP...), limit overshoot alarms
- Optional external antenna connector – allows the system to be installed according to requirements, also underfloor

Less maintenance, lower costs

- Status information and warning messages (SMS/e-mail) for remote diagnostics – fast response in case of weak batteries or malfunction prevents loss of data
- Approximately 10 years of battery life with weekly data transmission – reduce costs by long service intervals at high data integrity
- Robust, precise ceramic capacitive pressure cell with long-term stability – in field use clearly superior to piezo-resistive standard measuring cells using metallic membranes
- Probe body made of saltwater resistant stainless steel, hermetically encapsulated and reliably protected from water or dirt ingress

Easy operation at the station

- Quick installation using adapter plates or suspension brackets
- Easy battery, dryer unit, or SIM card replacement on site without using tools
- IR interface (IrDA) for easy and secure communication on site
- One operating program for two features: Configuration and reading data
- Intuitive program operation supported by the clearly structured, context-sensitive online help

Anytime access to measurement data collected from monitoring stations

Groundwater Total Solution

- OTT ecoLog Groundwater Level Logger/Transmitter
- Data message transmission via HTTP to Hydromet Cloud
- Secure hosting of monitoring data including anytime access via web or smart phone app

Features/Benefits

Anytime access to current and historic measurement data collected from remote groundwater monitoring stations

- Secure password protected log-in for multiple users
- User-established management/administration
- Measurement data backed-up in the cloud and stored for at least one year

Quickly view current data to check current conditions and know the station is running properly

- Map view, based on Google Maps, provides quick view of station location and most recent station data
- Station tab provides quick access to current and recent data, including graphs
- Customize mobile App to quickly view selected stations or sensors

Plot data to view and analyze recent and historic trends to identify how the data is trending and the duration of the trend

- Quickly plot predefined range (ex: 24 hrs, 2-day, 7-day, month, etc. or customized date range)
- Compare current or recent measurements from multiple sensors or stations
- Create and save custom plot templates using the mobile App to quickly view current and historic measurement data from one or more sensors

Simple station configuration for quick setup

- Add/configure station while at monitoring site using Hydromet Cloud web portal
- Perform simple modifications anytime (asadministrator), such as sensor scaling, resolution, coordinates, etc...

Create and download custom data reports in tabular or graphical format

- Export predefined range (ex: 24 hrs, 2-day, 7-day, etc…) or customized date range
- Export data report as an Excel or OTT MIS file
- Use mobile App to view and send/share data directly from your smart phone

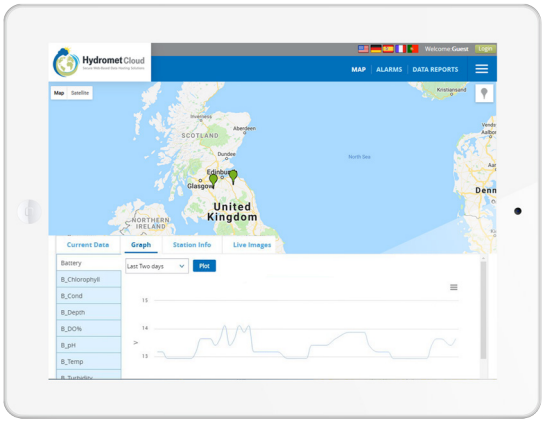
Hydromet Cloud can help you assess when a site visit is required and retrieve data as needed to create data product, e.g., reports.

Use data corrections to reject or correct measurement data

- Reject or accept provisional data
- Enter correct value for individual measurements
- Apply offset to multiple measurement values

Option to create derived parameters

- Combine parameters (e.g. add coefficients), stage/flow rating calculation, periodic averages, incremental precip, sum, min/max, etc.



Quickly view current measurements, identify how data is trending, and confirm stations are functioning properly- collecting good data.

Technical data

Pressure measuring ranges
0 ... 4 m, 0 … 10 m, 0 … 20 m, 0 … 40 m, 0…100 m WC

Pressure resolution
0.001 m/0.1 cm/0.01 ft/0.1 inch/ 0.0001 bar/0.001 psi

Pressure accuracy
±0.05 % FS

Long-term stability
±0.1 % / year FS

Temperature measuring range
-25 °C … +70 °C

Temperature resolution
0.1 °C

Temperature accuracy
±0.5 °C; higher accuracy option available

Power supply
- or lithium cells, 3.6 V/13 Ah
- or lithium cells, 3.6 V/26 Ah

Battery Life
- Hourly measurement
- one transmission per day
- Lithium batteries (26 Ah): >10 years

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 option available (SMA-m)

Communication Interface
Infrared (IrDA)

Measurement memory
4 MB, approx. 500.000 measured values

Sampling/storage interval
5 seconds … 24 hours

Installation
- In observation wells from 2" on, (multi-purpose suspension bracket available as an accessory)
- Incl. adapter plates for OTT top caps: 3", 4", 6"

Operating temperature
-30 °C … +85 °C

Storage temperature
-40 °C … +85 °C

Dimensions L x Ø
- Probe: 195 mm x 22 mm
- Communication unit: 520 mm x 50 mm

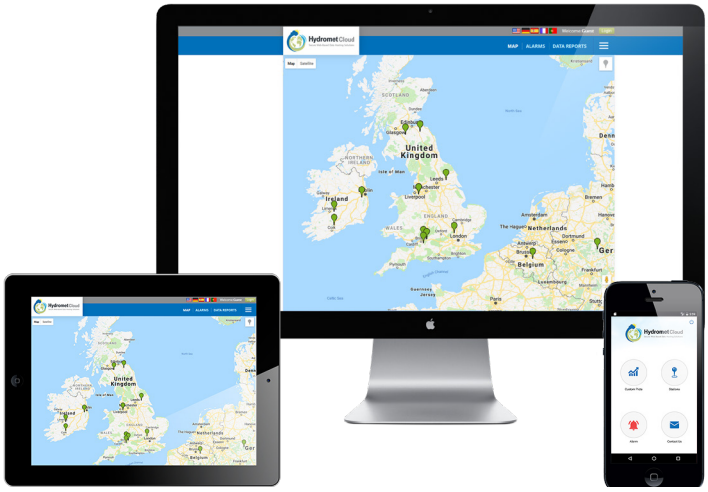
System length
(Cable length incl. communication unit and pressure probe)
2.0 … 200 m ±1 % ±5 cm

Weight
- Probe: approx. 0.300 kg
- Communication unit (w batteries) approx. 0.92 kg

Housing material
- Probe: Stainless steel (DIN 1.4539, 904 L)
- Communication unit: Aluminum, PA-GF

Type of protection
- Probe: IP68
- Communication unit: IP68

EMC limits
According 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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Secure Web-Based Data Hosting Solutions

Get a quote now

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