



Hydromet Cloud

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.



Water Level



Depth



Flow



Precipitation



Water Quality

Anytime access to measurement data collected from monitoring stations

Applications:

- Hydrology – water level, flow/velocity, and precipitation
- Groundwater – water level and water quality
- Water quality – pH, DO, conductivity, salinity, temperature, turbidity, nutrients, ...
- Meteorology – air temperature, relative humidity, wind speed, wind direction, barometric pressure, ...

Stations/Systems:

- OTT, Sutron, and third party systems collecting and transmitting data
- Satellite GOES DCS, DOMSAT, NOAAPORT, Iridium, Meteosat, GMS
- IP-Accessible Contact static IP on schedule,
- Connects to station with fixed IP on a schedule
- Cellular GPRS/HSPA/CDMA Modems

Features/Benefits

Anytime access to current and historic measurement data collected from remote hydrometeorological 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
- Design your own dashboard to quickly view and export current and recent measurement data
- 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

Receive automatic alarm messages via email, text message, or voice message for sensor values triggering alarm limits

- User definable value limits, rate of change limits, and alarm groups
- Automatic limit checking includes data value and rate-of-change limits



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

- Separate limits can be set for warning/critical levels
- Colored-coded (green, yellow, red) map pins, data values, and limit lines based on received alert and level

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
- User configurable Dashboard to retrieve frequently viewed data displayed as a plot, table, or values
- Use mobile App to view and send/share data directly from your smart phone

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

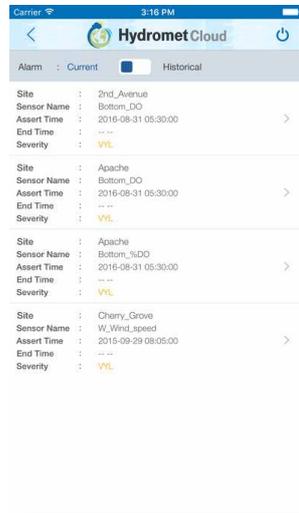
- Combine parameters (e.g. add coefficients), stage/flow rating calculation, periodic averages, incremental precip, sum, min /max, etc.



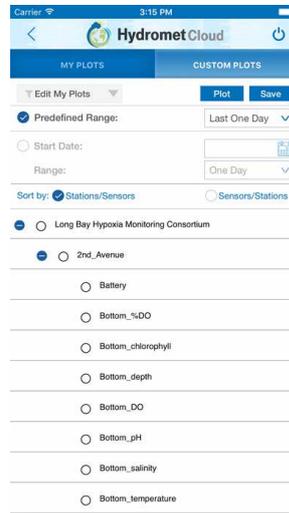
Quickly view current measurements, identify how data is trending, and confirm stations are functioning properly- collecting good data

Hydromet Cloud App: Quickly view data, alarms, and graphs from almost anywhere

Hydromet Cloud allows users to easily access their remote data from their field stations. Hydromet Clouds provides the latest station data and alarm status. Users can quickly view data in tabular and graphical form and save frequently graphed data as shortcuts for future use and recall.



View Alarms



Custom Plots



Push Notifications

iOS



You can install the app on your iPhone using this link: <https://itunes.apple.com/de/app/hydromet-cloud/id1149267443?l=en&mt=8>

Android



You can install the app on your Android smartphone or tablet using this link: <https://play.google.com/store/apps/details?id=com.hydrometcloud&hl=en>

Ordering/Licensing

S9400-0400	Hydromet Cloud Client Set Up (1-time fee for new Web Account)
S9400-0402	Hydromet Cloud Station Set Up (1-time fee per new station)
S9400-0403	Hydromet Cloud per Station Annual Fee for first 25 Stations
S9400-0404	Hydromet Cloud Service Discounted Recurring Fee for Stations 26-50
S9400-0405	Hydromet Cloud Service Discounted Recurring Fee for Stations 51+



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- 
- Satellite**
- GOES DCS
 - DOMSAT
 - NOAAPORT
 - Iridium
 - Meteosat
 - GMS

- Cellular**
- GPRS
 - CDMA
 - HSPA

HOW IT WORKS

1



Data collected from remote Hydromet stations is transmitted via satellite or cell phone modem to Hydromet Cloud.

** Also works with Line-of-Sight and repeater radios as well as serial direct connection, multiplexer, terminal server, etc.*

2

Data (including units of measurement) is decoded, time-stamped & processed based on user specifications.



Hydromet Cloud Servers



Hydromet Cloud SQL Database

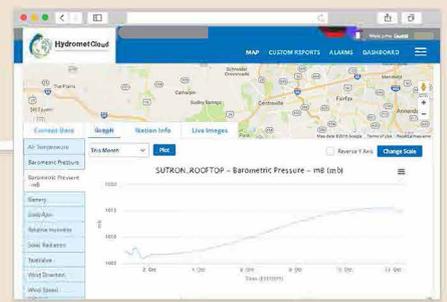
Data is stored in our SQL database where user-defined derived parameters & limit checks are automatically performed. Warnings & alarms are issued if triggered.

3

Access and view data directly from the station using a secure webpage updated immediately as your data arrives

Hydromet Cloud enables quick access to view and graph time series data, check alarms / limits, and create reports including corrected data.

4



Screenshot of the Hydromet Cloud web interface showing an 'Alarms' table. The table lists various monitoring stations and their current status.

Station Name	Station Value	Station Status	Last Value	Alarm
STFRON_KOCCTOP	1085	OK	2010-10-07 19:41:00	OK
Apfelwe	Kurzeit_Laerung	OK	2010-09-22 07:00:00	OK
Druck_Ebene	Alt_Neue_Laerung	OK	2010-09-20 18:00:00	OK
HTS	Wind_Edge	OK	2010-04-23 11:00:00	OK
Reinhold_Oase	Wind_Edge	OK	2010-02-24 17:00:00	OK
LINA_KOCCTOP	Bar	OK	2010-10-22 15:00:00	OK
SUTFRON_KOCCTOP	Bar_Temperature	OK	2010-10-24 15:11:00	OK

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



Hydromet Cloud Mobile App