

## MU-F Floating Monitoring Unit

### About

The MU-F is designed to automate the process of water quality monitoring in dewatering applications, through the use of apparatus that continuously records and reports the quality downstream of a certain point, whilst also being able to control the main dewatering pump. This is advantageous in high flow-rate applications, as the pump can be cut off before silty water enters the discharge pipe.

At the core the system is a range of standard measuring equipment brought together into an effective package to deliver maximum results and guarantee compliance, through the transmission of data to the leading-edge Senteos Portal and warning alert system.

### How It Works

The MU-F unit is situated right in the water source and continuously monitors the water quality. The data is then interpreted by our patented Control Module, the CM02, which transmits this data to the Senteos Portal, where it is logged and presented to you in a graphical format.

Using the MU-F in conjunction with our Senteos Portal means both historic and real-time data can be viewed anywhere and at any time and can be downloaded in a PDF format. The system will continuously read the water quality and will send a text or email alert message to site operatives when a permit constraint is approached or met, giving time for corrective action to be taken.

Depending on how the system is set up, when a constraint is met, it can send control signals to activate a valve or switch a pump on/off to save operatives needing to be on site but always ensuring the sites compliance.

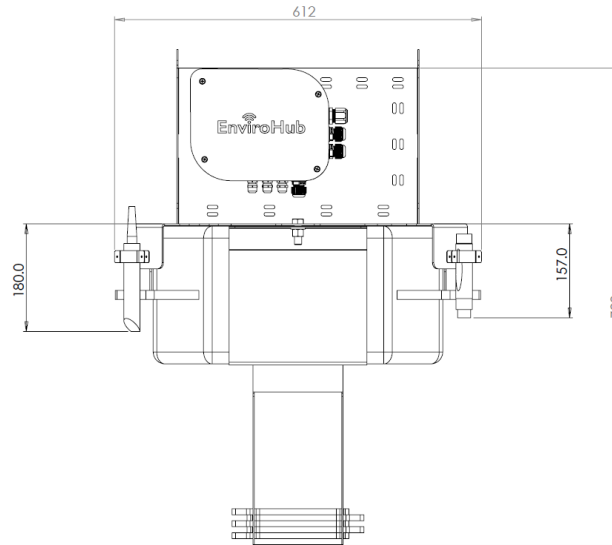
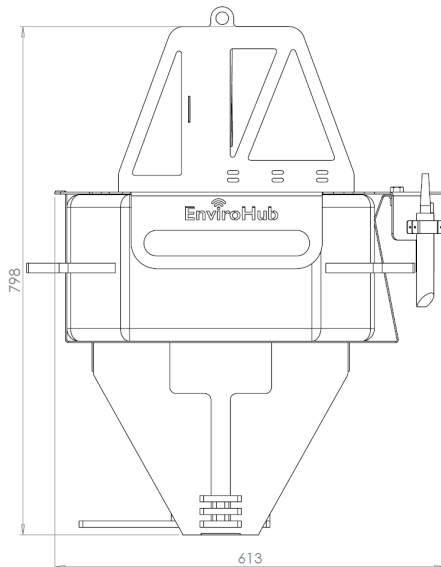
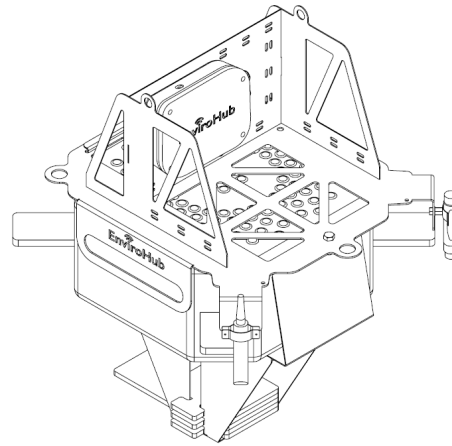
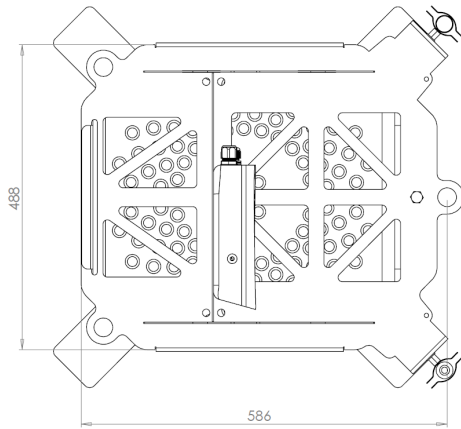
### Features

- Suitable for all water types
- Can be configured to monitor the following parameters:
  - pH
  - Turbidity
- Self-contained above the water level for protection of equipment
- Self-righting design to ensure probes are always submerged
- Very fast to deploy and start monitoring
- Very low power requirements
- Works in very poor radio connectivity areas
- Tie-points for rope to give increased stability
- Works well with other submersible equipment from Atlantic Pumps

### Benefits

- Removes human error and monitors continuously
- Provides 24/7, 365 data logs for onsite water activity to prove compliance via the Senteos online portal
- Data can be monitored from anywhere at any time with an internet connection
- Automated process and warning alerts of potential breaches before they happen
- Options for full system integration and control
- Good practice for environmental care
- Ensures compliance with Authority requirements

## MU-F General Arrangement Drawings



## Senteos

Senteos is a cloud-based data and systems management tool that enables the remote monitoring and control of equipment even in the toughest and remote of environments

### About

Senteos was built from the ground up to deliver hyper-efficient data collection, transmission, processing and display in even the toughest and most remote of environments. Initially developed from the requirements of remote quarrying sites, the Senteos Engine has since grown into a flexible system that can collect and display data from a wide range of sources and can provide user alerts and / or control the following as standard:

- pH levels
- Solids estimates
- Flow rate
- Turbidity

Additional parameters can easily be reported on as required, in conjunction with suitable sensors connected into an EnviroHub Control Module.

### How It Works

Data is collected from sensors, probes and other EnviroHub devices in the field and transmitted to the Senteos Engine, where it is displayed on the Portal in graphical format. Where the data reported is of a critical nature, 'hard' and 'soft' limits can be set on the Portal for both display purposes and for sending out user alerts. Alerts and control functions (e.g. pump shutdown) can be triggered when a soft limit is breached, ensuring that you are always in control of your site discharges and will never unknowingly discharge potentially polluted water.

### Features

- Developed to work with EnviroHub Control Modules for the monitoring and reporting of water quality issues.
- The structure of the system has been developed to be as lightweight as possible, meaning that your historical data can be stored securely and retrievably, but with a much smaller environmental footprint than most competing systems.
- Historical data can be downloaded and stored in both PDF and CSV formats.
- The Portal display is user-configurable meaning that the user can sort and reorder the graphs as per their needs.
- Any sensor or analyser with a 4-20mA output can be added to report onto Senteos.
- The Portal has Manager and User permission levels; a User view is a site-specific view whereas a Manager view can see multiple sites.
- Any number of Managers or Users can be added to a site.
- The Senteos Portal can also send SMS alerts to users who have their mobile number registered.