



# Odyssey® Xpert User Manual

## Odyssey Xpert User Manual

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## Initial Requirements.

1. Xtream Logger(s)
2. Internet connection
3. Xtract App loaded onto a tablet or smart phone

## Using the Xpert portal

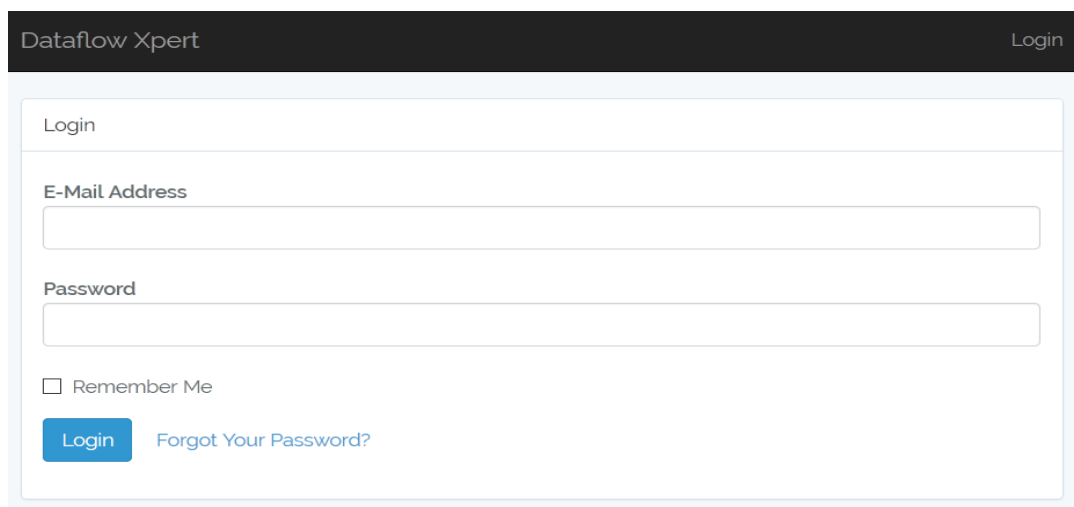
The Xpert portal is the web server where all data can be viewed for your Xtream loggers and all settings for the loggers are entered.

- Navigate to the Xpert Web page at [www.xpert.nz](http://www.xpert.nz)
- Press the Login button on the top right

LOGIN

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- Enter your username and password provided by Dataflow Systems.
- Press the Login Button



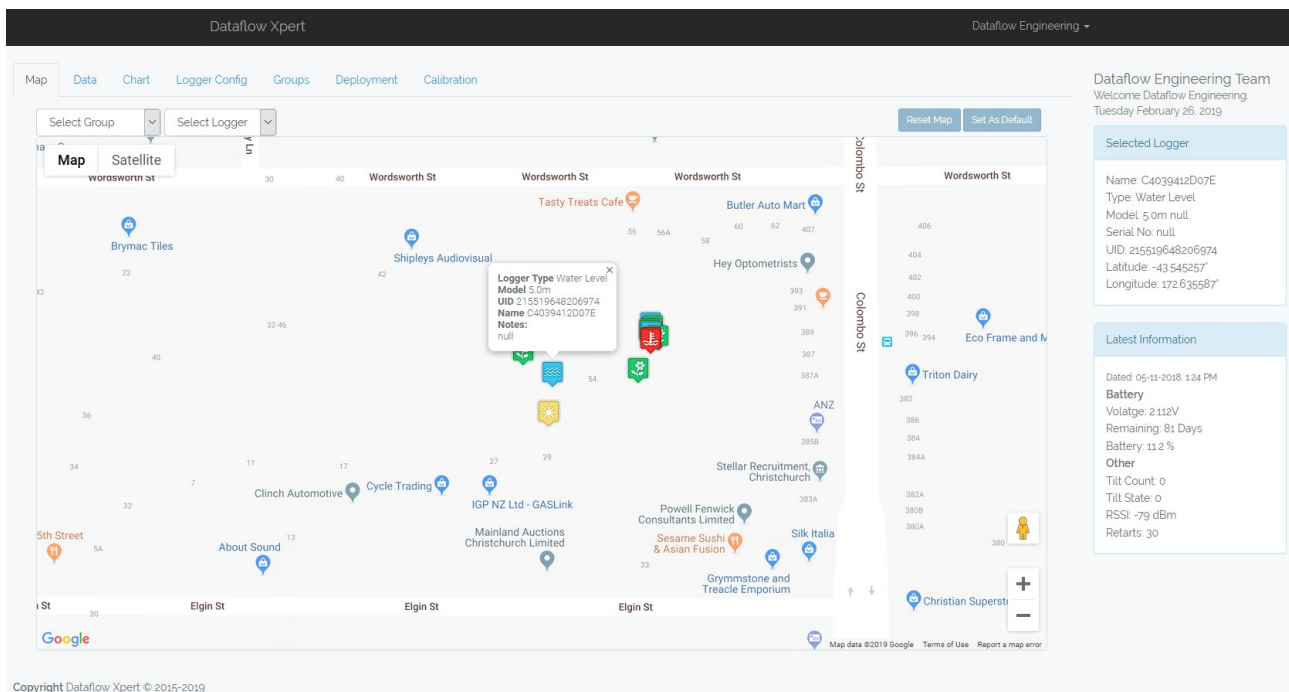
The screenshot shows the Dataflow Xpert login interface. At the top, there is a dark header bar with 'Dataflow Xpert' on the left and a 'Login' button on the right. Below the header is a light blue login form. The form contains a 'Login' label, an 'E-Mail Address' input field, a 'Password' input field, a 'Remember Me' checkbox, a 'Login' button, and a 'Forgot Your Password?' link.

To correctly use Xpert, the user will be required to connect the Xtract App to the Xpert web application via the **SERVER SYNC** button located in settings, in the Xtract App.  
To Logout click your company name in the right of the title bar and choose logout.

### Map Tab

The Map tab shows the location of all registered loggers using the GPS co-ordinates supplied by the Xtract App. This is the default page shown once logged in.

- Select the Map Tab from the Menu bar at the top of the page.



View of Map Tab

As seen above, general information on each logger can be seen by selecting the desired logger.

Select Group:	Allows the user to select which group of loggers they wish to view. New Groups may be added in the group tab. All purchased loggers are loaded into the Home group.
Select Logger:	Allows the user to select which logger within a group they wish to view.
Reset Map:	Sets the map back to its default location and zoom level.
Set As Default:	Sets the default map view to the current location and zoom level.

- Select a logger by clicking on the icon on the map. A pop-up will indicate it has been selected. The Selected Logger box and the Latest Information boxes will also be populated once the logger is selected.



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### Chart Tab

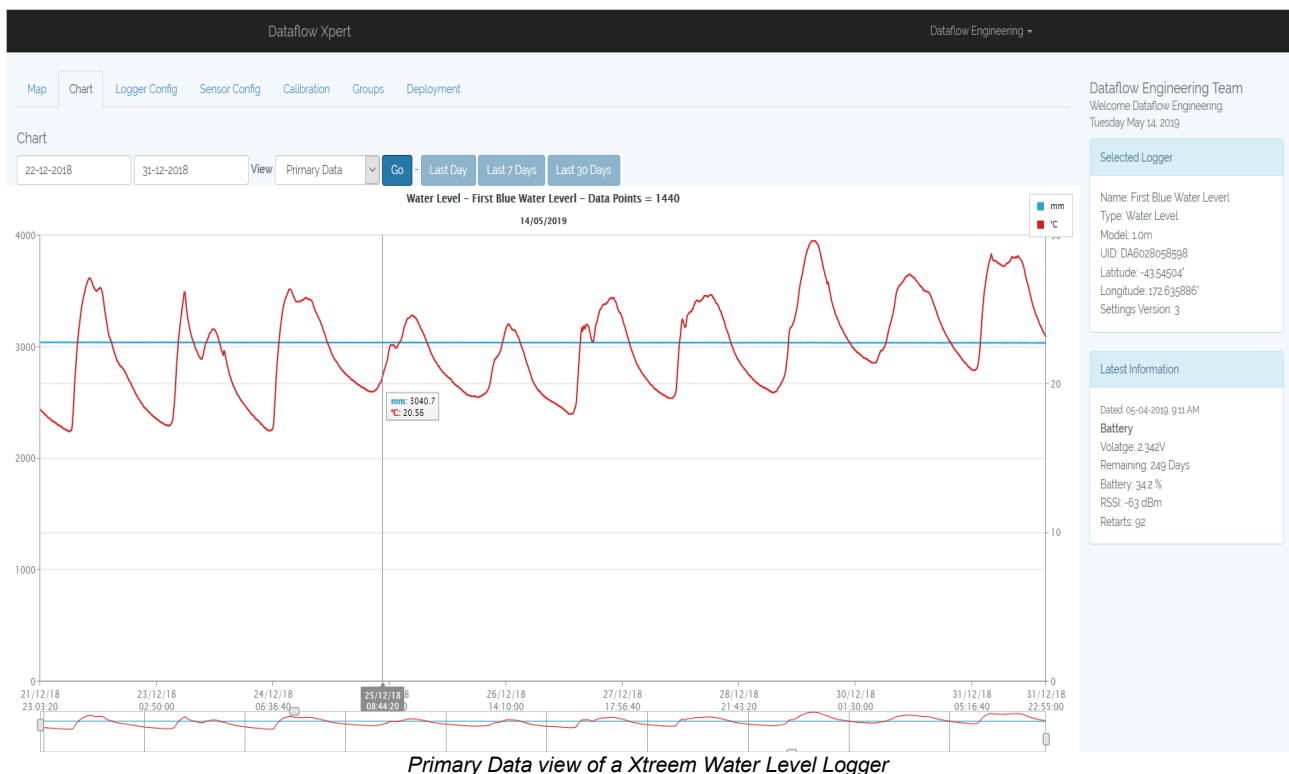
This is where the data that the logger has stored can be viewed.

- Select the Chart Tab from the Menu bar at the top of the page.

If a box pops up with no data available navigate back to the Map Tab and select a logger icon.

- To quickly view a graph of the logger data, Press one of the three quick graphing buttons, Last Day, Last 7 Days or Last 30 Days.
- To view a graph over a specified period enter the From Date and To Date in the boxes provided, then press the Go button.
- Move the mouse over the graph to view data at each point.
- To zoom in on the data click and drag with the mouse or use the menu on the right mouse click.
- For the graph menu right mouse click on the graph. This menu allows the displayed data to be exported in a number of formats.

Note: The graph shows the number of Data Points in the title. If this number is 5000 then not all data will be displayed. Reduce the entered date range to view all of the data.



From: View from Date.

To: View to Date.

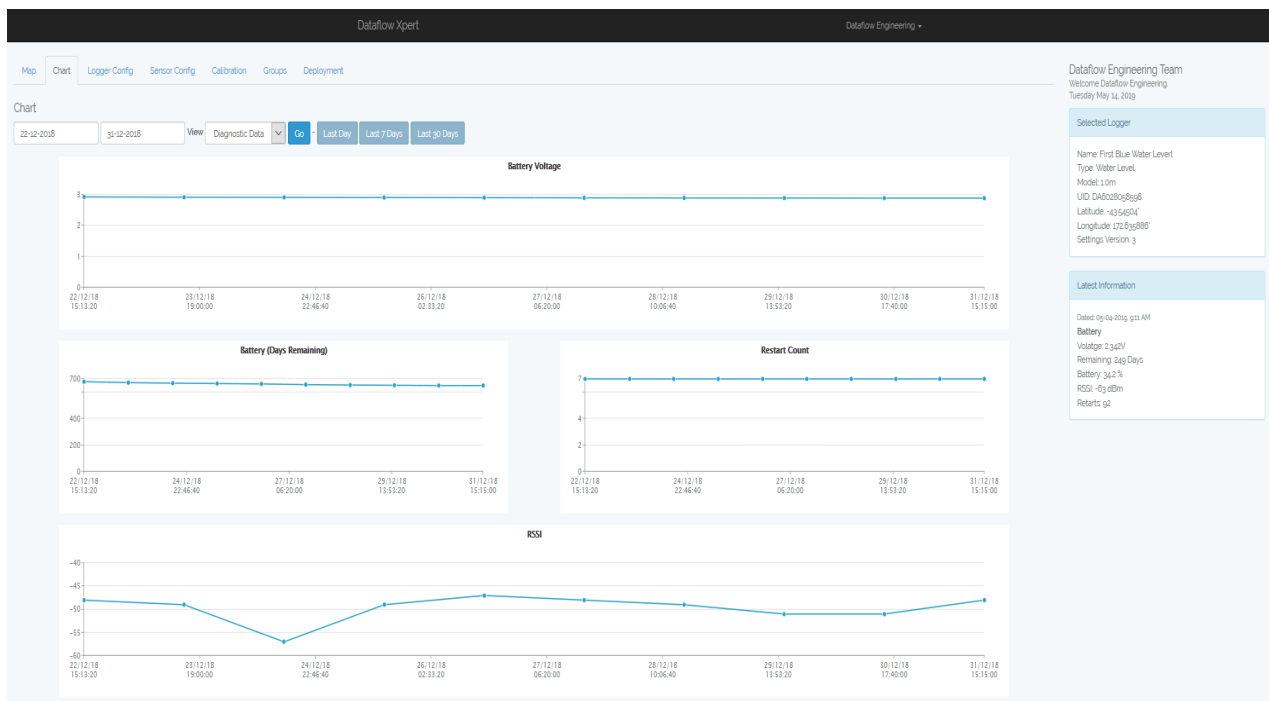


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View:	Primary Data: Sensor data the logger has recorded. Diagnostic Data: Additional data recorded by the logger which may be useful.
Last Day:	View the last day of data.
Last Week:	View the last week of data.
Last Month:	View the last month of data.

The diagnostic data is normally recorded once per day however it can also be recorded when things change i.e. when power is applied to the logger.

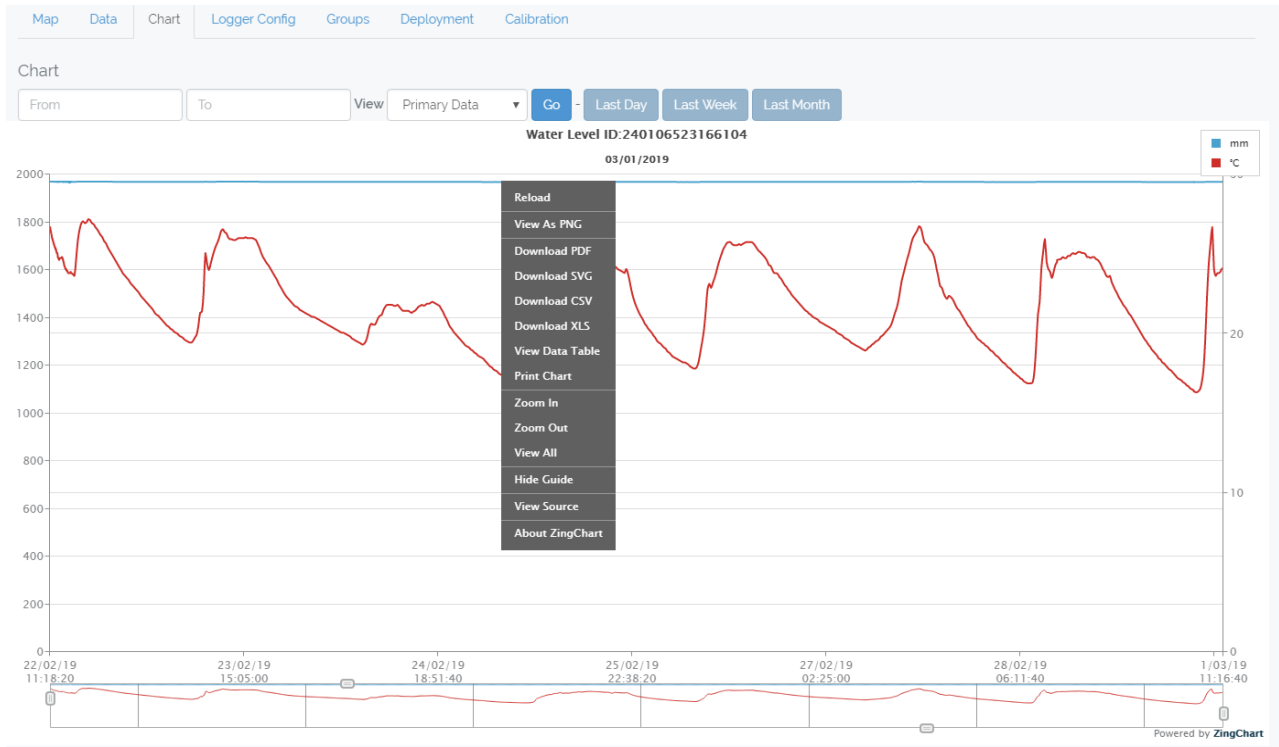


Diagnostic Data view of a selected logger



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Graphing menu

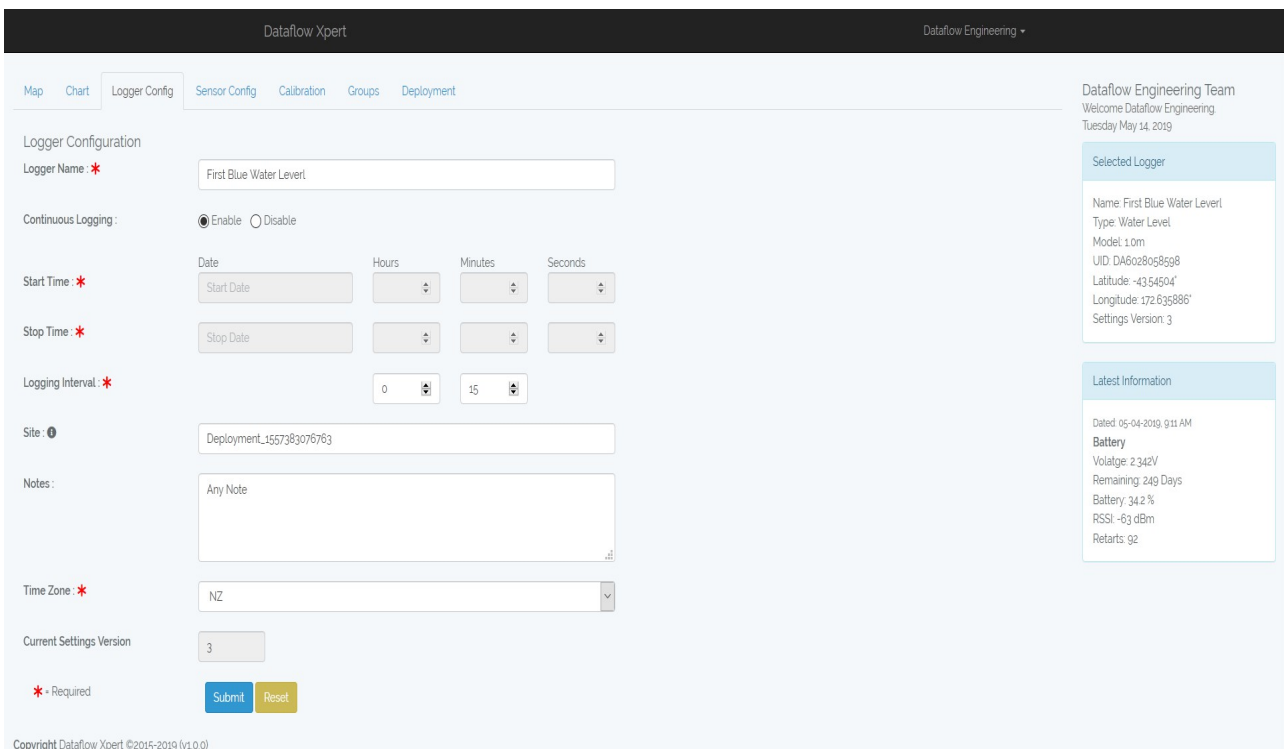
## Logger Config Tab

This tab is for the general settings of the logger. The fields with a red asterisk must be entered.

- **Logger Name.** This is the name the logger will be identified by. Write this name on the logger label if required.
- **Enable Continuous Logging** to allow the logger to overwrite the oldest data once the memory gets full. This is the recommended option.
- If continuous logging is disabled a **Start Time** and **Stop Time** must be entered to enable the logger only to log during the selected period.
- Set the **Logging Interval** in hours and minutes. This is how often the logger will take a sensor measurement.
- Enter a **Site** reference to be used in the deployment tab to recall notes and other information about this deployment.
- Enter any text in the **Note** field and it will be recorded in the deployment field.
- Select the **Time Zone** where the logger is deployed.
- Press the **Submit** button to store the settings for the Xtract application to collect.

The Current Settings Version number can be used in the Xtract application to make sure the settings have been applied to the logger.

**Note:** Identification of the logger by serial number is difficult due to the number of serial number digits. If a serial number is required then just make your own and put it into the logger name field. Write this on the logger label if required.



The screenshot displays the 'Logger Configuration' tab within the 'Dataflow Xpert' application. The interface includes a top navigation bar with tabs for Map, Chart, Logger Config (selected), Sensor Config, Calibration, Groups, and Deployment. The main content area is divided into sections for 'Logger Configuration' and 'Current Settings Version'. The 'Logger Configuration' section contains fields for 'Logger Name' (marked with a red asterisk), 'Continuous Logging' (radio buttons for Enable and Disable), 'Start Time' (marked with a red asterisk), 'Stop Time' (marked with a red asterisk), 'Logging Interval' (marked with a red asterisk), 'Site' (marked with an 'i' icon), 'Notes', 'Time Zone' (marked with a red asterisk), and 'Current Settings Version'. The 'Current Settings Version' field shows the value '3'. A legend at the bottom left indicates that a red asterisk (\*) denotes a required field. At the bottom right, there are 'Submit' and 'Reset' buttons. The right sidebar provides additional information, including 'Selected Logger' details (Name, Type, Model, UID, Latitude, Longitude, Settings Version) and 'Latest Information' (Dated, Battery voltage, Remaining days, Battery percentage, RSSI, Retarts).

View of Logger Configuration tab



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Logger Name:	This is the individual name of the selected logger. A default name is given to all loggers at the time of registration.
Continuous Logging:	Enable: Allows for continuous logging with no stop date. Disable: Logging will now follow the Start & Stop times entered
Start Time:	Allows the user to select a start and stop date for data logging.
Stop Time:	
Logging Interval:	The duration between each recorded reading.
Site:	A default generated deployment name is given to the logger. This can be changed by the user at time of initial configuration. <i>Note: changing the site name of an already deployed logger must be done in the Deployment tab. Doing so in Logger Config will cause the system to create a new deployment for the selected logger instead of updating an existing deployment.</i>
Notes:	User notes for the logger.
Time Zone:	Time zone the logger is in.

**Note:**

The Xtract Application must connect to the server and download the new settings. This will occur within 10 minutes or to synchronise immediately use the Sync to Server button in the settings menu of the Xtract Application. The logger then must be in range of the Xtract Application to connect and download the new settings.





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### Groups Tab

Registered loggers can be sorted into groups of the users choosing to make it easier to find them. Initially all loggers are placed in the Home group.

Assign loggers to another group.

- Click the My Loggers drop down box to select one of your loggers.
- Click the Select Group drop down box to select a group.
- Click on the submit button to assign the selected logger to the selected group

Create a User Defined group. Choose a group name that is meaningful.

- Click the Group Name box and enter a new group name.
- Click on the Create button to save the new group name.

Delete user Defined groups.

- Click the delete Group drop down box and select the group name.
- Click on the delete button to delete the group name.

The screenshot displays the 'Groups' tab in the Odyssey Xpert software. At the top, there are navigation tabs: Map, Data, Chart, Logger Config, Groups (selected), Deployment, and Calibration. Below the tabs, the 'Current Logger Assignment' section shows a table with columns for Logger, Model, Name, and Group. The table lists 17 entries, with the first few being 'Photosynthetic Active Radiation' (PAR), 'Rain Gauge' (TBRG), and several 'Water Level' sensors. A search bar is located to the right of the table. Below the table, the 'Logger Groups' section allows users to assign a logger to a group using two dropdown menus and a 'Submit' button. The 'Create Group' section has a 'Group Name' input field and a 'Create' button. The 'Delete Group' section has a 'Group' dropdown menu and a 'Delete' button.

Logger	Model	Name	Group
Photosynthetic Active Radiation	PAR		My PAR Loggers
Rain Gauge	TBRG		Home
Water Level	10m		Home
Water Level	50m		Home
Water Level	10m		Home
Water Level	10m		Home
Water Level	10m		Home

View of Group tab

Logger Groups: Allows the user to assign a selected logger to a selected group.

Create Group: Allows the user to create a new logger group.

Delete Group: Allows the user to delete a logger group.



### Deployment Tab

This tab shows the deployment history of a selected logger

- In the Select Deployment drop down box, choose a deployment name previously entered in the Logger Config tab. Note a logger must be selected from the Map to use this page
- Change the Name of selected deployment by over-writing the text in the Site box.
- Change the Deployment Notes by over-writing the text in the Site box.
- Press the button Edit to save the changes made.
- Press the Button Delete to remove this deployment.

Deployment History

Show 10 entries

Search:

Id	Logger	Name	Site	Start Time	Stop Time
130	Extended Temperature	D438CEE47FAE	New Deployment_1550538616217	n/a	01-01-70 00:00:00
131	Extended Temperature	EAB58D7D0F03	New Deployment_1550538645491	n/a	01-01-70 00:00:00
135	Extended Temperature	Sim Hot Tank	New Deployment_1551136159350	n/a	01-01-70 00:00:00

Showing 1 to 3 of 3 entries

Previous 1 Next

View/Edit Deployment

Deployments:

Site:

Deployment Notes:

Edit Delete

View of Deployment tab

Deployments:	Select required deployment.
Site:	The user can chose to update the Site name for the chosen deployment.
Deployment Notes:	User notes on selected deployment.

## Sensor Config Tab

Each type of logger may have a user required configuration for its sensor.

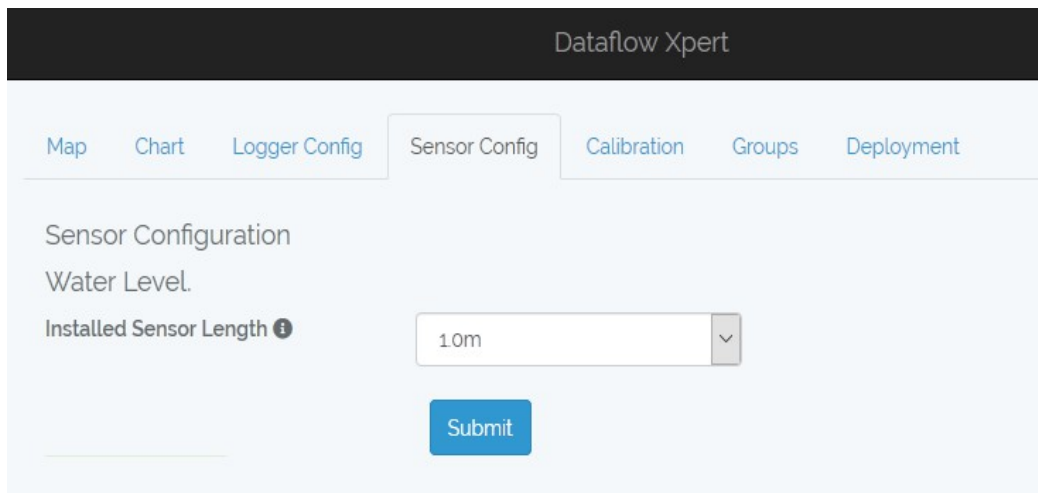
## Water Level Logger

Plug in the sensor cable into the logger and identify its length which is printed on the cable close to the connector.

- Click on the Installed Sensor Length drop down box and select the length cable installed onto the logger.
- Press the Submit button to save the changes.

### Note:

The Xtract Application must connect to the server and download the new settings. This will occur within 10 minutes or to synchronise immediately use the Sync to Server button in the settings menu of the Xtract Application. The logger then must be in range of the Xtract Application to connect and download the new settings.



Water Level Sensor Calibration Tab

Installed Sensor Length	Select the length of the sensor cable plugged into the logger.
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## Soil Moisture Logger

This includes the single soil moisture logger or the multi-profile soil moisture logger. For the multi-profile logger it is possible to enable or disable each sensor for logging. Check your soil moisture sensor rod and enable the number of sensors the sensor rod has fitted. The soil moisture sensor cable or rod is removable from the logger and can be plugged into any other logger. Note the Multi-profile logger is different to the single soil moisture logger.



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- Select each sensor that is required to be recorded by the logger.
- Press the Submit button to save the changes.

**Note:**

The Xtract Application must connect to the server and download the new settings. This will occur within 10 minutes or to synchronise immediately use the Sync to Server button in the settings menu of the Xtract Application. The logger then must be in range of the Xtract Application to connect and download the new settings.

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Map Chart Logger Config **Sensor Config** Calibration Groups Deployment

Sensor Configuration

Primary Sensors

Moisture Sensor 1 :	On <input checked="" type="radio"/>	Off <input type="radio"/>
Moisture Sensor 2 :	On <input checked="" type="radio"/>	Off <input type="radio"/>
Moisture Sensor 3 :	On <input checked="" type="radio"/>	Off <input type="radio"/>
Moisture Sensor 4 :	On <input checked="" type="radio"/>	Off <input type="radio"/>
Moisture Sensor 5 :	On <input checked="" type="radio"/>	Off <input type="radio"/>
Ambient Temperature :	On <input checked="" type="radio"/>	Off <input type="radio"/>

Submit

*Soil Moisture Sensor Calibration Tab*

Moisture Sensors X	Enable or disable each sensor
--------------------	-------------------------------

## Calibration Tab

Some loggers require a user calibration to be performed for its sensor. Note some loggers also have a factory calibration.

## Water Level Logger

The water level logger can be purchased with factory calibrated temperature and temperature compensation. The sensor will still need to be calibrated for this logger. Refer to the Water Level Logger user manual for details on how to perform this user calibration.

- Enter the first reading for the Reference and the Logger reading. Make sure the decimal point is put in.
- Enter the first reading for the Reference and the Logger reading. Make sure the decimal point is put in.
- The Sensor length should be the same as entered in the Sensor Config and should be filled in already.
- Enter the logger temperature as reported by the logger when collecting the user calibration data. This is required for factory temperature compensated units.
- Press submit button to save the data.

If it is needed to carry out another calibration the logger must be returned to factory defaults before taking new measurements.

- To return the logger to factory calibration defaults select the Restore Factory defaults tick box and press the submit button.

**Note:**

The Xtract Application must connect to the server and download the new settings. This will occur within 10 minutes or to synchronise immediately use the Sync to Server button in the settings menu of the Xtract Application. The logger then must be in range of the Xtract Application to connect and download the new settings.

Once the user calibration has been carried out the Calibrated Parameters boxes will be filled out. The resolution box indicates the resolution in mm that can be expected from data logger. The minimum resolution will always be 0.1mm.

If the logger has been factory temperature compensated the applied temperature compensation in mm/°C will be displayed in this box.



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Map Chart Logger Config Sensor Config Calibration Groups Deployment

Calibration Settings

Water Level.

Restore Factory Defaults <sup>i</sup> ☐

First Reading \* Reference <sup>i</sup> Logger Reading <sup>i</sup>

mm mm

Second Reading \* mm mm

Sensor Length \* mm

Logger Temperature \* °C

Calibrated Parameters <sup>i</sup>

Resolution mm

Temperature Compensation mm/°C

\* = Required

Submit

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Water Level Sensor Calibration Tab

First Reading:	The first calibration point.
Second Reading:	The second calibration point.
Sensor Length:	The length of the sensor plugged into the logger.
Logger Temperature:	The ambient temperature as measured by the logger during the calibration.
Restore Factory Defaults	Returns the calibration to the factory defaults.

### Soil Moisture Logger

The soil moisture logger is factory calibrated for temperature and each sensor is temperature compensated. The user must select the soil type from the drop down box or choose custom to set your own soil parameters.

*Further information to be added.*