



Watchlog USB Manual





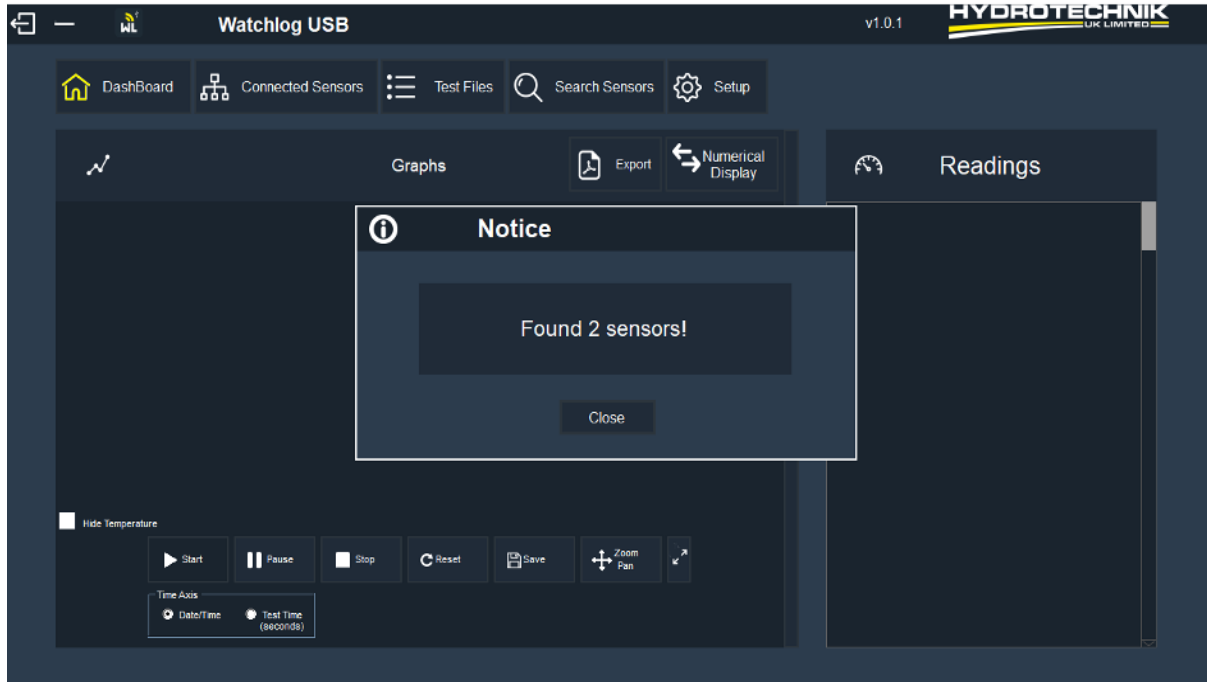
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Note: Before following this quick start guide, please make sure you have the USB pressure sensors connected to your laptop or PC.

1. Opening The Software

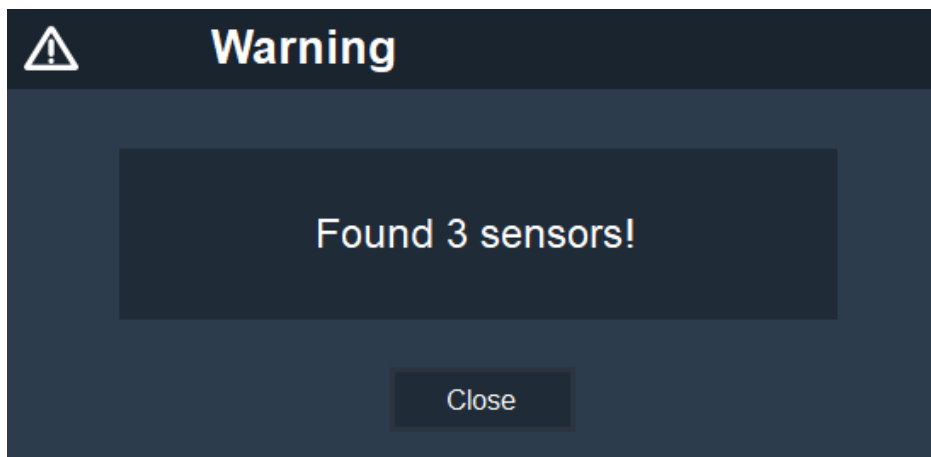
When you open the software, you will land on the home page which will display a warning message stating how many sensors have been found/connected to your laptop or PC.



1.1 Searching For & Adding More Sensors

If you wish to connect additional sensors once you have started the software, you can do this by connecting the additional pressure sensors and clicking the Search Sensors tab along the top menu.

This will then display a warning message showing the total number of sensors connected.

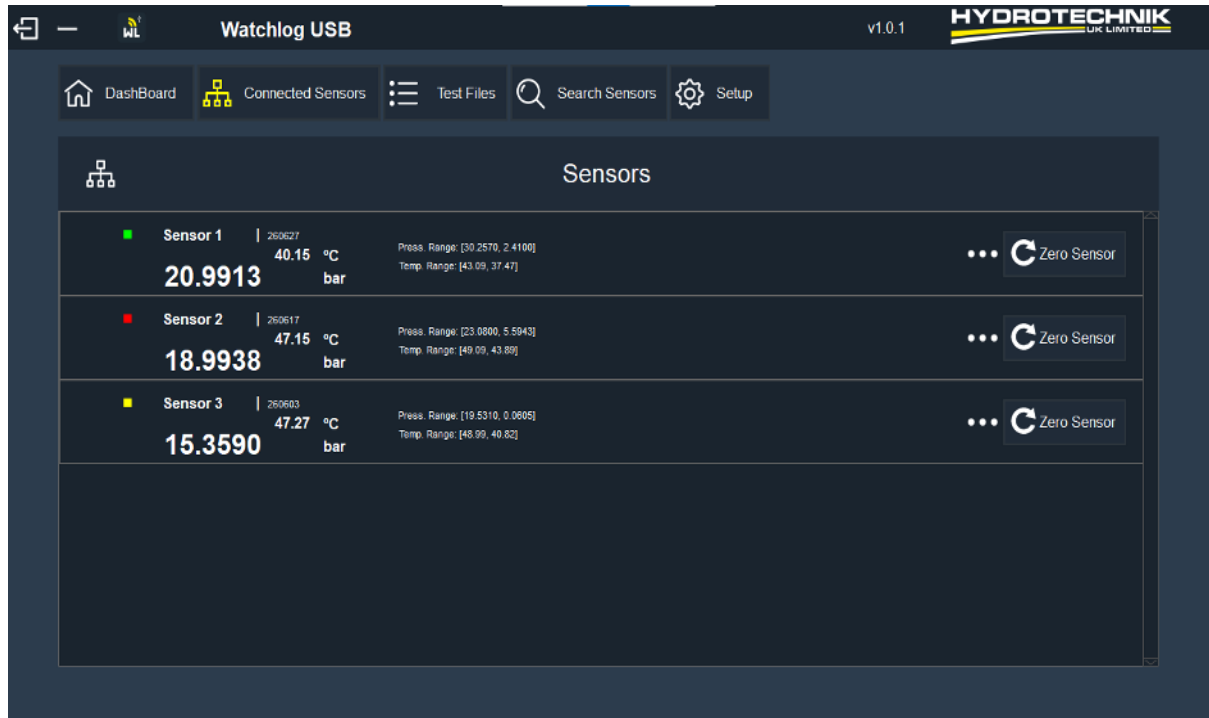


Press close to take you back to the dashboard



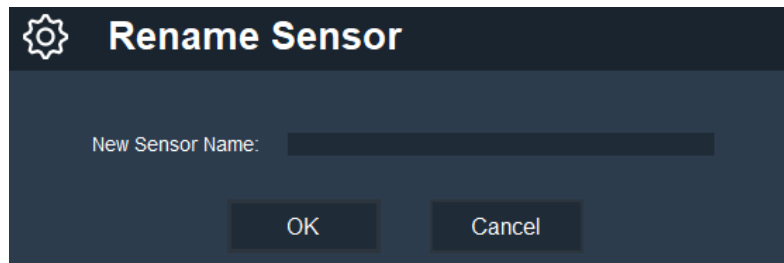
1.2 Connected Sensors

Connected sensors allows you to view the sensors data, such as the sensor name, the current pressure reading, min & max pressure reading and the minimum and maximum temperature range.



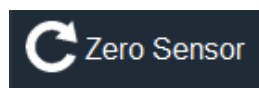
1.3 Renaming A Sensor

If you press the three dots on the right hand side (...) this will allow you to rename that particular sensor. A separate box will appear, you can then type the new name for your sensor, press OK to save.



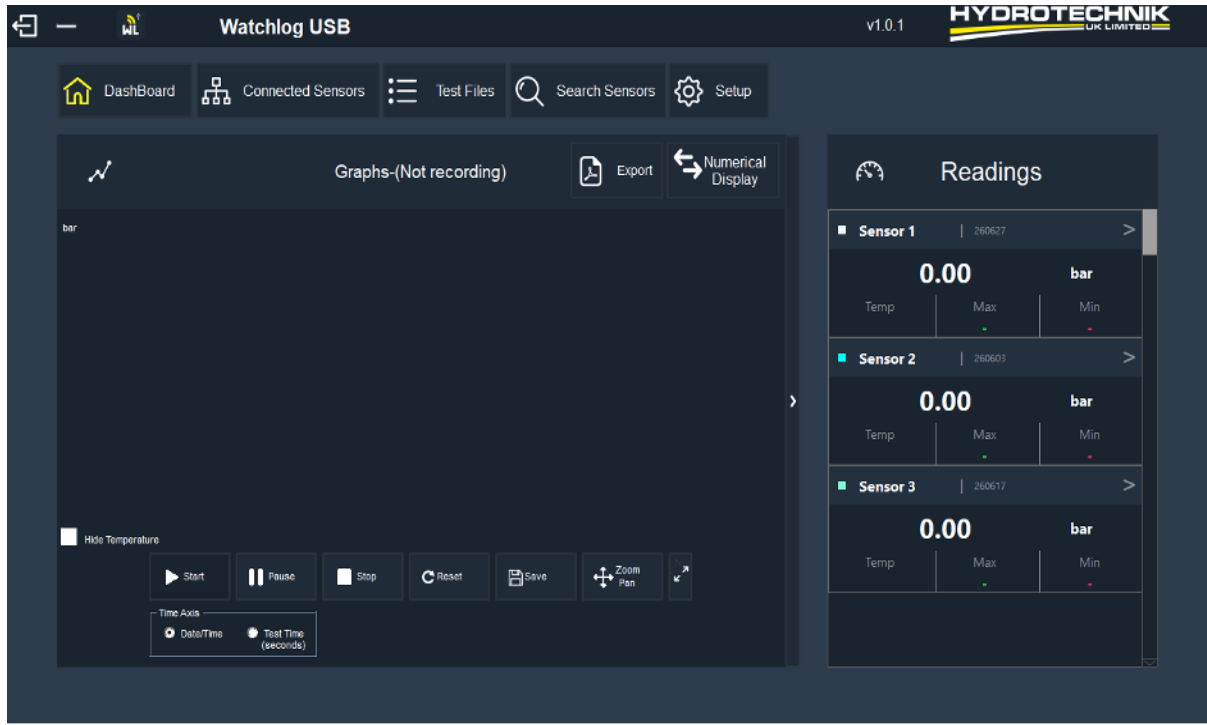
1.4 Zeroing A Sensor

Zeroing sensor function removes any zero point errors. We recommend doing this before doing any new test.



2. Dashboard

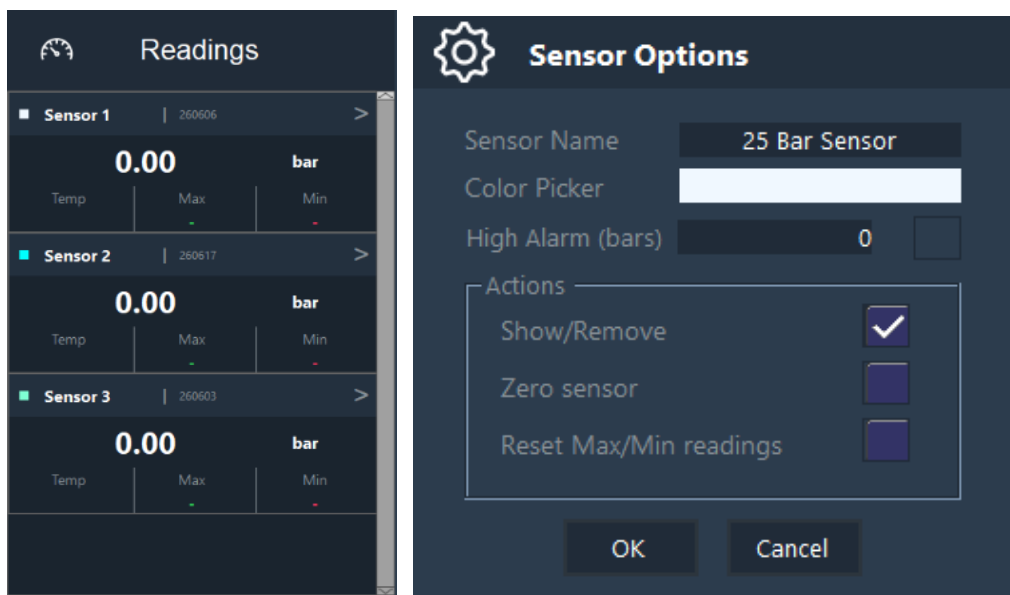
The dashboard is the home page for the Watchlog software. This standard display set up is a graph view and a readings display on the right hand side. Please see sections 2.2 & 2.3 for different layout options.



2.1 Readings Box

The readings box provides information such as the sensor serial number, the pressure reading, the sensor's temperature reading and the min & max pressure readings.

If you press the > Icon, then this will take you into more options for the sensor.



Sensor Name – Allows you to give the pressure sensor a name or reference for easy referencing when we annotate our test.

Colour Picker – Allows you to give the pressure sensor a colour ID. This will be the colour of the lines on the test graph for the sensors pressure & temperature measurement.

High Alarm (Bars) – The figure set will be when an alarm would start to work. E.g. if you set the alarm to 15 bar, and 15 bar is then exceed on your test, the reading will flash Red.

Zero Sensor – Zeroing function to remove any zero point errors. We recommend doing this before doing any new test.

Reset Min & Max – By selecting this, you will reset the pressure sensors minimum & maximum pressure reading that was recorded previously.

2.2 Stretching the graph

To stretch the graph press the **>** icon to the right hand side of the graph screen, this will allow you to stretch the graph to a full screen. By doing this you will remove the readings column from the display.

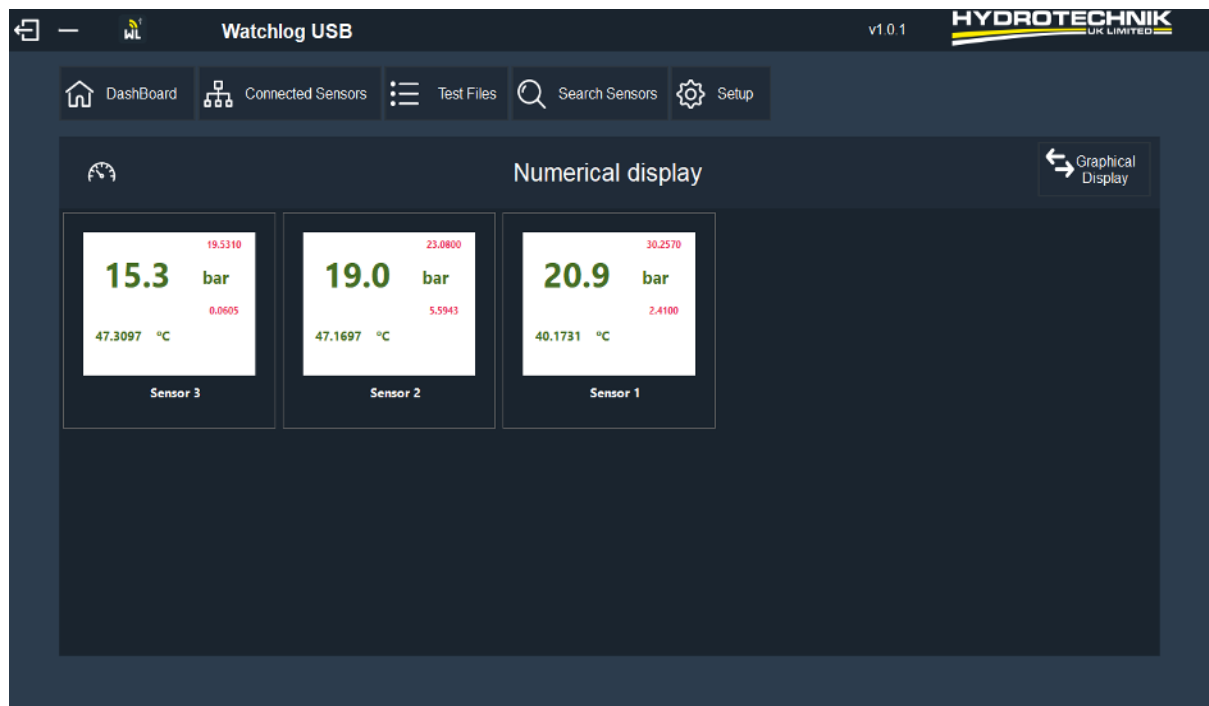


To revert back to the default screen, press the **<** icon.



2.3 Numerical Display

If you prefer to view the test data as a numerical display, you can do this on the dashboard by pressing the Numerical Display button.

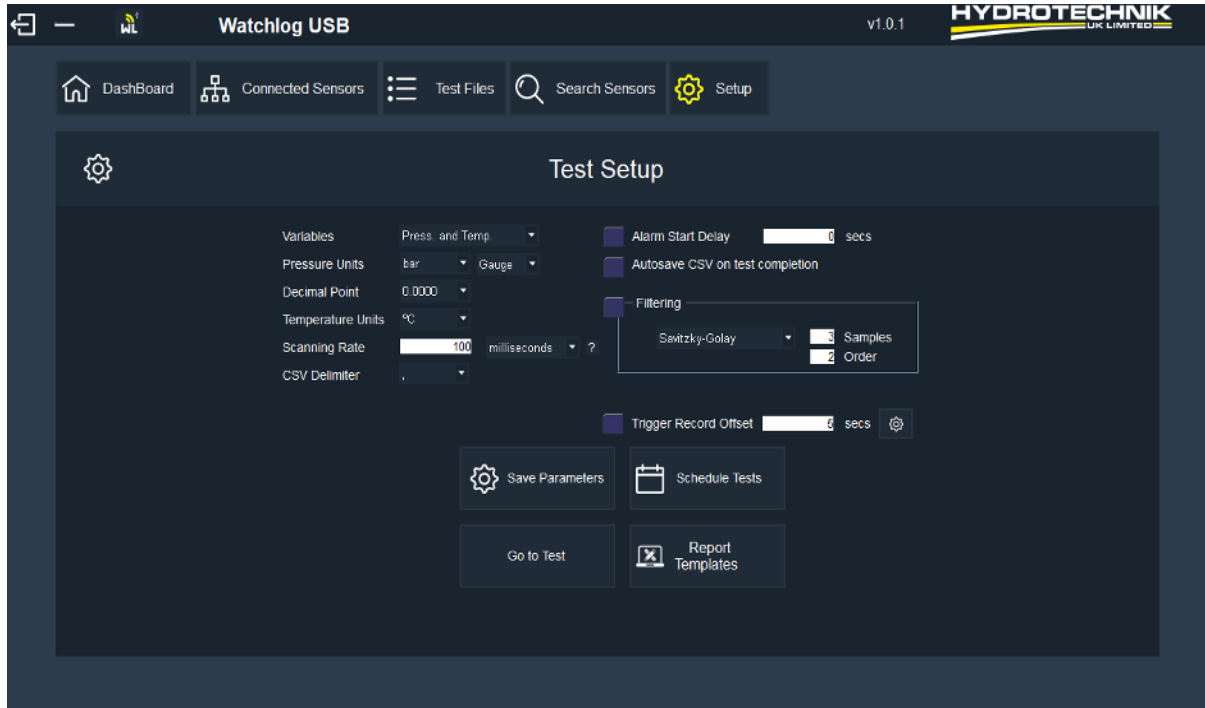


To revert back to the default screen, press Graphical Display.

If the alarm threshold is met, then the display of the numerical tiles will flash Red. Please see section 2.1 “High Alarms” for more information.

3 Setup A Test.

To setup a test, select setup from the top menu bar and change the parameters to meet your requirements.



Variables – This allows you to select what data you would like to see. i.e. pressure, temperature or pressure & temperature. As a default, the software will only display pressure.

Pressure Units – This allows you to select what pressure units you would like to measure in. i.e. bar, psi, kPa. You can also select between gauge and absolute reference.

Decimal Points – This allows you to see the data with 1 to 4 decimal points. i.e. 0.0, 0.00, 0.000 & 0.0000

Temperature Units – This allows you to see the temperature in Celsius (°C) or Fahrenheit (°F)

Scanning Rate – This is the scanning rate of the test and it is set in milliseconds. If you set this to 0, then the fastest possible acquisition speed will be enabled, typically 50ms. Please note that setting the scanning rate to zero, results in 20 readings, per second, for each sensor connected, to be recorded, which then uses a lot of computing power.

CSV Delimiter -You can select how you would like your data exported to a CSV file. You can select between a comma or semi colon.

Alarm Start Delay –This is the time delay of an alarm in seconds. If an alarm threshold is reached then the alarm will start after this duration. E.g. if you set the alarm to 15 bar, the alarm will start if 15 bar is then exceed for 3 seconds.

Autosave CSV on Test Completion – If the box is ticked, this will automatically save your test as a CSV file once the test is completed.

Filtering –To reduce any noise from the sensor or system.

Trigger record offset - This determines how long an event should take place (in seconds) before the trigger starts recording data

Save Parameters – This saves your test parameters that have been set. You must save the parameters before running a test.

Go To Test – This takes you back to the dashboard so you can view or run a test.

Schedule Test – The user can schedule a test for a specific date, time and duration.

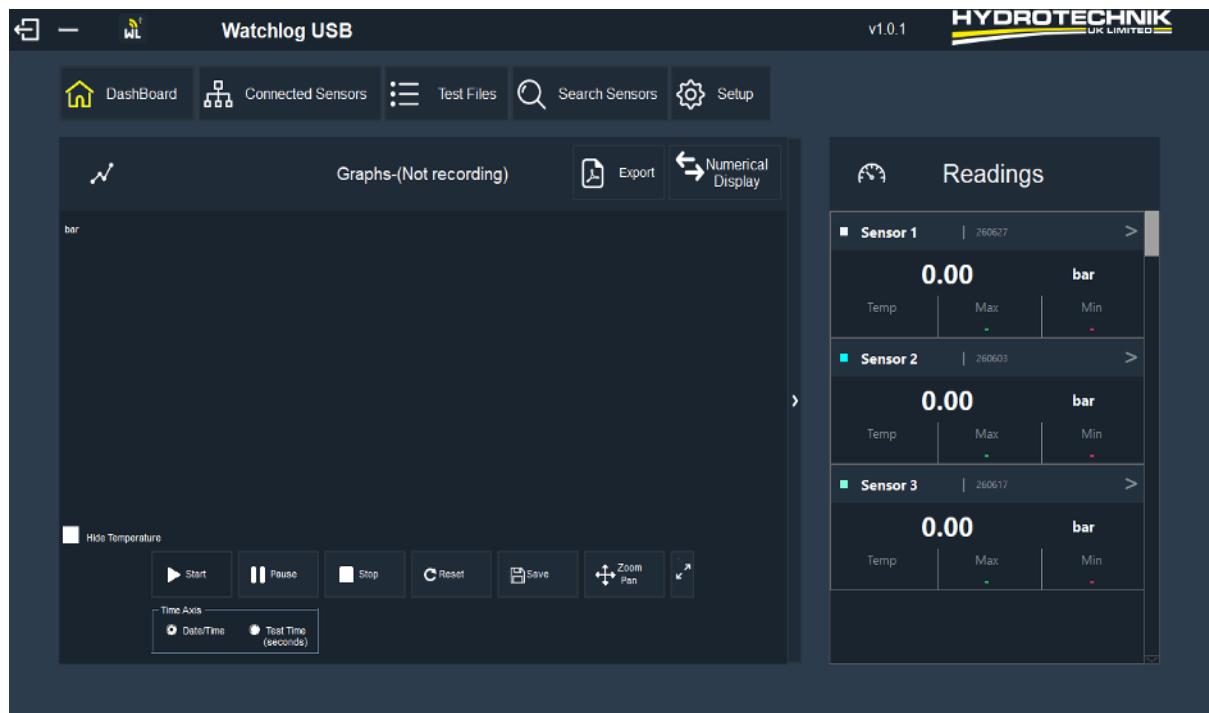
Report Templates – This allows you to create a test report for your test. Please see section 7.0 for further information

N.B Once you have set the parameters of your test you have to press **Save Parameters**. When the parameters are saved, press **Go To Test** which will take you back to the **Dashboard**.

4. Recording A Test

To start a new test, press the start button.

N.B When you have pressed start, make sure the title changes from **(Not Recording)** to **(Recording)**.



Hide Temperature – Tick this box if you wish to hide the temperature readings from your test.

Start – This will start your test recording.

Stop – This will stop the test.

Pause – This will pause your test.

Reset – Resets the graph and the sensor readings on the right hand side.

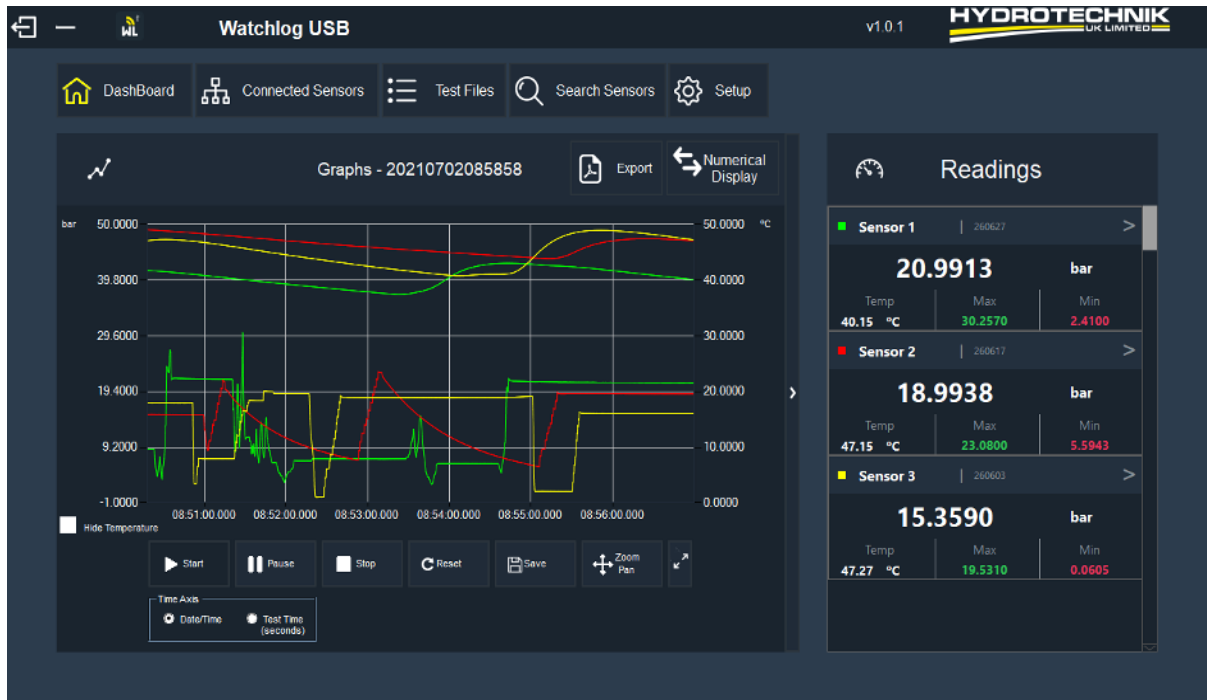
Save – This will save your test file and ask you to name it.

Zoom Pan - When you have zoomed into a specific section of the data, you can select Zoom Pan so you can click and drag the data around. (see section 5.3)

Expand Arrows – This will return the graph to a default view after zooming in.

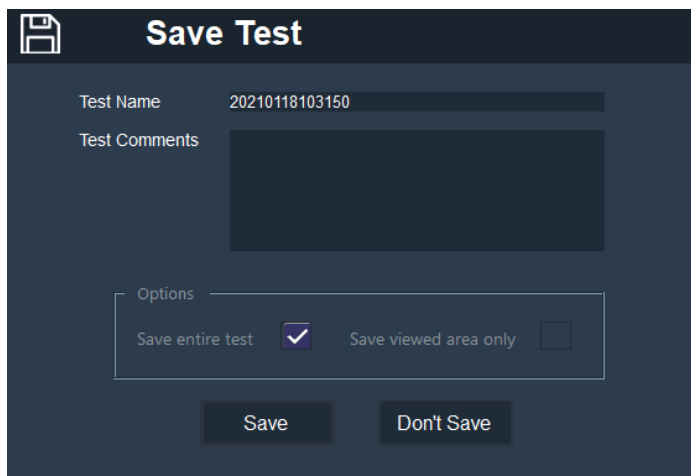
Time Axis Box – This will allow you to switch between date/time or test time on the X Axis.

Once you have completed your test, you should see something similar to the below.



4.1 Saving your Test

To save your test, press the Save icon, which will open a separate box



The 'Save Test' dialog box contains the following fields and options:

- Test Name:** 20210118103150
- Test Comments:** (Empty text area)
- Options:**
 - ☒ Save entire test
 - ☐ Save viewed area only
- Buttons:** Save, Don't Save

Give your test a name and add any comments you wish too about the test. You can overwrite the default test name as shown in the image above

Save Entire Test – This will save the whole test.

Save viewed area only – This function is used to save a particular point of your test. For example, if you have zoomed in to a particular part of the graph, it will only save this section. This acts as a “Save As” function

Then press Save.

5. How To Annotate Your Test

To add annotations to your test, right click where you would like to add an annotation on the graph and a separate box will appear. The box will automatically populate with test comments. However, you can name the annotation and write your own comments on the test if you prefer.



Save Annotation

Annotation Name: Sensor Info.

Comments: TimeStamp: 2021-07-02 08:54:13
Sensor 1
Pressure: 6.20 bar
Temp.: 42.07 °C

Save Don't Save

For this manual we have proceeded with the default text. Now, press save.

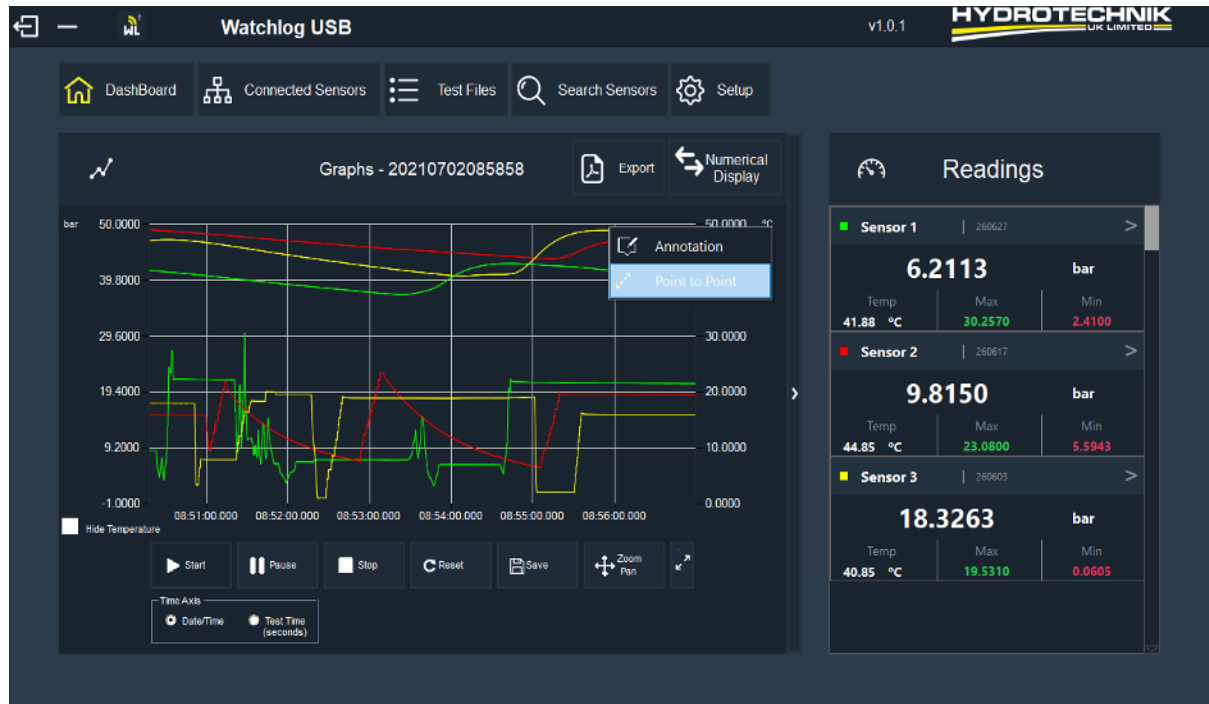
The annotation will now appear on the graph. You can move the annotation text box anywhere you like on the graph. You can also move the annotation pointer to pinpoint the displayed information. Please beware that the annotation shows the pressures at the point originally picked, moving the arrow away does not change the values.



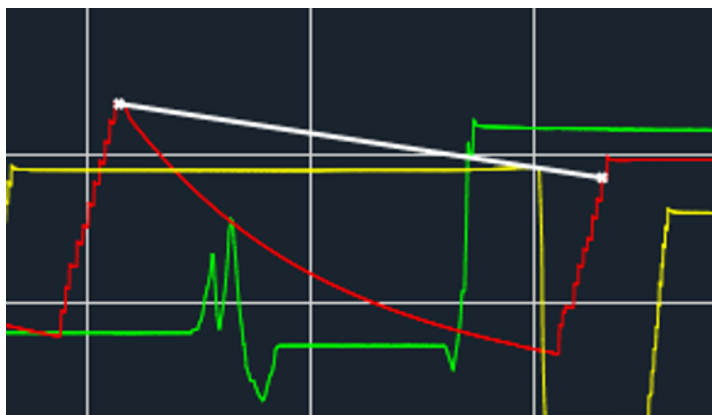
If you wish to edit or remove the annotation box, select it by clicking on the box to highlight it. Then right click on it and a separate annotation box will open and you can either edit & save or press remove to delete.

5.2 Point to Point

Point to point allows you to view the data between two points on the test graph. To do this right click the mouse and select point to point.



Once Point to point has been selected, you can now select between the two points which you would like to view. (The white line below)





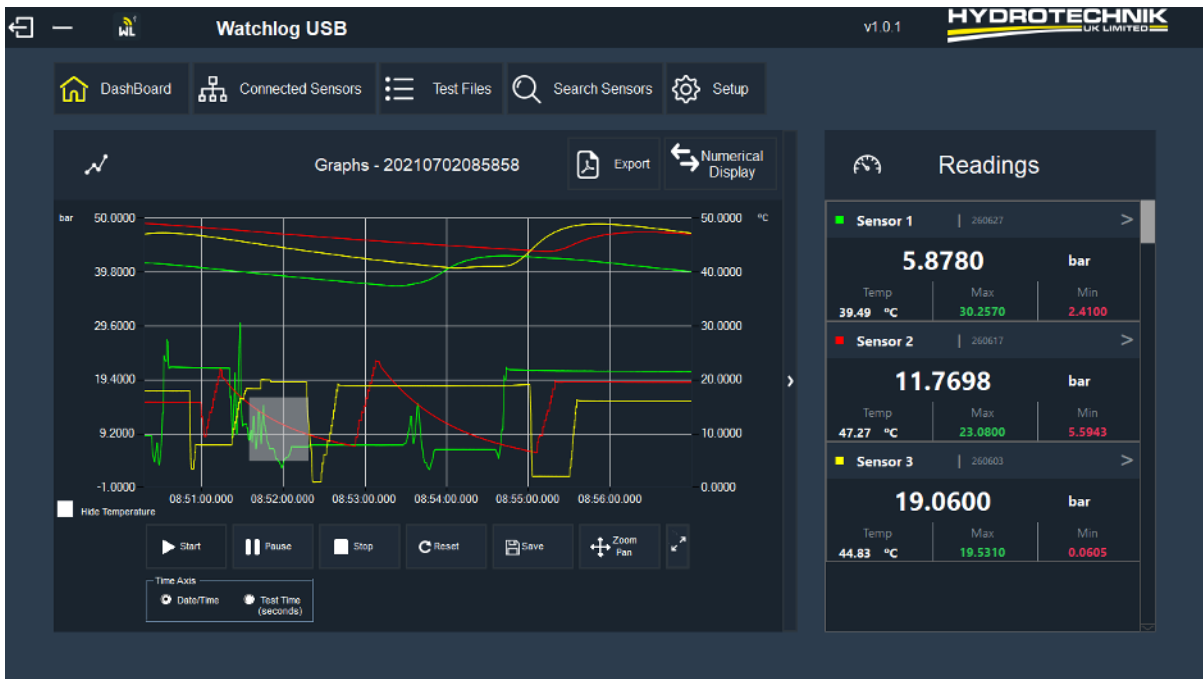
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This will automatically populate the spot box.



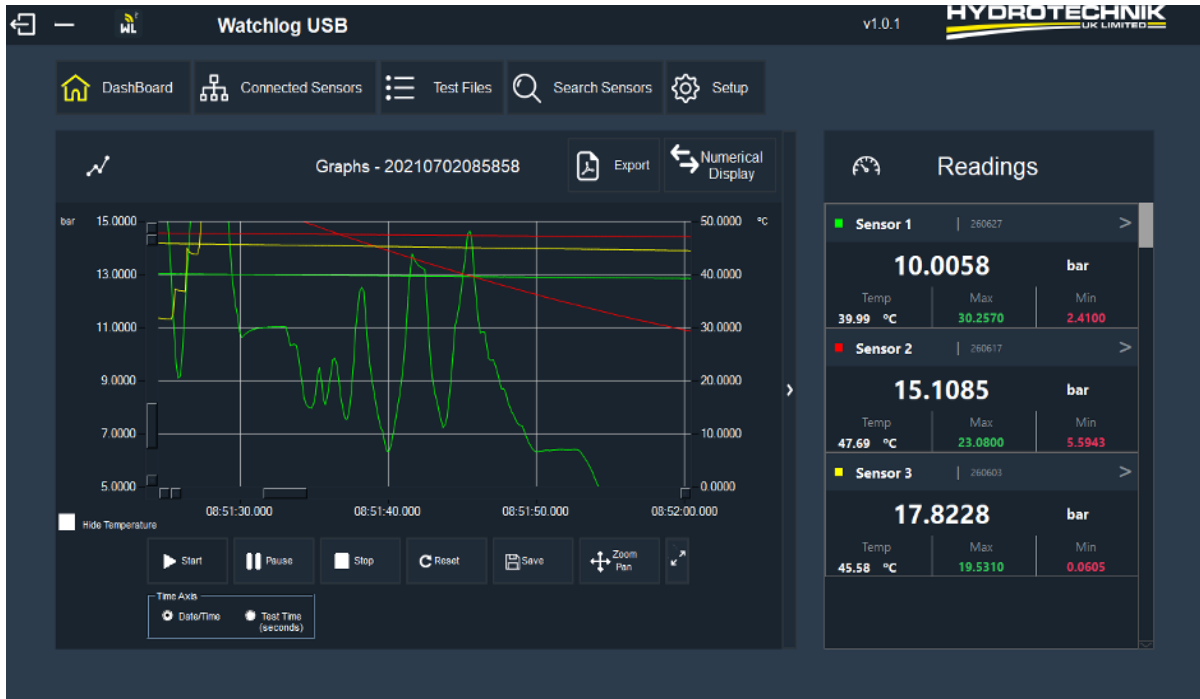
5.3 How to Zoom In & Out Of Test Data

To zoom in on your test data, left click and drag over the area you would like to zoom into. A Grey box will appear to show the selected area.

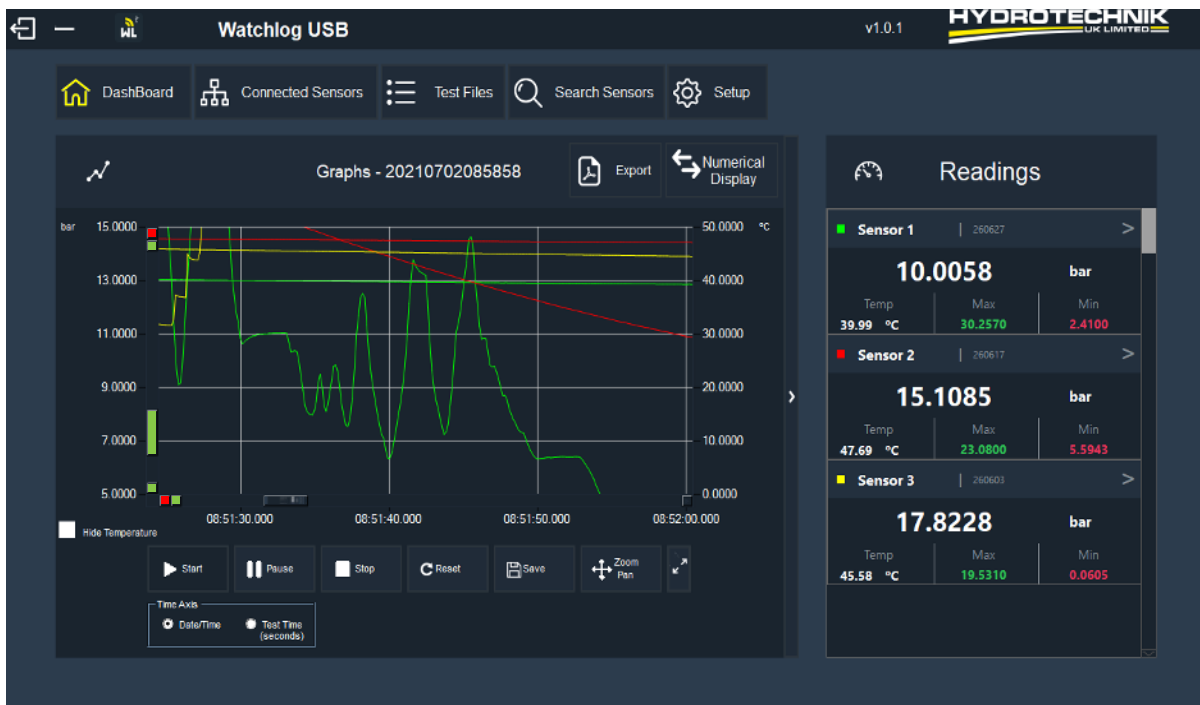


The graph will now show the selected area.

By selecting the icon  you can click and drag the test data to view the other areas of the test data for a quick viewing.



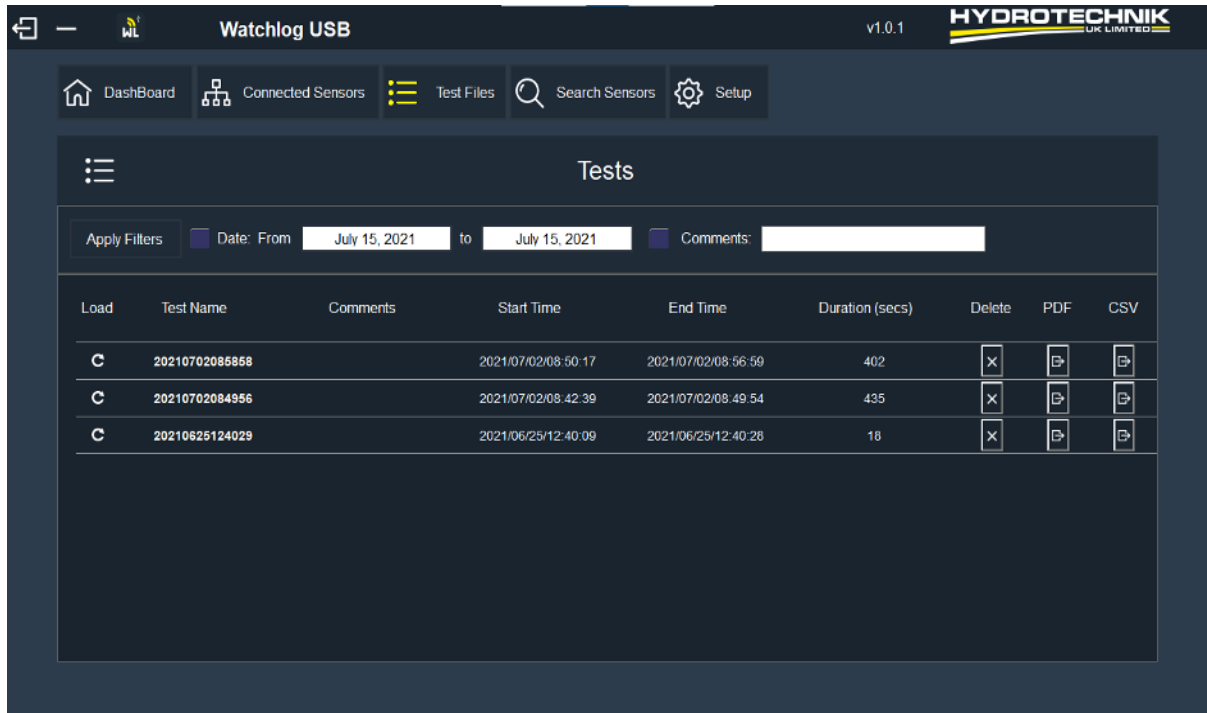
If you want to gradually zoom out, you can do this by clicking the **Red** highlighted boxes. If you would like to scroll up and down or left to right on the test data, you can do this by using the highlighted **Green** slider bars & boxes



To zoom back out to a full screen, press the  icon

6.0 Test Files

This will display all of the test files that have been created and saved in the past.



Date From & To – Allows you to filter saved files by the date they were created. If you do this, you will need to press apply filters button once you have selected your date range.

Load – By pressing the circular arrow, the software will load up that particular test into the dashboard. To view the reloaded test you will need to press the dashboard tab.

Comments – Displays comments regarding the test that you may have added when you saved the test

Start Time – This is the date and time when the test was started

End Time – This is the date and time when the test was completed

Duration – The is the test duration in seconds.

Delete – Deletes the test file.

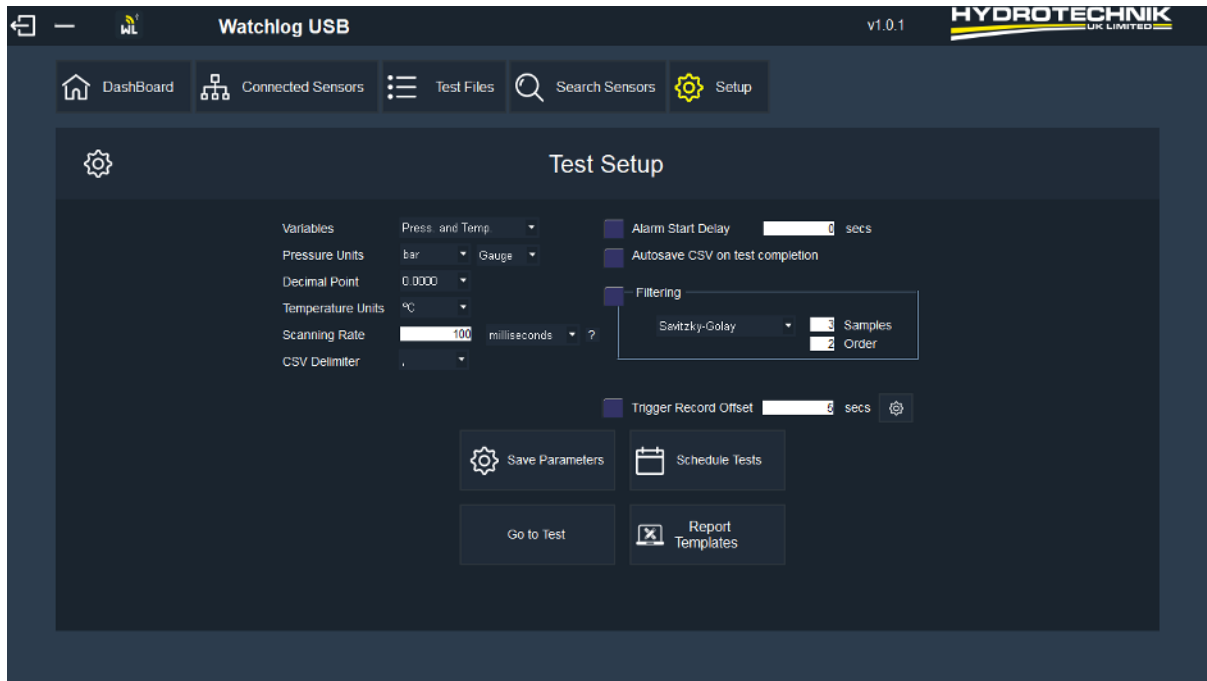
PDF – Exports the test data as a PDF file.

CSV – Exports the test data as a CSV file.

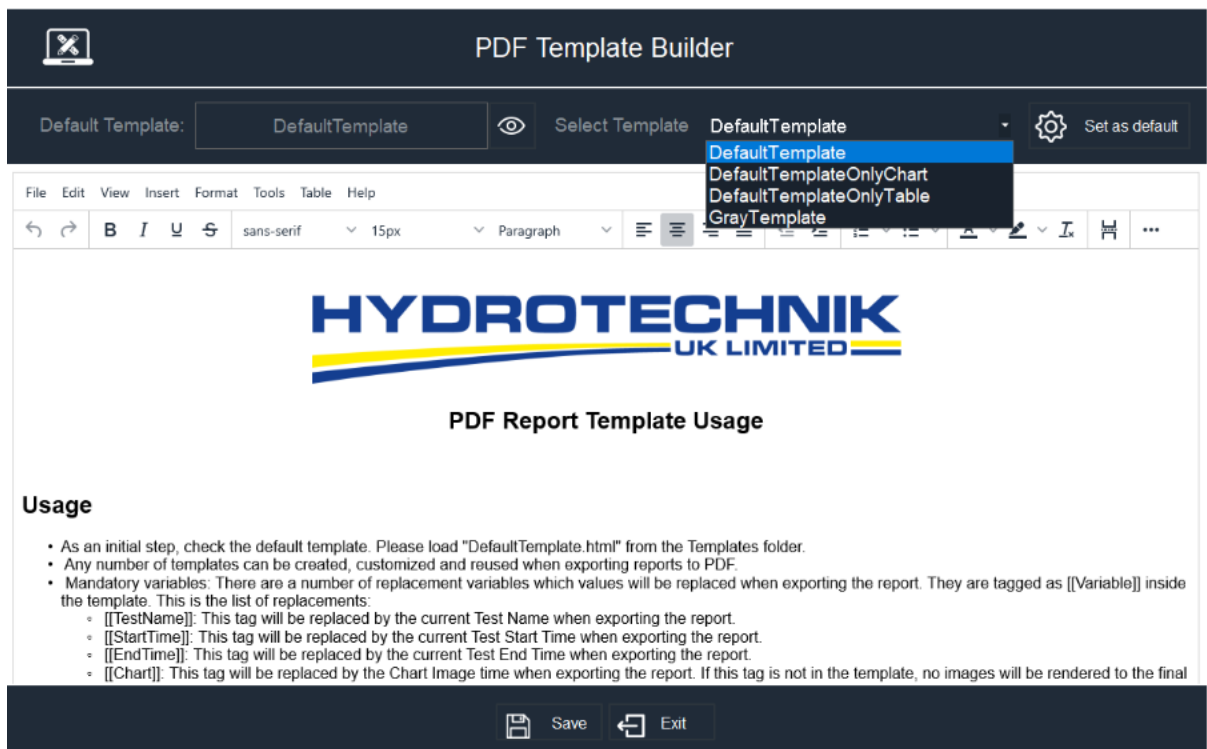
NB. Previous tests that have been reloaded can be annotated, zoomed in and resaved as a separate file. This can be useful to create reports that pinpoint certain events.

7.0 Report Templates

If you want to export your test into a report template, you will need to go back into the setup tab and press report templates.



The following page will automatically appear.



Report templates allows you to choose what type of test report template you would like to use, to build up your test report.

There are three options of report templates to choose from, Chart Only, Table Only, & Grey template. By selecting these from the drop down menu, it will give you a sample of what the report would look like in the main body of the window



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Select which template you would like to use and then press save. We recommend saving this template to your desktop.

In this example, we have used Template Only Chart.

Now press save.

NB. You can add your own company logo to the templates.

7.1 Exporting Your Test To A Report

If you want to export your test into a report template, you will need to press Export, which is next to the Numerical display above the graph on the dashboard/homepage.

You will then be asked to save the PDF test, we recommend saving this to your desktop.

Once the test is saved, you can now open and view the test report. All the fields will be populated automatically.



Test Name: 20210702085659
Start Time: 2021/07/02 08:50:17
End Time: 2021/07/02 08:56:59

Test Results

Chart

