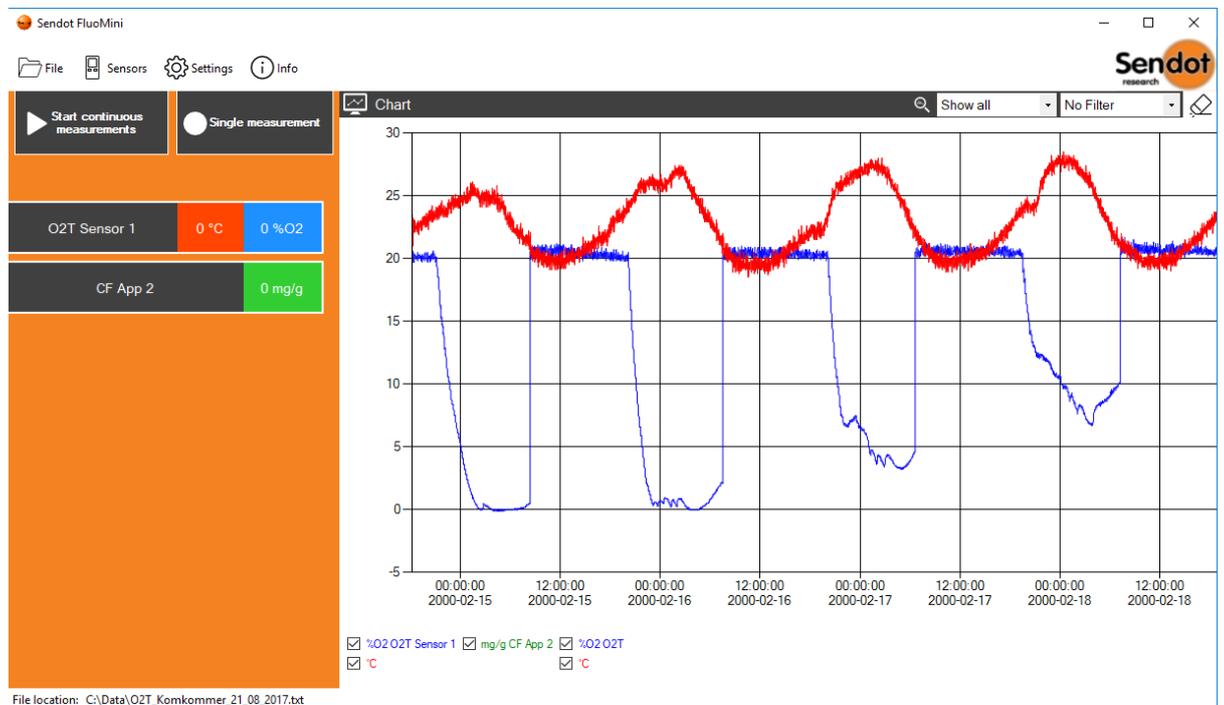


# Software Manual

## FluoMini Software Suit



System info  
 Software version : v1.0  
 Compatible with : FluoMini Pro O2|T  
 : FluoMini Pro CF  
 : FluoMini App O2|T  
 : FluoMini App CF  
 : FluoMini App Q-CF-Seed  
 : FluoMini App PAM  
 : FluoMini Pro PAM

## Index

1. Getting started .....	3
2. Main Screen .....	4
Start continuous measurements .....	4
Single measurement .....	4
Graph Area .....	5
Data Filtering.....	5
Clear Graph .....	5
Show/Hide Lines .....	5
Create Image.....	5
3. File.....	6
New .....	6
Save .....	6
Open.....	6
Clear .....	6
Export to Excel .....	6
4. Sensors List.....	7
Refresh .....	7
Settings.....	7
Calibrate .....	8
Sensor Data .....	8
5. Software Settings .....	9
Interval time.....	9
Hotkeys .....	9
Default file location.....	9
6. Calibrate Procedure .....	10
Calibration methods .....	10
Start Calibration .....	11
CF Calibration procedure .....	11
O2T Calibration procedure.....	11
Abort Calibration.....	12
Calibration Errors .....	12
Errors.....	13

## 1. Getting started



When initiating the software the loading screen, as showed above, will appear. The screen will show the progress of checking the ports.

Please keep in mind that the software may detect a device, on one of the ports ,which is not a Sendot sensor. The software will indicate “Device not responding” error since the foreign device is unfamiliar to the software commands.

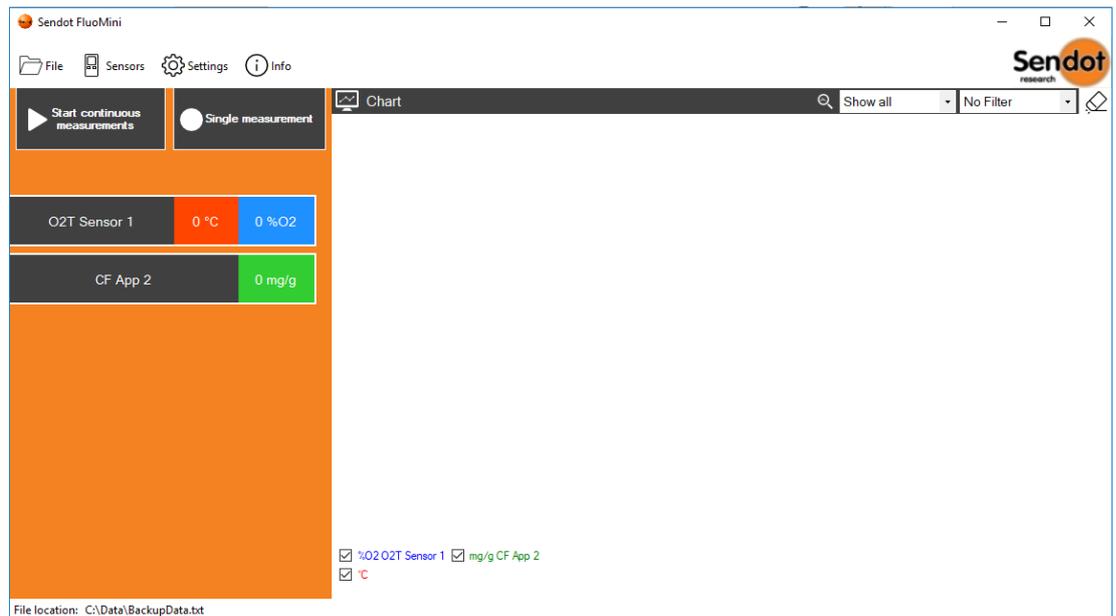
Once all the ports have been checked the software will start and show all connected sensors.



When you initiate the software without any sensors attached, the software will still start up but most functions are disabled. You can [add sensors](#) while the software is running.

Even if there are no sensors attached to the laptop or PC the software will allow you to open and interact with previous measurements.

## 2. Main Screen



Once started up you will see the screen shown above.

On the left hand side of the screen you can see two buttons and in this case two sensors with their values.

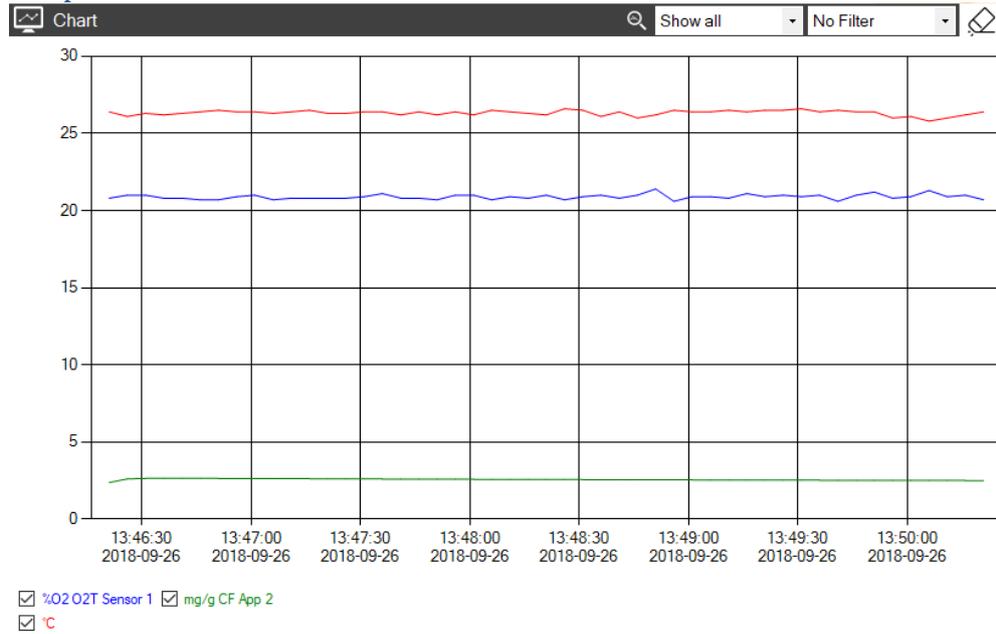
### Start continuous measurements

Start doing continuous measurements with a custom interval with the sensor(s). You can change the Interval at the [software settings](#) screen.

### Single measurement

As the button says, this will do a single measurement with the sensor(s).

## Graph Area



The graph indicates real time or performed measurements. Each sensor has its own line(s) in the graph.

When you hover with your mouse over the line in the graph you will see a tooltip with the value of the line at that point. This will allow you to view a specific point in the graph. By scrolling in the chart you can zoom in or out.

## Data Filtering

You can show specific data by using the dropdown boxes at the top right of the graph area.



### Following the data

The first dropdown allows you to track the data or show everything.

### Filter data

With the second dropdown you can choose to filter the data by day/week/month, or you can choose your own filter by using Custom filter.

## Clear Graph

By clicking on the pencil button at the top right of the graph you can erase the graph. This will only clear the graph, not the file you are working in.

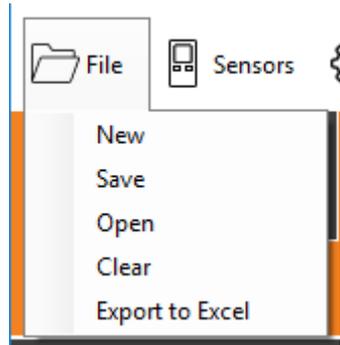
## Show/Hide Lines

You can show or hide graph lines by clicking on the checkboxes at the bottom of the graph.

## Create Image

You can create an image of the graph by right clicking on the graph and selecting "Create Image".

### 3. File



The software is always working from a back-up file (BackUpData.txt) unless you create a new file or open another file.

In the bottom left corner of the screen you can always see in what file you are working.

#### New

Create a new file or select an existing file to start working in.

#### Save

Select a file to save all the current measurements in.

#### Open

Select a file to open. All measurements in this file will be loaded in to the graph. You will continue measuring in this file.

#### Clear

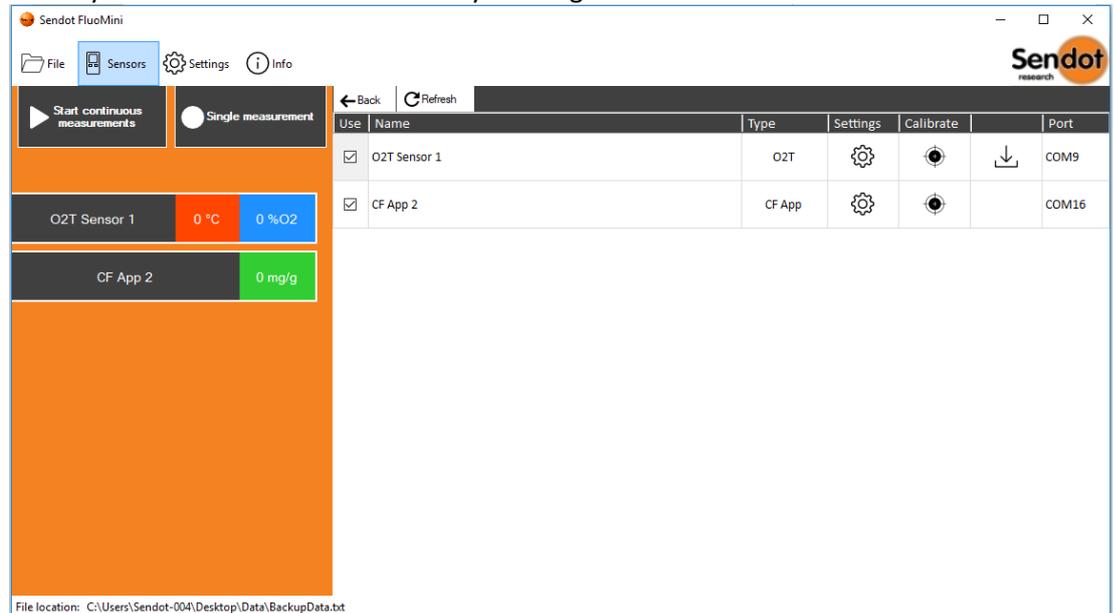
Clear the current file from all measurements. You will keep measuring in this file after it is cleared.

#### Export to Excel

Export all measurements from the current file to a selected excel file. This will create a file with all the measurements. The measurements for each sensor will be in a different tab.

## 4. Sensors List

When you click on the Sensors button you will get the screen that is shown below.



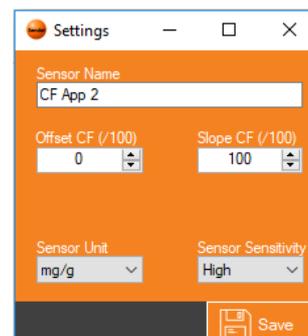
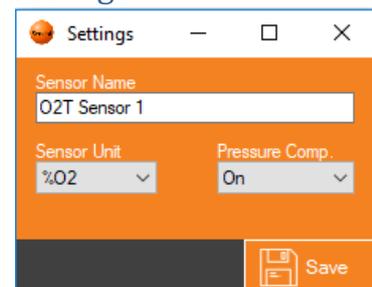
Here you have a list with all the sensors that have been found.

By selecting the checkbox in front of the sensors name, you can chose to use the sensor when measuring.

### Refresh

This will prompt the software to check all ports for any changes in sensors that are connected. New sensors that have been found will be added to the list, but you will have to still click the checkbox if you want to measure with it as well. Sensors that have been removed will also be removed from the list.

### Settings



Each sensor has their own settings screen, as every sensor has its own parameters that are needed for the measurements.

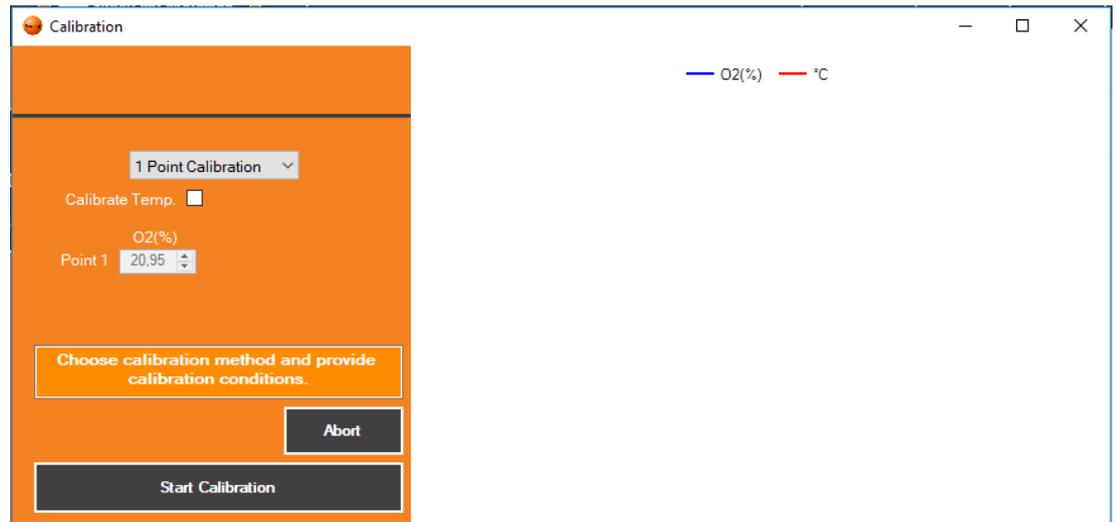
For each sensor you can change the **Name** and **Unit**, all the other settings are type specific.

When going into the settings screen of an App version you can also change the Offsets and Slopes as shown in the screenshot above.

Changing the name of a sensor can help you distinguish sensors when you have multiple of the same type. This will also be changed in the file that is open.

**NOTE:** The settings will only be changed after pressing the Save button.

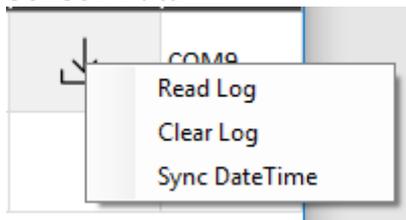
## Calibrate



Here you can calibrate the sensor.

For detailed information about this process please refer to [Calibration Procedure](#).

## Sensor Data



When clicking on this button you will see a few option.

### *Read Log*

This will read the measurements from the SD card of the selected sensor to a selected file. You will continue to measure in this file after the log file is read.

### *Clear Log*

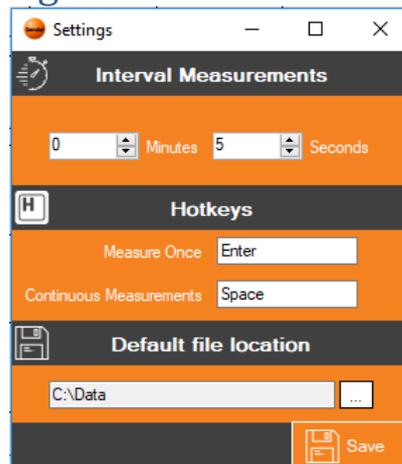
Clear all the measurements from the SD card in the selected sensor.

### *Sync DateTime*

This will set the date and time of the selected sensor to the current date and time on the computer.

**NOTE:** This button will only appear for Pro Sensors.

## 5. Software Settings



When you click on the Settings button in the menu you will get the screen shown above. Here you can change some basic settings of the software.

### Interval time

This is the interval time that is used for doing continuous measurements.

Changing this will take effect after saving.

If continuous measurements were still running while you changed this you will have to restart the measurements for changes to take effect.

### Hotkeys

Here you can change hotkeys for doing measurements.

Simply click inside of the text field and press another button on the keyboard to change the hotkey.

### Default file location

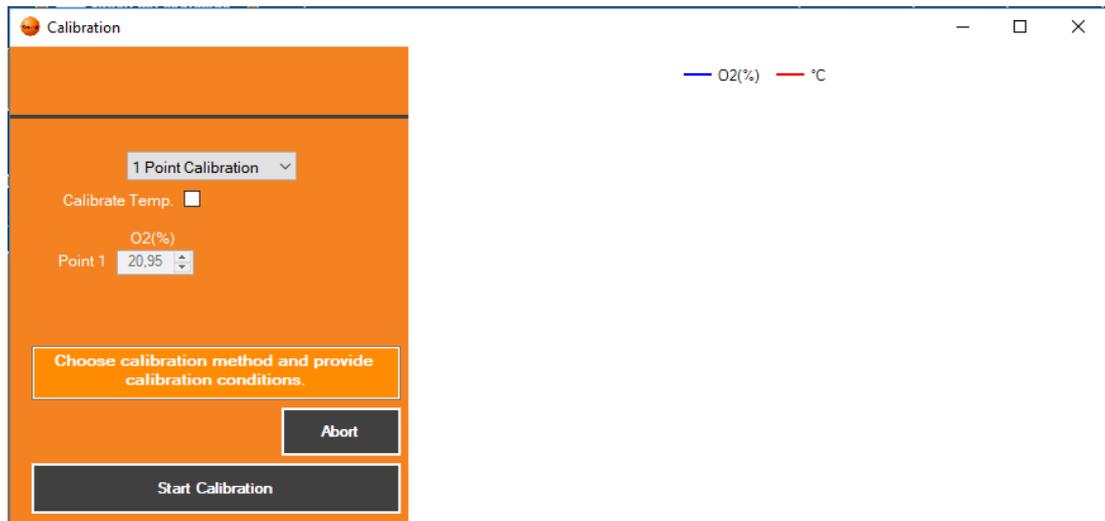
This is the location of the standard BackUpData.txt file.

You can change this by clicking on the box behind the text field.

After you have saved any change made to the file location the current back-up file will be moved to the new location.

**NOTE:** The settings will only be changed after pressing the Save button.

## 6. Calibrate Procedure



Please pay attention to the orange field above the buttons. It will instruct you how to progress with a calibration and it will always show information about the next step you have to take.

### Calibration methods

Before you can start the calibration you have to select the calibration method and fill in the reference points.

You can choose between a 1 or 2 point calibration, and if you have selected an oxygen + temperature sensor (O2T) you can click the T-calibration checkbox to turn the temperature calibration on or off. Make sure you have a reference temperature sensor standing by if you choose to calibrate the temperature as well.

## Start Calibration

When you have selected the calibration methods and filled in the reference values you can start the calibration by following the instructions in the orange box and clicking on the “Start Calibration” button.

### CF Calibration procedure

#### 1 Point

- Point the probe at the calibration medium with the entered reference value and click “**Calibrate CF**” when the measurements are stabilized. This step may take several minutes. The sensor will perform the calibration.
- When the calibration is completed the software will indicate “Calibration Finished” in the orange box.

#### 2 Point

- Point the probe in the air (CF value will be 0) and click “**Calibrate CF Point 1**” as soon as the measurements in the graph have stabilized. The sensor will calibrate the first point.
- Click “**Start Calibrate CF Point 2**” to start the calibration for the 2<sup>nd</sup> point.
- Point the probe at the calibration medium with the entered reference value and click “**Calibrate CF Point 2**” when the measurements are stabilized. The sensor will perform the calibration.
- When the calibration is completed the software will indicate “Calibration Finished” in the orange box.

### O2T Calibration procedure

#### 1 Point

- Expose the probe to the 20.95% calibration medium and click on “**Calibrate O2**” when measurements are stabilized. This step may take several minutes. The sensor will perform the calibration.

When the calibration is completed the software will indicate “Calibration Finished” in the orange box

#### 1 Point + Temperature

- Expose the probe to the 20.95% calibration medium for the temperature and click “**Calibrate Temperature**” when measurements are stabilized. This step may take several minutes. The sensor will perform the temperature calibration.
- Click “**Start O2 Calibration Point 1**” to start the calibration for the Oxygen.
- Expose the probe to the 20.95% calibration medium and click “**Calibrate O2**” when measurements are stabilized. The sensor will perform the calibration.
- When the calibration is completed the software will indicate “Calibration Finished” in the orange box

### 2 Point

- Expose the probe to the 0% calibration medium and click **“Calibrate O2 Point 1”** when measurements are stabilized. The sensor will perform the calibration.
- Click **“Start O2 Calibration Point 2”** to start calibration for Point 2.
- Expose the probe to the 20.95% calibration medium and click **“Calibrate O2 Point 2”** when measurements are stabilized. The sensor will perform the calibration.
- When the calibration is completed the software will indicate **“Calibration Finished”** in the orange box.

### 2 Point + Temperature

- Expose the probe to the 20.95% calibration medium for the temperature and click **“Calibrate Temperature”** when measurements are stabilized. The sensor will perform the temperature calibration.
- Click **“Start O2 Calibration Point 1”** to start the calibration for Point 1.
- Expose the probe to the 0% calibration medium and click **“Calibrate O2 Point 1”** when measurements are stabilized. The sensor will perform the calibration.
- Click **“Start O2 Calibration Point 2”** to start calibration for Point 2.
- Expose the probe to the 20.95% calibration medium and click **“Calibrate O2 Point 2”** when measurements are stabilized. The sensor will perform the calibration.
- When the calibration is completed the software will indicate **“Calibration Finished”** in the orange box

### Abort Calibration

Click **“Abort”** to stop the calibration process.

This action will reset all the changes that have been made so far in the calibration.

### Calibration Errors

There are two types of calibration errors.

**“Out of range”** Error, this means that the reference values were far off the measured values.

**“Could not get a stable measurement”** Error, this means that the sensor was not able to acquire a stable measurement after trying 5 times. This can happen when there is an issue with the probe, or the battery is almost empty.

## Errors

**“Device not responding”** Error; this happens when the software cannot find the sensor. Try reconnecting the device or restarting the software.

**“No measurement received”** Error; this happens when the sensor returns the wrong data or the sensor did not respond to a measurement command. When this error persists try reconnecting the device or restarting the software to refresh the connection.

Whenever there was a fatal error in the software there will be an error screen which shows what happened. The details of this error will be written in an error log file at the default file location. If this error persists or prevents you from operating the software in the way you want please send this file to [info@sendot.nl](mailto:info@sendot.nl) .

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