PUR 800 Operational manual

Introduction

This manual gives a step by step procedure on how to set up and use the PUR800 with its PC application software. For any additional information on the functions or workings of the PUR800 PC application please use the help file.

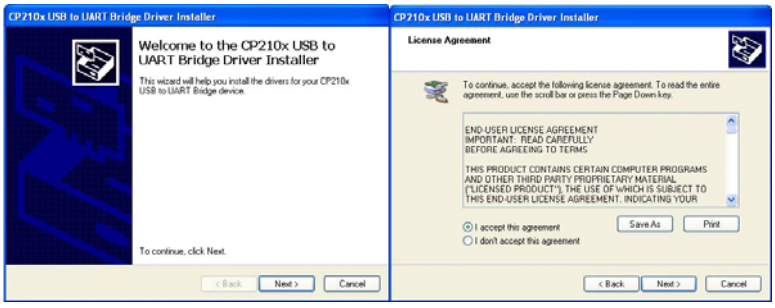
Requirements for PUR800

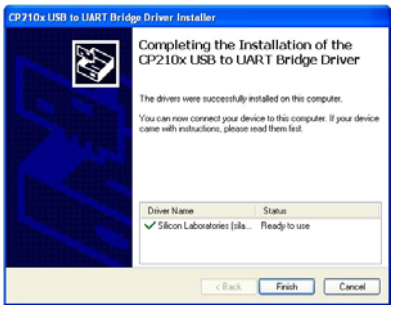
- 1x PUR 800 Recorder
- 1x PUR 800 Product temperature probe
- 1x PUR 800 Calibration cable
- 1x PUR 800 USB/Charger cable
- 1x Temperature controlled bath
- 1 x Precision Temperature meter
- PUR 800 Application software

Setting up the Recorder for first use

Installing USB Driver

Please verify the operating system that is being using: x86 bit or x64 bit.
Run the corresponding executable file ‘CP210xVCPInstaller_x64.exe’ or ‘CP210xVCPInstaller_x86.exe’.
Follow the step by step instructions of the “CP210x USB to UART Bridge Driver Installer”





- **Connect the USB/Charger to the recorder**

The new PUR 800 connectors “clip” into place, NO turning is required. Push the cable connector into the female connector on the PUR 800 recorder with the red dots facing each other (one on the Recorder and one on the USB/Charger cable).

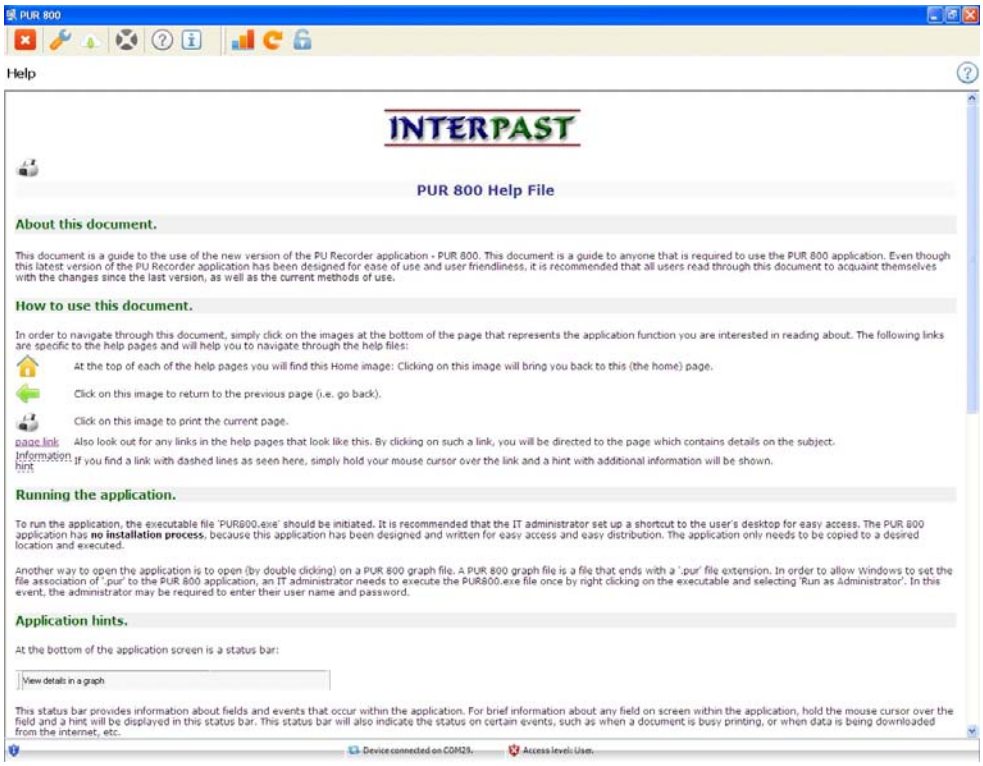
If connectors are connected properly the Recorder needs to be switched ON by placing the magnet (provided) at the designated position (marked on enclosure as ACTIVATE). The left LED will be green and the right LED will be off indicating Recorder is in idle mode. Recorder has a self power down after ± 2 minutes if no communication was detected.

Running PUR 800 application

To run the application, the executable file 'PUR800.exe' should be initiated. It is recommended that the IT administrator set up a shortcut to the user's desktop for easy access. The PUR 800 application has **no installation process**, because this application has been designed and written for easy access and easy distribution. The application only needs to be copied to a desired location and executed.

When the application starts running the following will be briefly displayed:

During this process the application will search for the recorder by connecting to every COM port until it gets a reply.
When the application is done loading it should start up in the Help Tab. If the application does not start with the Help Tab open, it could be opened by clicking on the Help Tab (Question mark):



The help file does not give a step by step explanation on when to use what part of the application it only

gives a detailed explanation what each function does.

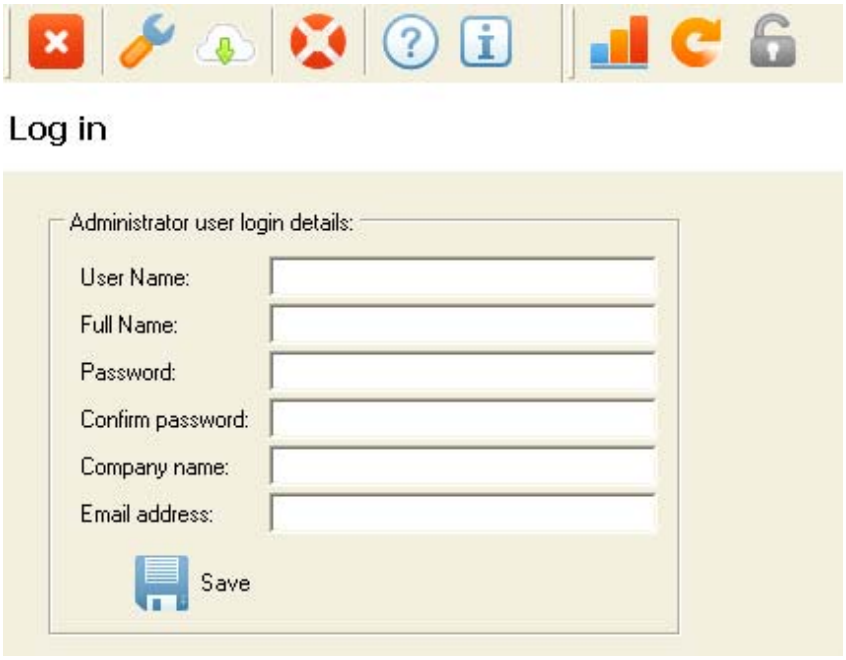
If the recorder is on and connected properly, it will be indicated at the bottom of the screen. The application will indicate which COM port is being used.

Also indicated on the bottom bar; what tab is currently open and what Access level the user currently has.

Setting up Administrator Access

Click the Log in/Log out Tab on the top left of the screen (Lock).

The following will be displayed (**Please fill in all the areas!**):



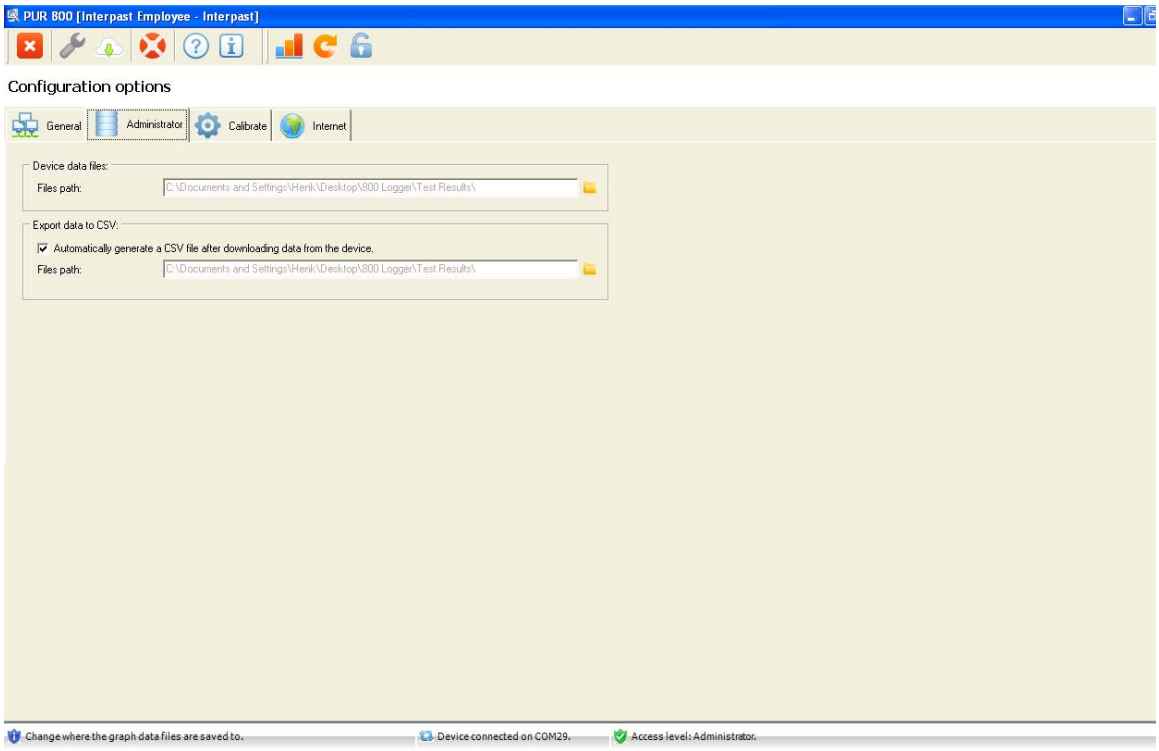
If one or more is not filled in an error message will be displayed. Click save when done, the user will automatically be logged in. The Access level will also change on the bottom of the screen.

For certain functions administrator level access is needed in order to use them.

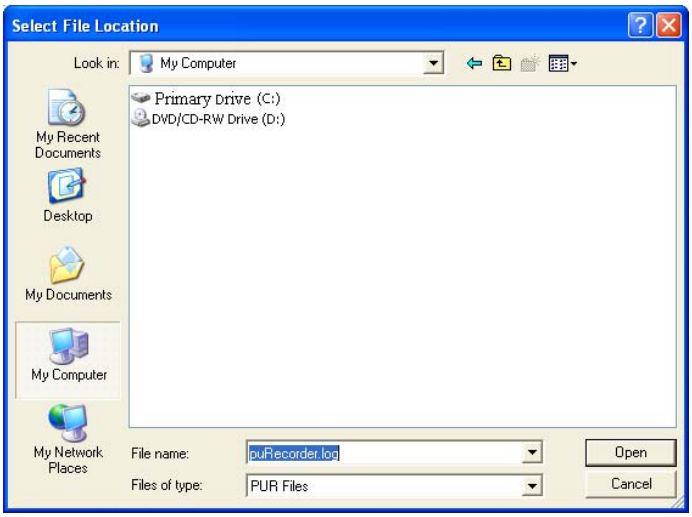
Setting up File Destinations

In order to set the file destinations administrator access is required. Click on the Configuration Options Tab on the top left (Wrench).

After jumping to the Configuration options menu click on the Administrator Tab, the following should be displayed:



The default path will be the same as the location of the application's executable file. To change the file destination click on the envelope , a browse dialog will open. When destination is set click "*Open*".



Calibrating Sensors

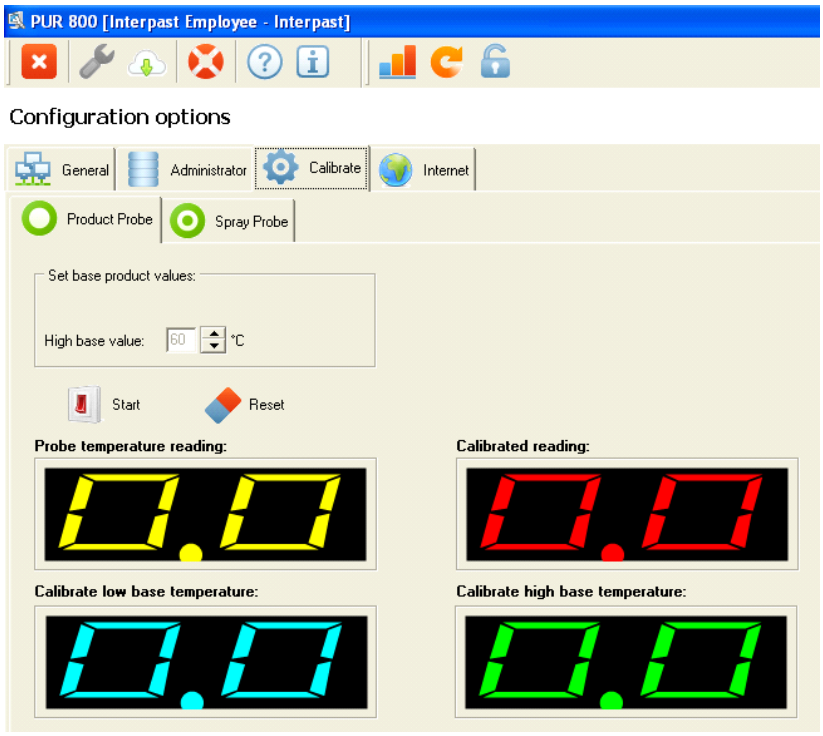
The calibration cable is needed to do the calibration.

- Connect the calibration cable to the Recorder and the USB/Charger cable.
- Connect the product probe to the calibration cable.
- Place the Recorder with product probe into Temperature controlled bath (bath should be ON).
- Temperature controlled bath should be set for 60°C.
- Place Precision Temperature sensor against the probe to be calibrated first.

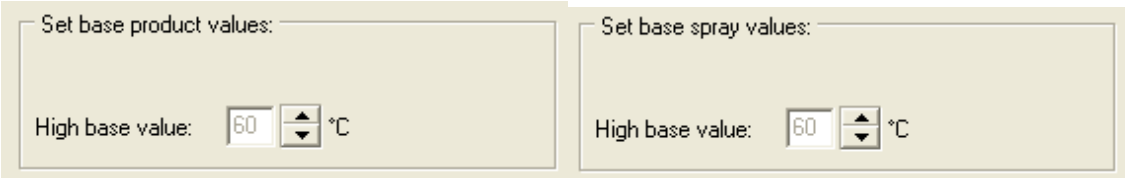
In order to use the calibration function administrator access is required. Click on the Configuration Options Tab on the top left (Wrench).

After jumping to the Configuration Options menu click on the Calibrate Tab, the following should be displayed:

The Help Tab will explain every aspect of the Calibration Tab in detail.

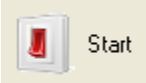


The two different probes can be selected for calibration by clicking on the appropriate Tab. Both look and work the same way except that the one says product and the other spray.

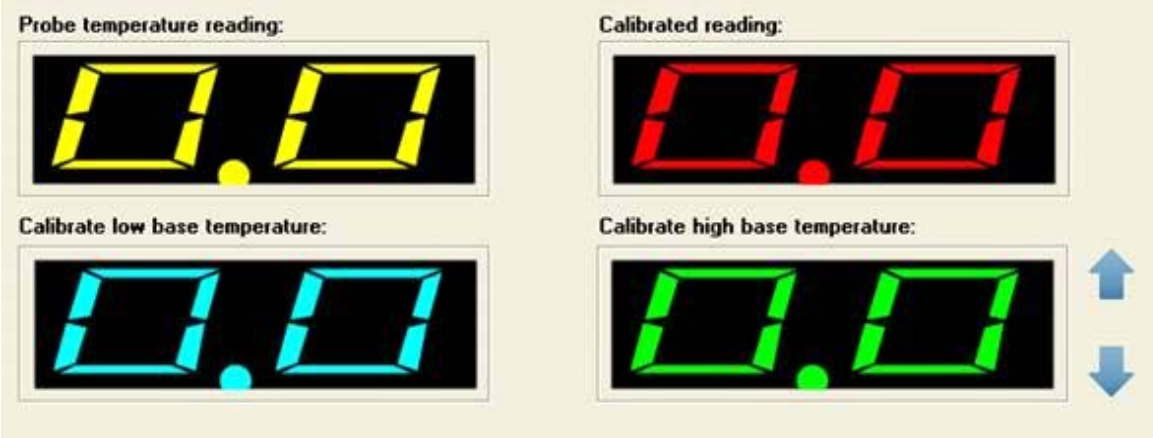


The default High base value should be 60 °C if not adjust it to 60°C. Calibration will be enabled between 5°C under, and 5°C over this temperature value. For example if the high base value is set at 60°C then calibration is possible from 55°C to 65°C.

Press the Start button to begin real time temperature reading.



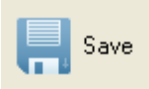
A new temperature reading will be done every 2 seconds. When the Probe Temperature reading falls within high base value ± 5°C a set of arrows will become available to calibrate the temperature reading.



Use the arrows to adjust the Probe temperature reading so that the Calibrated reading matches that of the Precision Temperature Meter.

Once calibration is done press Stop, this will stop the real time temperature reading.

To save the calibrate values press Save.

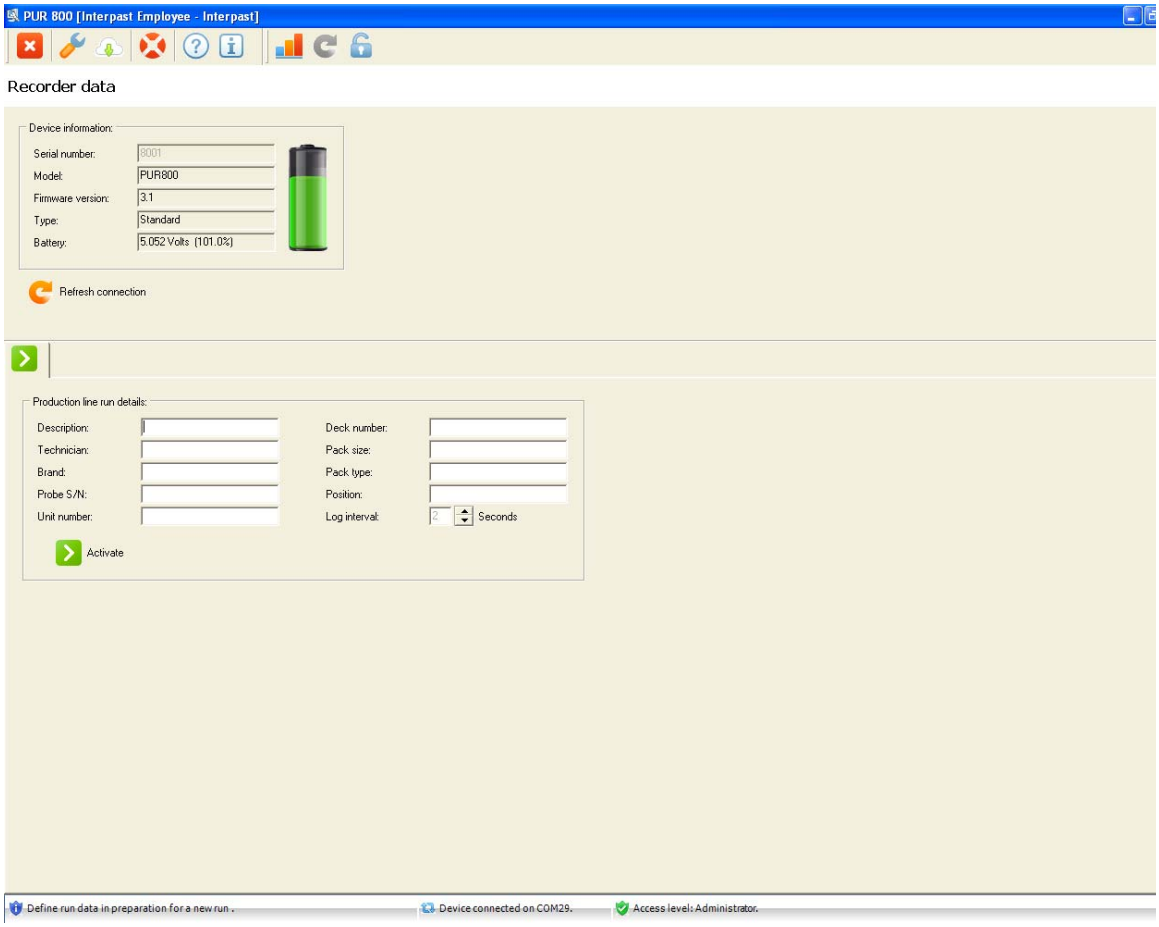


NB! Calibration should be done every time a new probe is connected to the Recorder or if the calibration was reset.

Setting up for Recording

Go to the Recorder data screen by clicking on the Connection Tab (Circular Arrow).

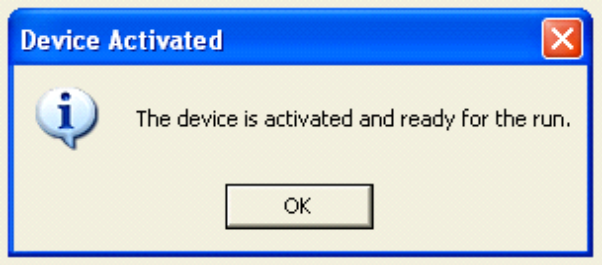
The following page will be displayed:



Please fill in all the open areas under Production line run details. Make sure that the Unit number is the same as the Serial number at the top of the screen! There is currently only one Log interval between temperature recordings and that is every 5 seconds. If one of the fields is left open an error message will be displayed.
Press Activate when ready.

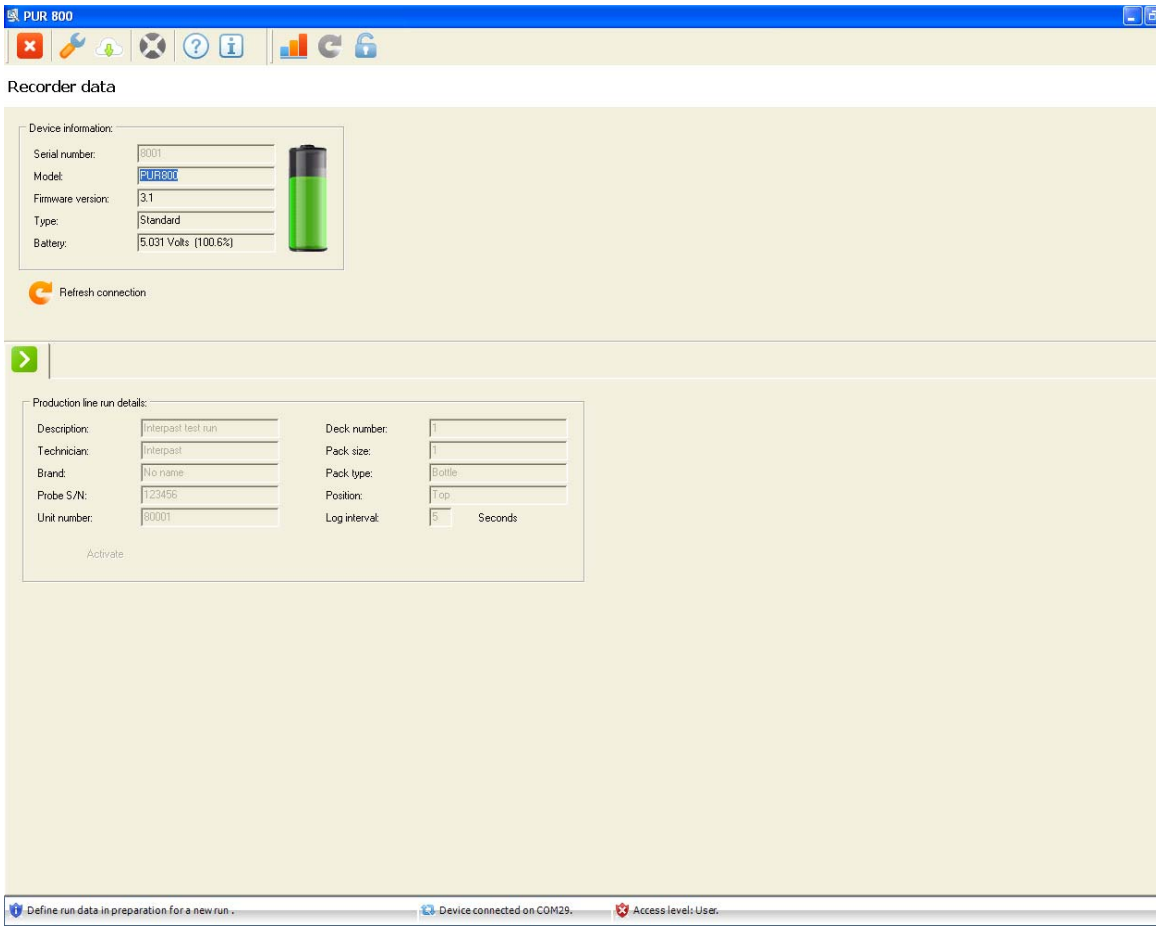
A message will pop us telling that the recorder will be put into recording mode and won't respond to any instructions from the application until the recording is completed. Press "*Yes*" to continue.

Another message will be displayed telling the user that the recorder is activated and ready to record. Press Ok.



As soon as "*OK*" is pressed the LED's will flicker Red/Green until the magnet activates the recording.

The application screen will look as follow:



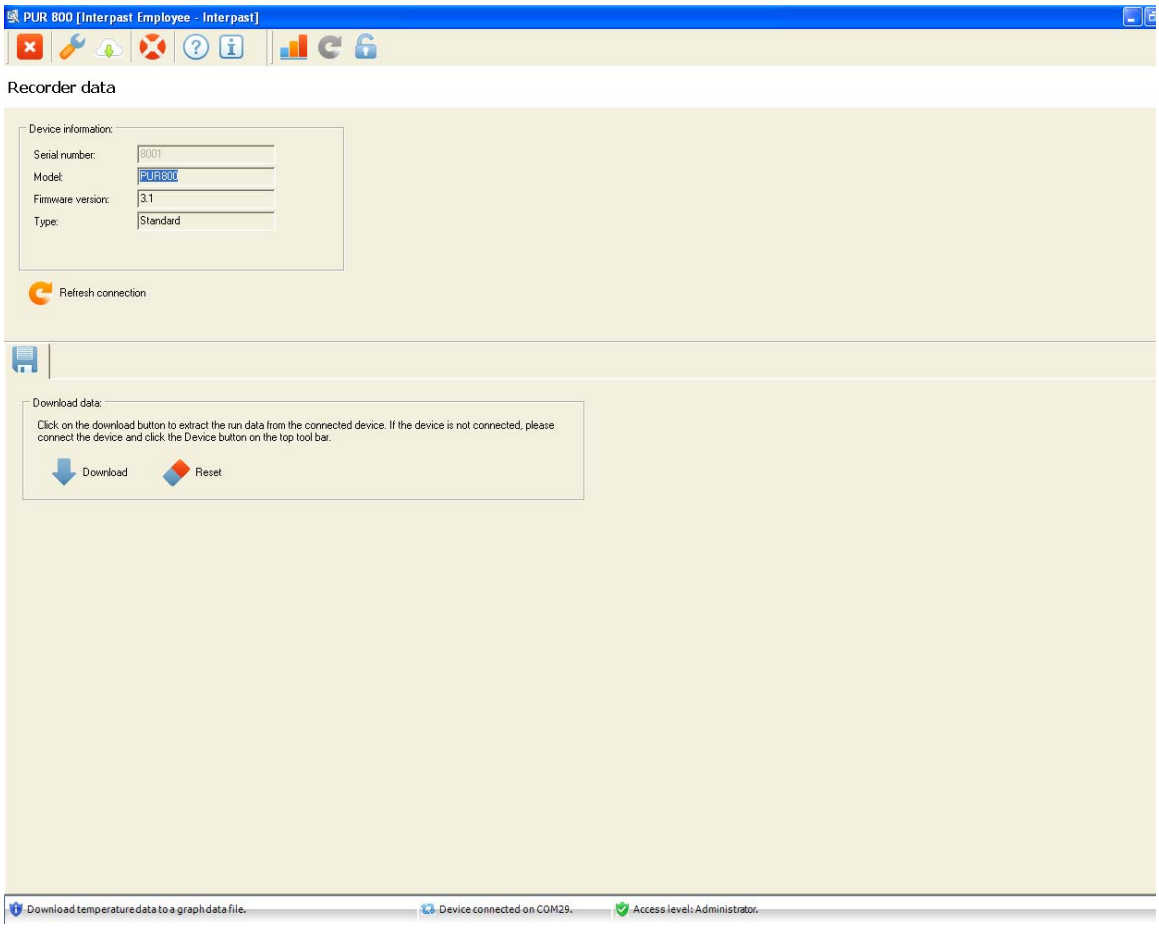
Downloading Recorded Data

- Once the recorder is out of the pasteuriser the run can be stopped by placing the magnet on the

designated area.

- Connect Recorder to USB/Charger cable.
- Run PUR800 computer application, if it isn't already open.
- Switch Recorder on if it powered down.

Once the Recorder is on, connected to the computer and the application is running click on Refresh connection to communicate with the Recorder. The following will be displayed:

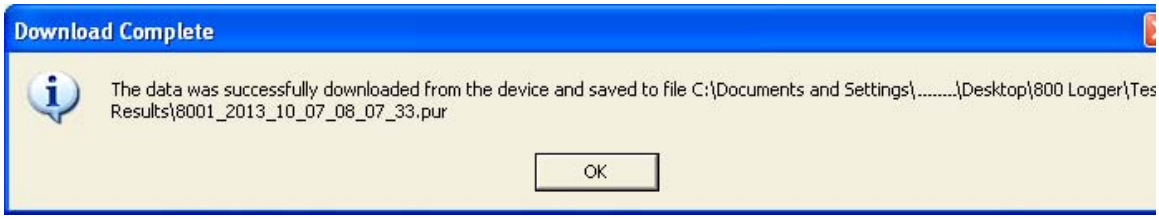


Click on Download to get the Recorded data from the recorder

if the recording was faulty click on Reset to discard the data.

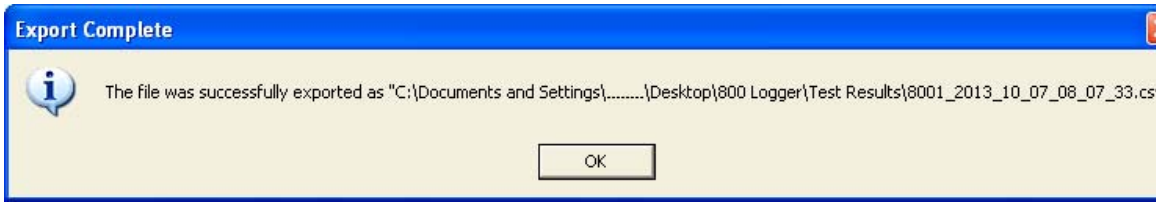
Once clicked on "*Download*" the data download will begin from Recorder to PC application. Download time should be a few seconds (Dependent on the amount of data). When download is complete the

following message will be displayed:



The file destination specified here is the one that was previously set and the file name (8001_2013_10_07_08_07_33) indicates the Recorders Serial number, date and time at which the recording started. The .pur file contains data used to generate a graph. Click "*OK*" to continue.

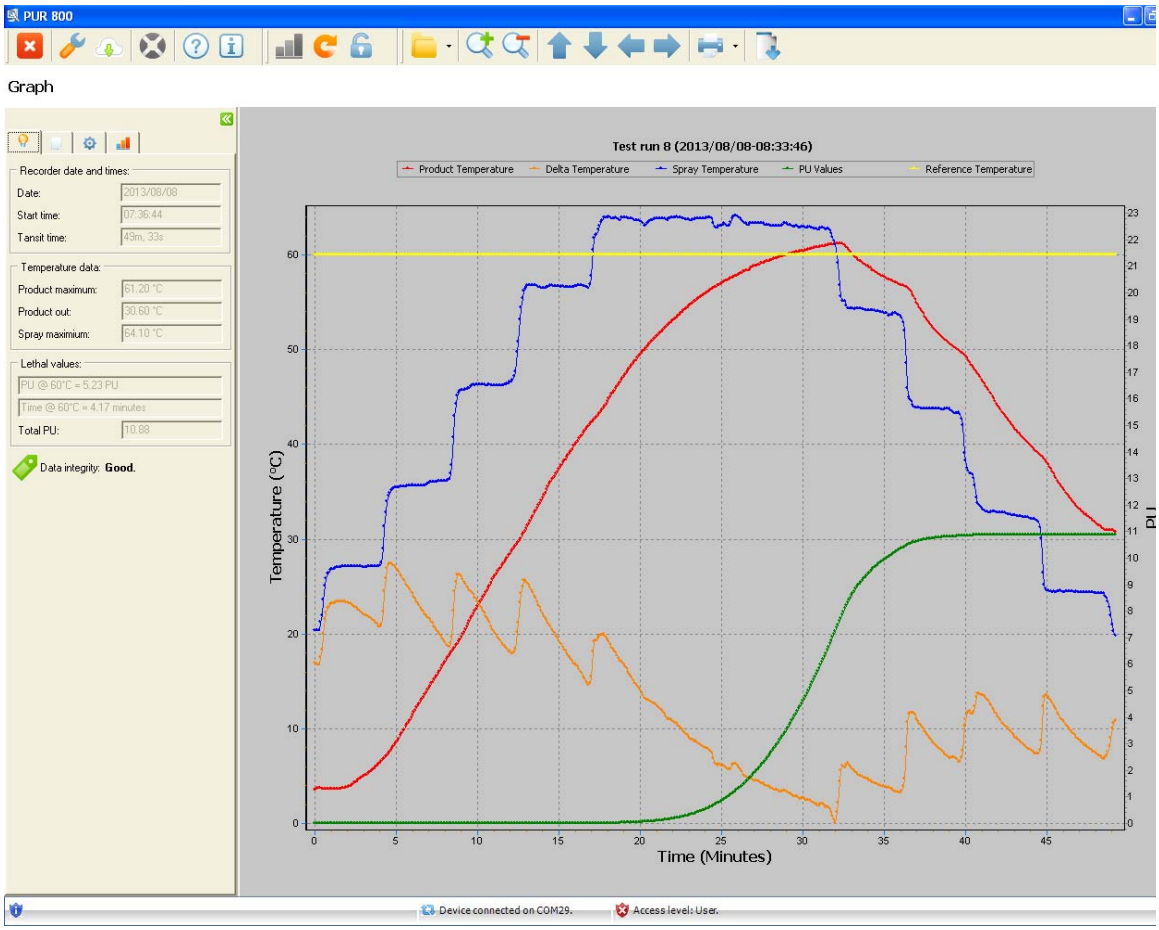
The following message will be displayed when OK is pressed

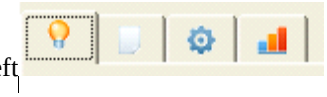


The file destination is the same as previously specified. The file name also specifies Serial number, date and time at which the recording started. The .csv file contains the raw temperature readings taken by the recorder. Click "*OK*".

Using the Graph

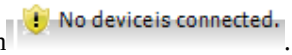
Click on the Graph Tab on the top left . The following screen will be displayed if the recording and download was done correctly (NB. This graph is a SAMPLE):



The Tabs on the left  each contains different information, please read help file for detailed descriptions on each. The current tab contains the most important information namely Recorder date and time, Temperature data and Lethal values.

For more Recordings; repeat Setting up for Recording, Downloading Recorded Data and Using the Graph.

Trouble shooting

When running the PUR800 application and the following is displayed at the bottom of the screen it means that there is a connection problem 

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Solutions:

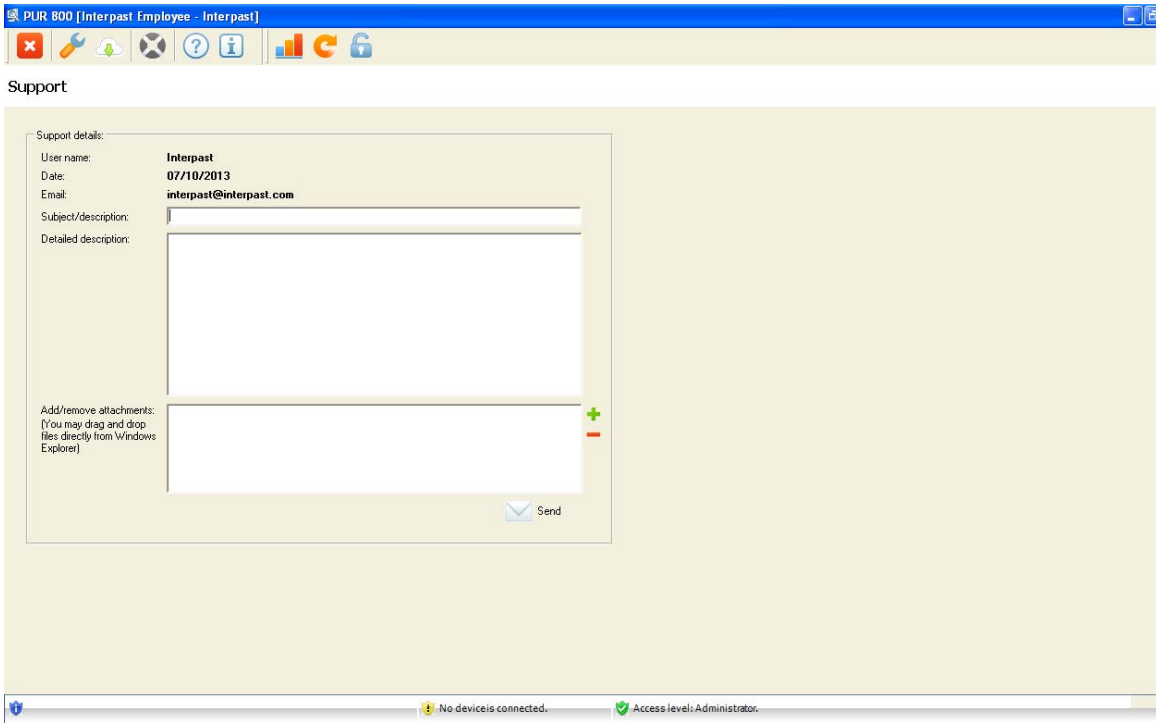
- Make sure that the Recorder isn't busy recording.

- Reconnect the USB/Charger connector to the recorder.
- Put USB into another USB Port on the PC.
- Make sure the cables aren't damaged.
- Click Refresh connection in the Connection Tab (Circular Arrow).

If this "No Device Connected" message persists after doing all the above steps please contact Interpast.

Please make sure that the access level is administrator before trying to use the Support function.

Interpast can be contacted using the Support Tab . The following screen will be displayed:



The User name, the Date and Email address will already be added to the support email, only the Subject, a detailed description of the problem and if an attachment is needed. Once satisfied with the information

click “*Send*”.

The Support function can be used with any problems.