



 **DATALOGGER**

Logiciel d'exploitation des portables Génie Climatique

Operating system for HVAC portable instruments

Table of contents

1	Introduction.....	4
2	Software installation.....	4
2.1	Protection.....	4
2.2	Minimum recommended configuration.....	4
2.3	Installation.....	4
3	Uninstall the application.....	4
4	Software presentation.....	5
4.1	Meanings and functions of the home menu buttons.....	5
4.2	Meanings and functions of menu bar buttons.....	6
4.3	Meanings and functions of menu bar buttons.....	7
5	Connect the device.....	8
6	Transfer files.....	10
7	Manage customers and operators.....	14
7.1	Create a customer or an operator.....	14
7.2	Remove a customer or an operator.....	16
7.3	Modify a customer or an operator.....	16
8	Manage the devices park.....	17
8.1	Modify the information of devices, probes and modules.....	17
8.2	Remove a device, a probe or a module registered in the park.....	17
9	Study the registration datasets.....	18
9.1	Open a dataset.....	18
9.2	Description of the dataset display.....	19
9.2.1	Customize the display.....	19
9.2.2	Global view.....	20
9.2.3	Legend and statistics.....	20
9.3	Take action on the graphic.....	21
9.4	Display the tables.....	22
10	Export the datasets.....	24
10.1	Export the graphic.....	24
10.2	Export the table.....	24
10.3	Export the report.....	24
11	Manage the calculated functions.....	25
11.1	Add a calculated function.....	25
11.1.1	Add a customised function : the operations.....	25
11.1.2	Add a customised function : the mathematical functions.....	25
11.1.3	Add a predefined function.....	27
11.2	Modify a calculated function.....	27
11.3	Delete a calculated function.....	28
12	Datalogger parameters.....	29
12.1	General parameters.....	29
12.2	Data.....	29
12.3	Printing options.....	30
12.4	Graphic.....	30
13	Set time on the device.....	32
14	Clear memory.....	32
15	Languages management.....	33
16	Updating the device.....	34
16.1	Make a manual updating.....	34
16.2	Make an automatic updating.....	34

1 Introduction

Available as an option with class 210 and 310 portable instruments and with the flow meter DBM610, the Datalogger enables visual indication and exploitation of measurement datasets.

Its main functions :

- Visual indication and results of measurement datasets.
- Zoom function for a more precise study of a period.
- Shaping and editing measurement reports.
- Controlling appliances.
- Recovery of data and file creation in text format.

2 Software installation

2.1 Protection

A CD-ROM copy for saving is possible and also its installation on several workstations.

2.2 Minimum recommended configuration

- Windows XP SP3, Windows Vista, Windows 7 or Windows 8
- USB port for communication with the device
- CD player for software installation
- Internet connection to update devices
- RAM 1024 Mo

2.3 Installation

You need necessary rights. *If this is not the case, contact the administrator.*

- Insert the CD-ROM . The installation program automatically starts.

*Note : if the installation program does not start automatically, go in My Computer or Windows explorer and double-click on "**setupDatalogger.exe**".*

- Follow instructions on the screen.

Note : *depending on existing software, or not, on the computer (especially NET Framework), waiting times can be non negligible – Please wait.*

*The software is now installed, the **Datalogger** icon is on the desktop.*



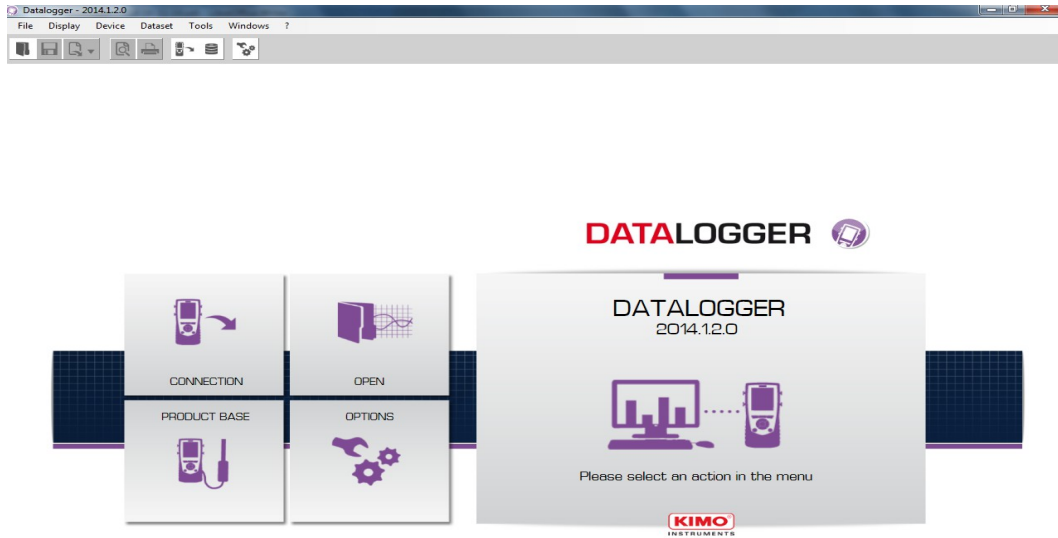
3 Uninstall the application

To uninstall the Datalogger, you need suitable rights and use the Windows tool provided for that purpose :

- Go to the menu "**Start**", "**Parameters**", "**Control panel**", then "**Add/Remove programs**".
- In the index "**Install/Uninstall**", click on the "**Datalogger**" line and follow Windows indications.

4 Software presentation

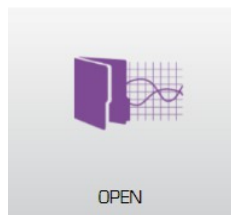
- To open the software, double-click on the Datalogger icon.
The following window opens :



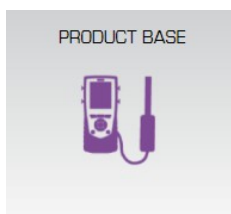
4.1 Meanings and functions of the home menu buttons



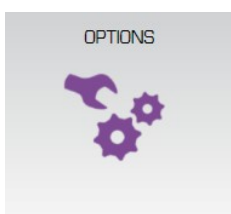
Enables the software to recognize the device connected on the computer



Opens an existing file on computer



Enables an access to the devices base registered on the computer



Enables an access to the software options

4.2 Meanings and functions of menu bar buttons

File Display Device Dataset Tools Windows ?

- **File**
 - **Open** : Open an existing file on computer
 - **Add file** : Adds a dataset file to the current dataset
 - **Save** : Saves the current dataset
 - **Save as** : Saves the current dataset in an other location
 - **Save all** : Saves all the open datasets
 - **Export** : Exports the current dataset in a picture file, CSV, TXT or PDF
 - **Recent files** : Recently opened files list
 - **Print preview** : Preview of the dataset report before print
 - **Print** : Print of the current dataset
 - **Exit** : Exit application

- **Display**
 - **Tool bar** : Show or hide the tool bar
 - **MKT** : Show or hide the MKT for temperature measurements

- **Device**
 - **Device reading** : Reads the information of the connected device
 - **Consult the product base** : management of the devices park

- **Dataset**
 - **Dataset information** : Current dataset information
 - **Calculated functions** : Add, remove or modify a calculated function


- **Tools**
 - **Language** : Choice of the software language
 - **Management of customers and operators database** : Enables an access to the registered customers and operators
 - **Display data files** : Opens the data folder in Windows Explorer
 - **Preferences** : Opens the software options


- **Windows**
 - **Reorganize** : Reorganize the opened datasets


- **?**
 - **About** : Software information


4.3 Meanings and functions of menu bar buttons




 Opens an existing file on the computer


 Saves the current dataset

 Exports the current dataset in a picture file, CSV, TXT or PDF

 Preview of the dataset report before print

 Print the current dataset

 Reading the information of the connected device

 Management of the devices park

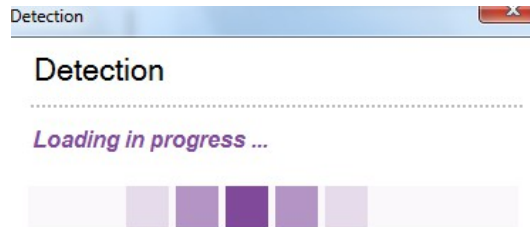
 Software options

5 Connect the device

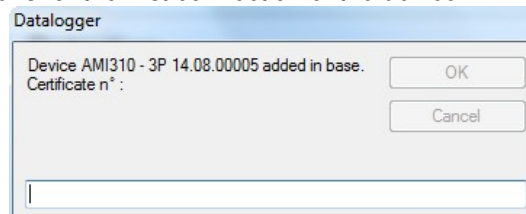
- Connect the device in USB on the computer.
- Switch on the device.
- Activate the Datalogger software by clicking on the icon
- Click on the **"Connection"** button.



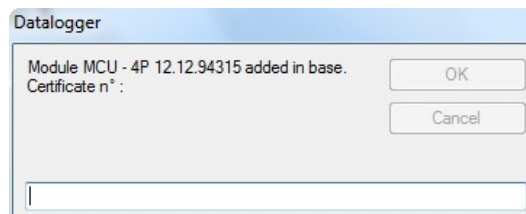
The following window opens :



Then the following window opens for the first connection of the device :



- Please enter the certificate number of the device. Click on "OK".
If a module or a probe is connected, please enter its certificate number.



Click on "OK".

The device is added in the database.

The information of the device opens.



AMI310


<i>Serial n°</i>	3P 14.08.00005	<i>Adjustment date</i>	---
<i>Software version</i>	1.10	<i>Certificate n°</i>	58
<i>Number of dataset :</i>	70	<i>Certificate validity</i>	12 month(s)

Return

Manage my certificates

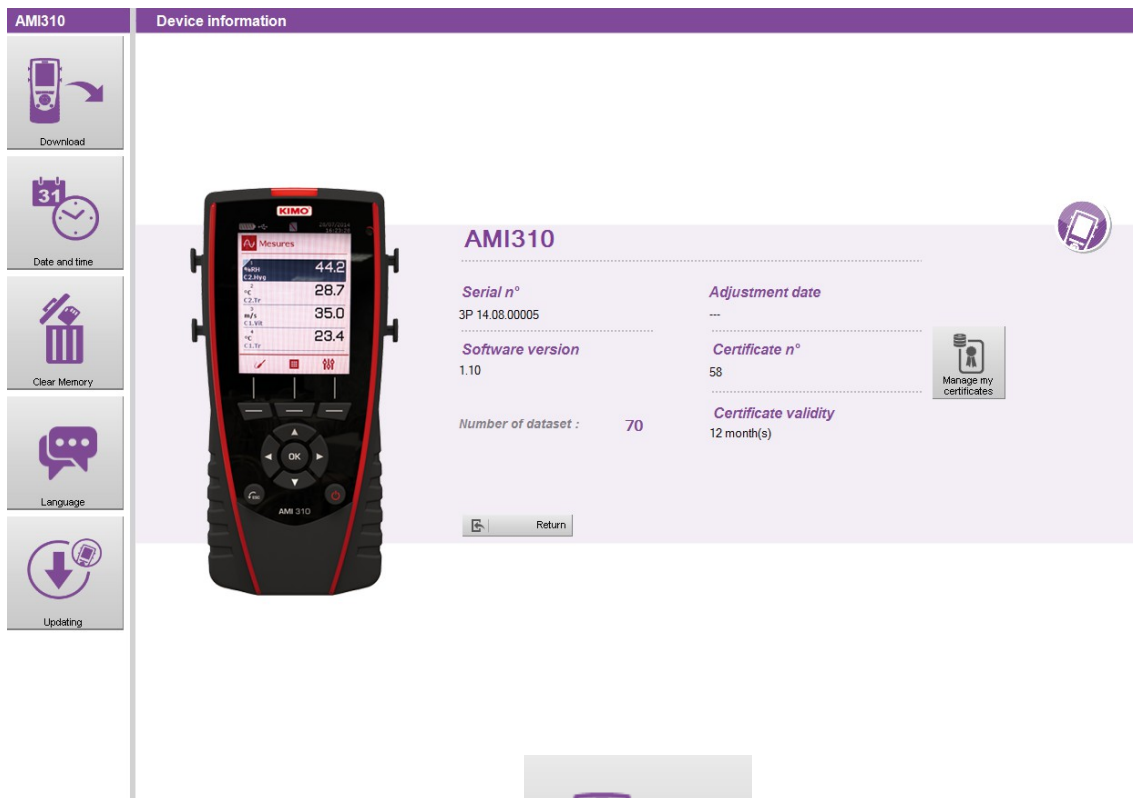
This window gives the following information :

- Serial number of the device
- Software version of the device
- Date of the last adjustment
- Certificate number

 When a device is already registered in the device database, the window "**Device information**" directly opens after detection of the device.

6 Transfer files

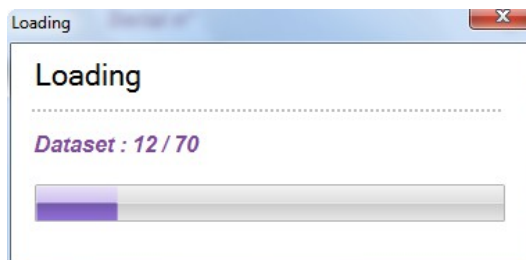
Transfer files enables to copy the measuring dataset saved in the device on the computer.
From the window "Device information" :



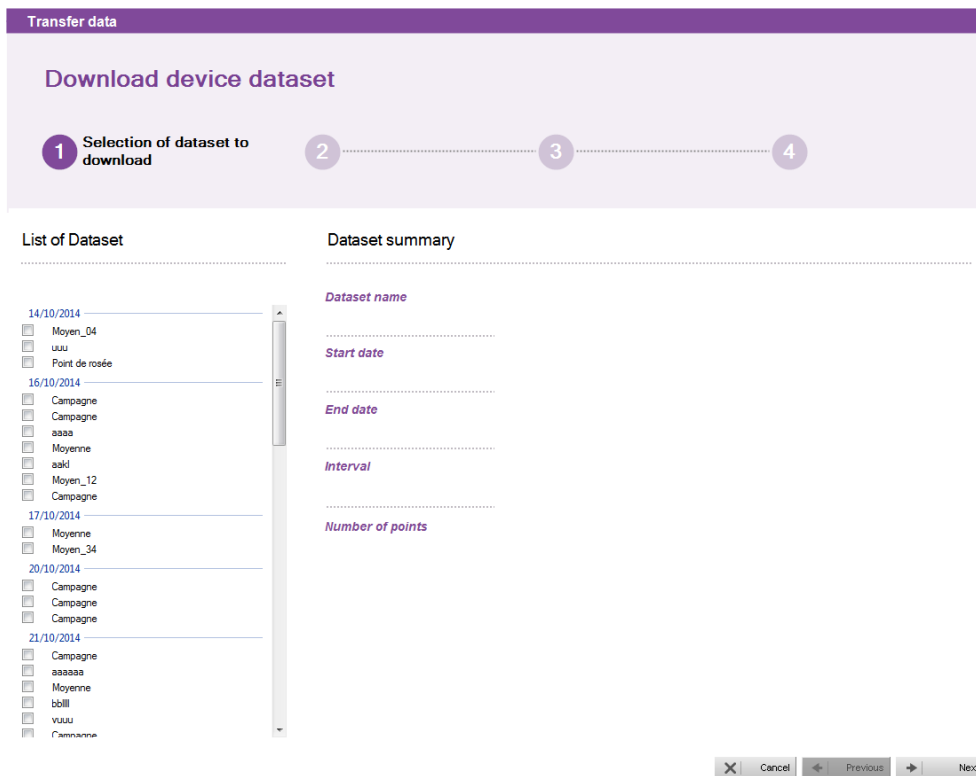
➤ Click on the button "Download".



The following window opens with its progression bar.



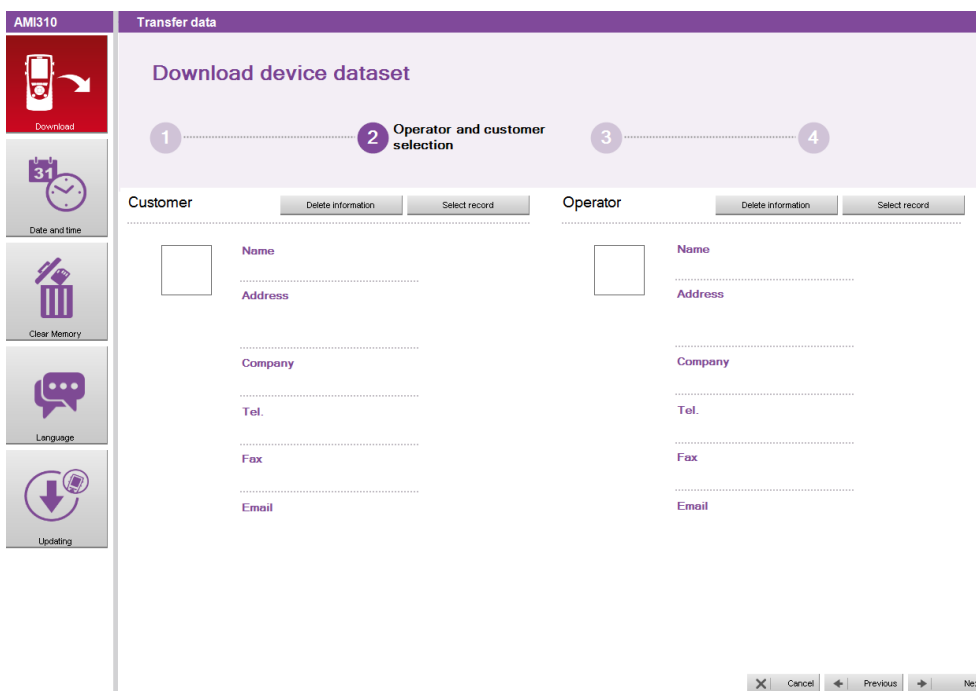
When the loading is finished, the following window opens :



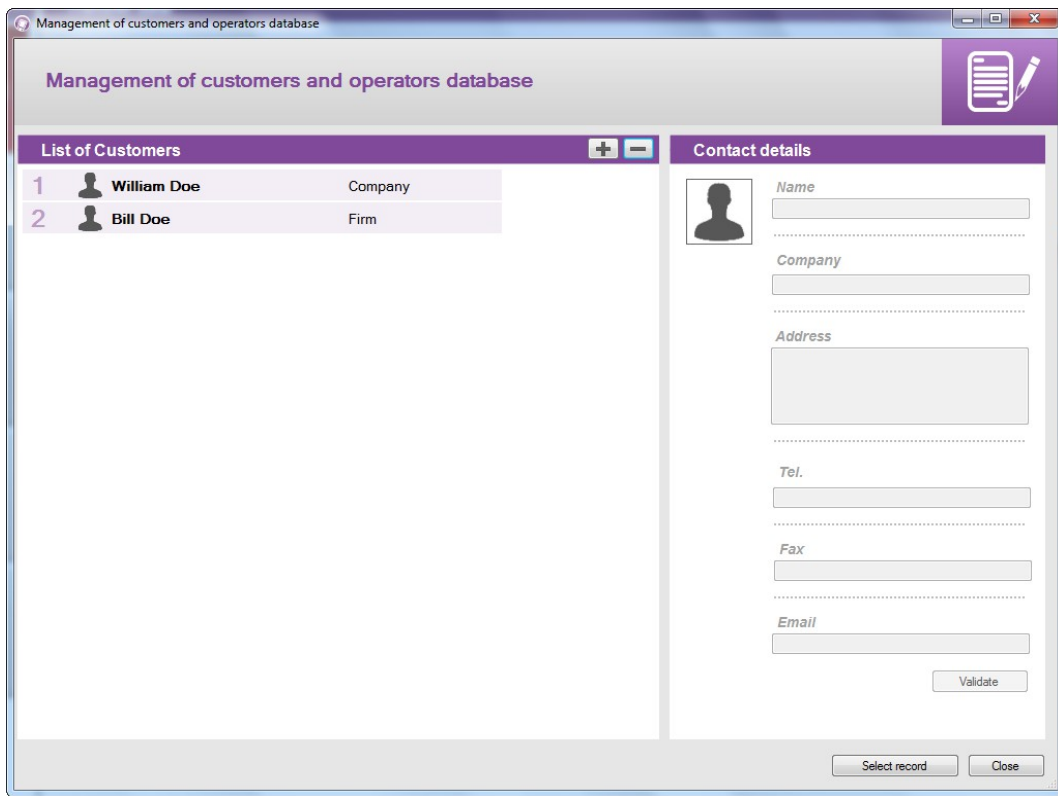
This window presents on the left the dataset list existing on the device.

- Tick the boxes of the dataset to discharge on the computer
- Click on the button **"Next"** below right of the window.

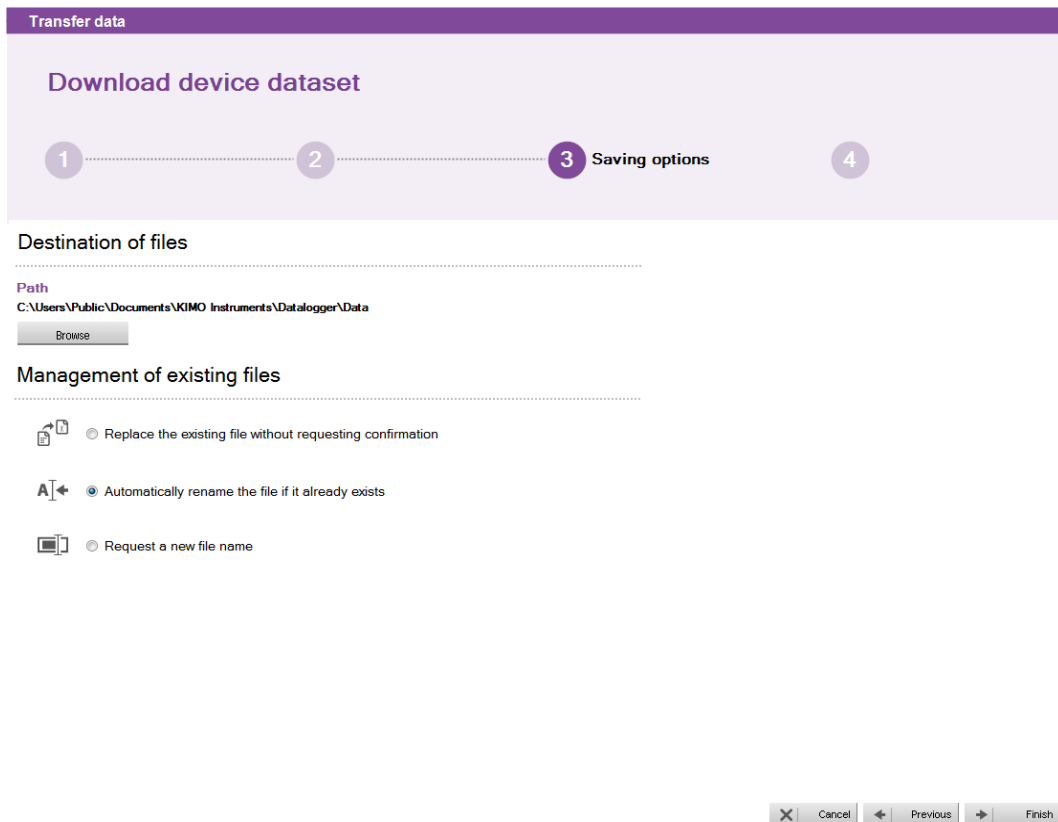
The following window opens which enables to choose the operator who carried out the dataset and the customer for whom the dataset has been carried out.



- Click on the button **"Select record"** in the part **"Customer"**.
The following window opens :

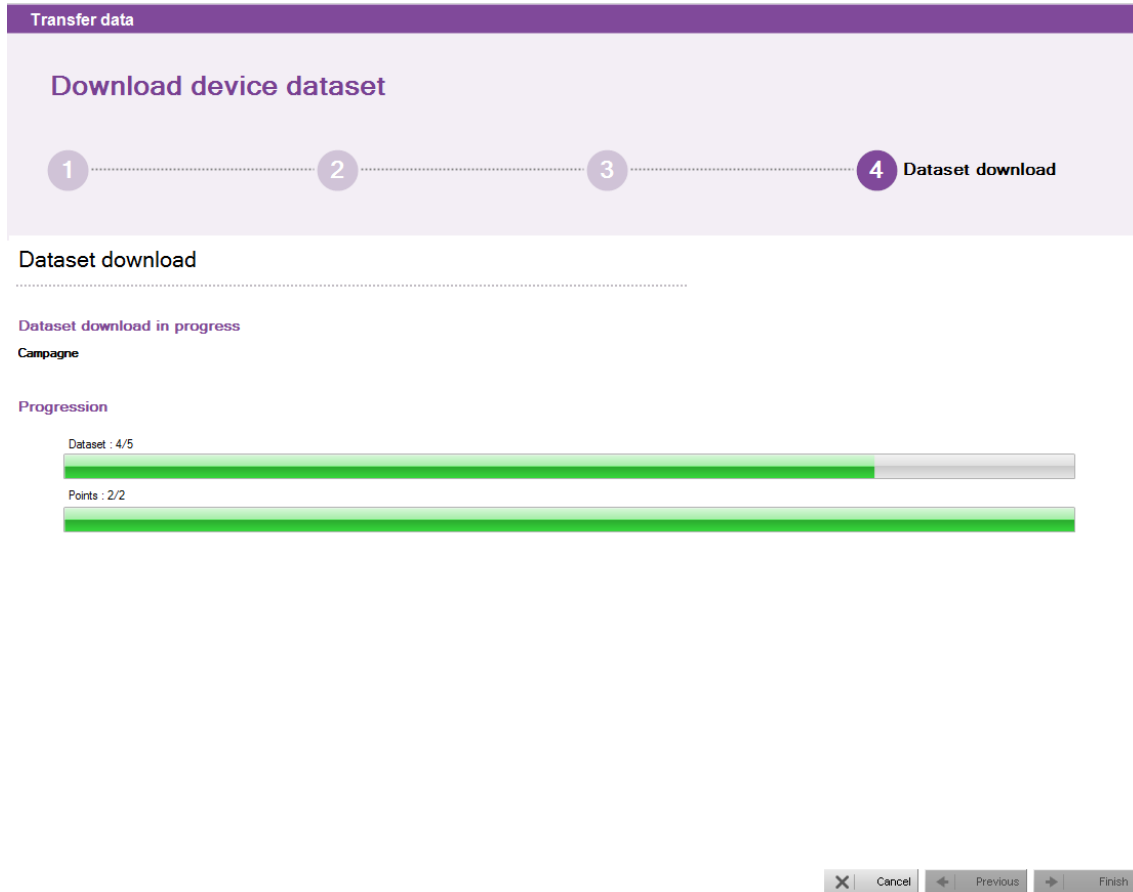


- Select a customer in the list or click on the button "+" to create one (see on page 14 for creation of customers and operators).
 - Select a customer and click on **"Select record"** below right of the window.
 - Do the same operation to select an operator.
 - Click on the button **"Next"** of the window **"Data transfer"**.
- The following window opens :*



This window enables :

- to modify the location where the measuring dataset will be saved in the computer :
 - Click on the button "**Browse**" then select the required folder.
- To select the action to realise when a folder already exists :
 - Click on the required bullet.
- Click on the button "**Finish**".
The following window opens :



At the end of the unloading datasets, a window opens asking to display or not the datasets unloaded.

- Click on YES to display the datasets or on NO, then the software comes back on the homepage.

7 Manage customers and operators


It is possible to create a base with the customers to whom the datasets are destined for and the operators who carried out the datasets.

7.1 Create a customer or an operator

- Click on **"Tools"** in the menu bar then on **"Management of customers and operators database"**.
The following window opens :

List of Customers	
1	William Doe Company
2	Bill Doe Firm

Contact details form fields: Name, Company, Address, Tel., Fax, Email. Buttons: Validate, Close.

- Click on the button **"Customers"** or **"Operators"** on the left of the window according to the type of contact to create.
- Click on the button .
A customer or an operator appears in the list.

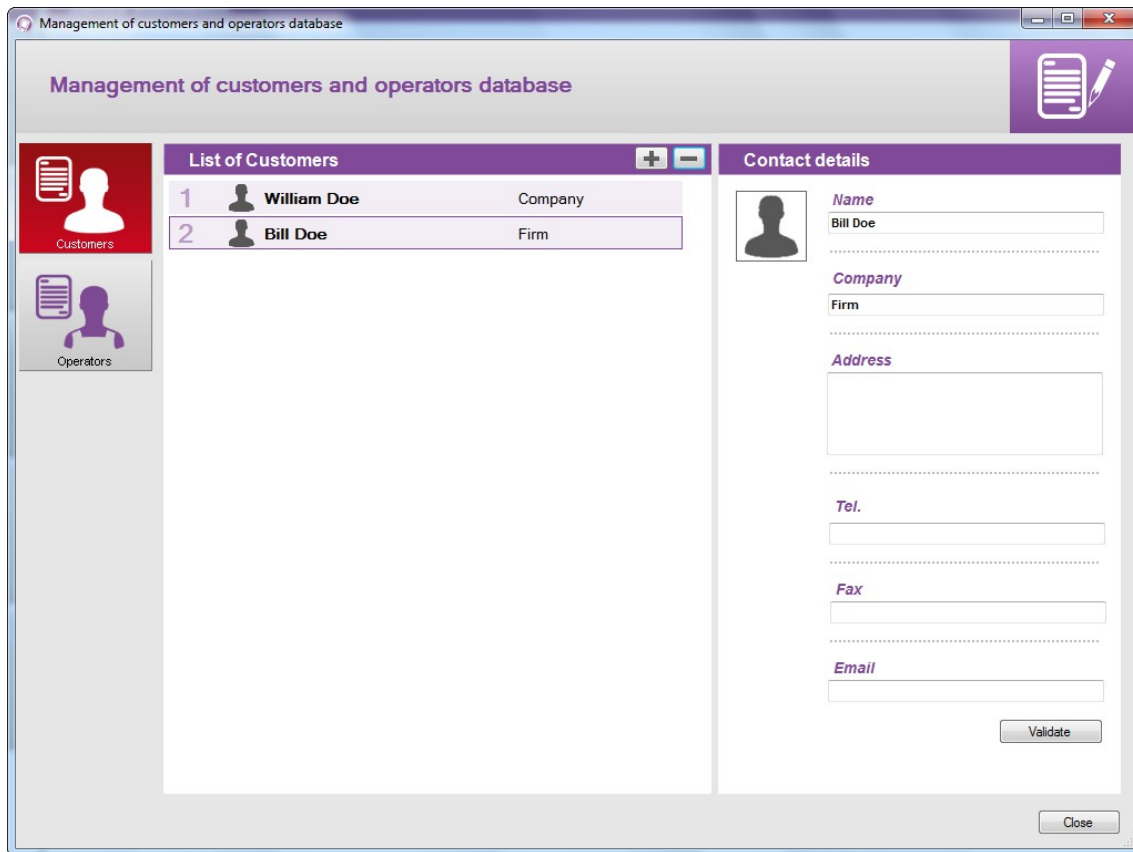
List of Customers	
1	William Doe Company
2	Bill Doe Firm
3	


Contact details form fields: Name, Company, Address, Tel., Fax, Email. Buttons: Validate, Close.

- Click on the line of this customer or operator.
Details of contacts on the left of the window become accessible and can be completed.
- Complete the details of the contact : name, company, address, phone number, fax, e-mail.
- Click on the button "**Validate**".
The name of the customer or operator and his company appear in the list.
- Click on the button "**Close**" below right to exit and come back on the homepage.

7.2 Remove a customer or an operator

- Click on the menu "Tools" then on "Management of customers and operators database".
The following window opens :



- Click on the customer or operator to remove.
- Click on the button .
The customer or operator disappears of the list.
- Click on the button "Close" to close the window.

7.3 Modify a customer or an operator

From the window "Management of the customers and operators database" :

- Click on the customer or operator to modify.
- Modify the required information in the part "Contact details".
- Click on the button "Validate" to save the modifications.
- Click on the button "Close" to close the window.

8 Manage the devices park

The management of the devices park enables to manage the certificates of all the devices, probes and modules which have been connected to the "Datalogger".

- Click on the menu "Device" then on "Consult the product base".

The following window opens :

Product base

Management of the devices park

No certificate is valid.

List of devices

#	Name	Serial n°	Type of operation	Certificate n°	Date	Certificate validity	Warning time	Additional Information
❗ 1	AMI310	3P 14.08.00005	No certificate	58	01/01/2000	12 month(s)	0 day(s)	
❗ 2	TM210	2P 15.01.00385	No certificate	86	01/01/2000	12 month(s)	0 day(s)	
❗ 3	HQ210	2P 14.10.00052	No certificate	23	01/01/2000	12 month(s)	0 day(s)	
❗ 4	VT210	2P 15.01.00425	No certificate	47	01/01/2000	12 month(s)	0 day(s)	
❗ 5	MP210	2P 15.01.00349	No certificate	18	01/01/2000	12 month(s)	0 day(s)	

List of probes and modules

#	Name	Serial n°	Type of operation	Certificate n°	Date	Certificate validity	Warning time	Additional Information
✅ 1	MCU	4P 12.12.94315	No certificate	58	01/01/2000	12 month(s)	0 day(s)	

Close

An icon at the start of each line enables to determine the state of the certificate :


- ✅ The certificate is valid
- ❗ The certificate is in the warning period
- ❌ The certificate is no more valid.

8.1 Modify the information of devices, probes and modules

From the window "Management of devices park", it is possible to modify the following information :

- Certificate number
- Certificate validity
- Warning delay
- Click on the information to modify.
- Enter the required information.
- Click on the button "Close".

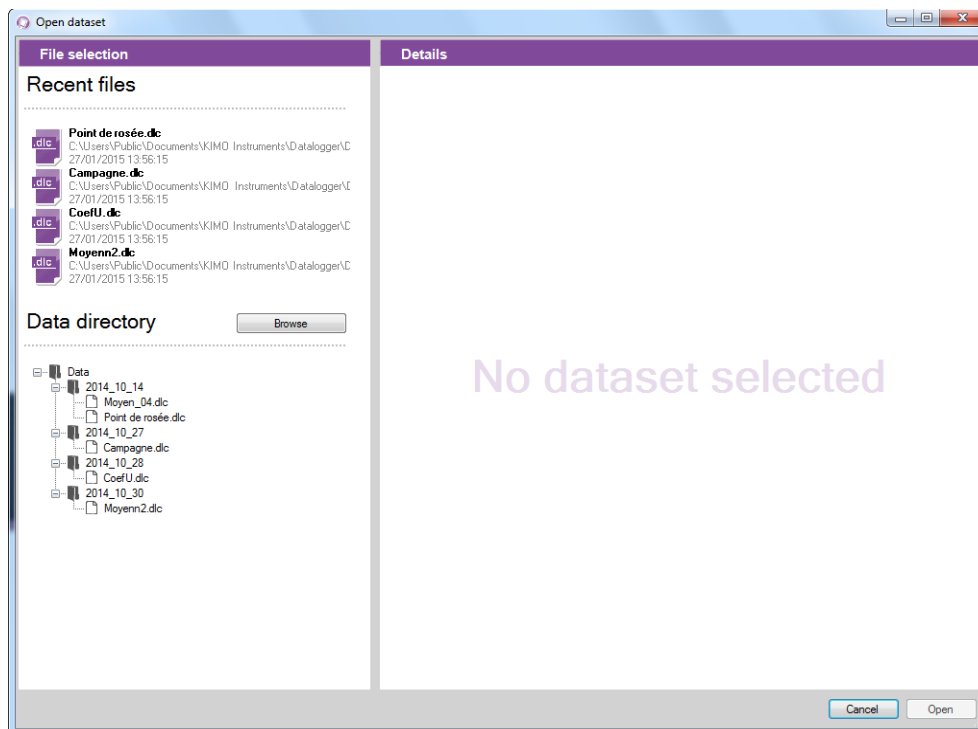
8.2 Remove a device, a probe or a module registered in the park

- Click on the line of the element to remove.
- Click on the button  The element is removed from the park.

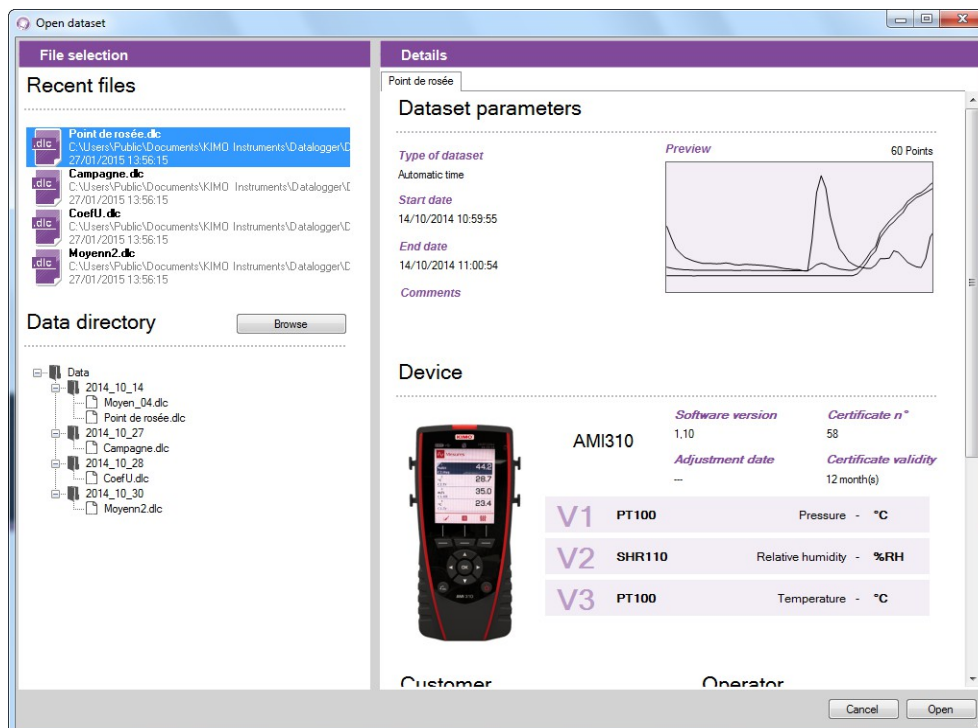
9 Study the registration datasets

9.1 Open a dataset

- Click on the button **"Open"** on the homepage.
The following window opens :

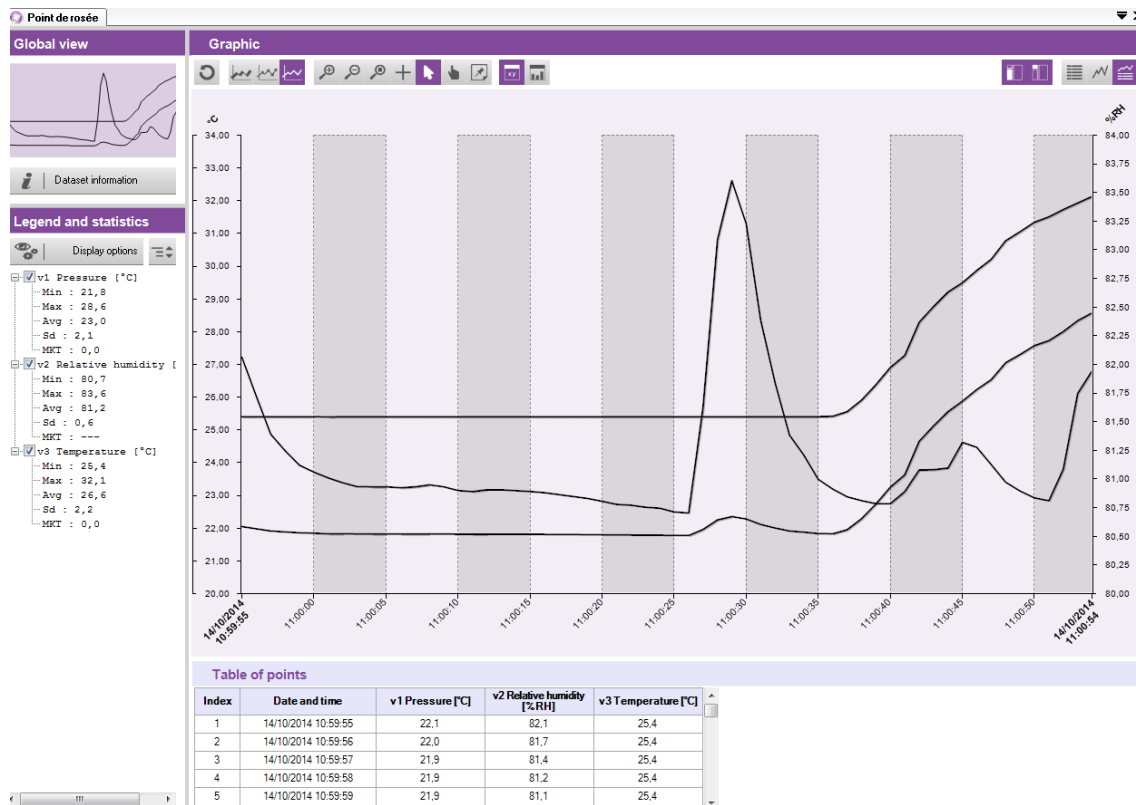


- Click on a dataset on the left of the window.
Details of the selected dataset display on the right of the window : date, type of dataset,



- Click on the button **"Open"** below right of the window.

The dataset opens :



9.2 Description of the dataset display


This window is divided in four parts :


- the global view
- the legend and statistics
- the graphic
- the tables


9.2.1 Customize the display


It is possible to display or not the different parts. For this purpose click on the following buttons :

 Display or not the legend and statistics

 Display or not the global view

 Display or not the single table

 Display or not the single curves

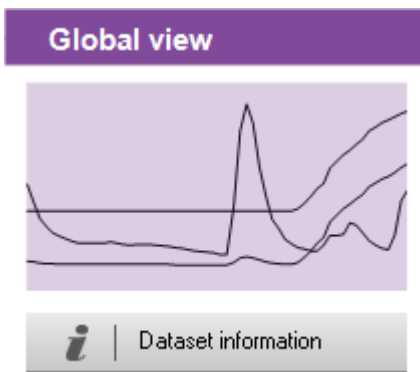
 Display or not curves and table



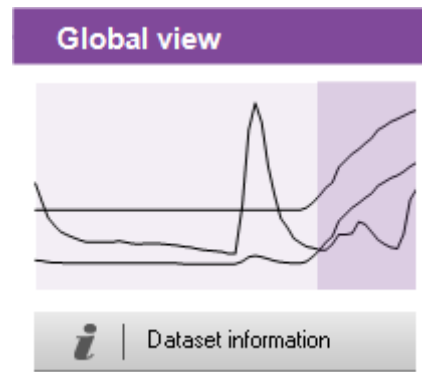
At least one of the three last buttons must be active.

9.2.2 Global view

The global view enables to have permanently a view on the whole curve of the measuring dataset. In the case of a zoom on a precise area of the dataset, the zoomed zone will be valorised on the global view :



Global view without zoom



Global view with zoom

The button "Dataset information" enables to open the details window of the dataset :

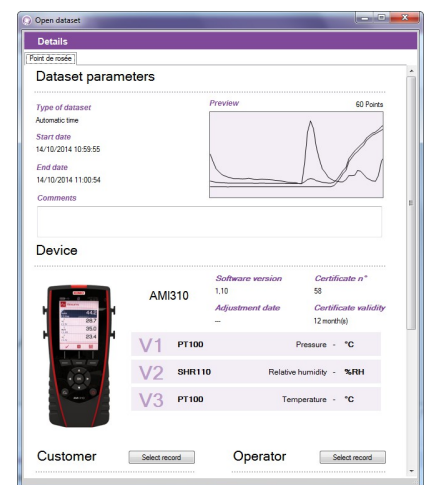
- Click on the button.

The window above opens. It lists the following elements :

- Type of dataset
- Date of start and end
- Optional comment
- Type of device used
- Customer and operator



It is possible to select a customer and/or an operator by clicking on the button "Select record".



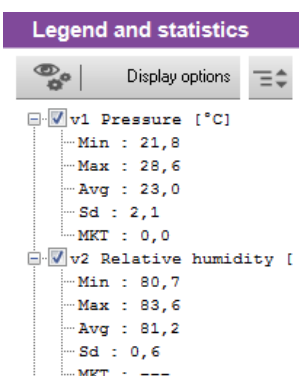
9.2.3 Legend and statistics

The part "Legend and statistics" displays the statistics related to the measuring dataset. The statistics of a way are displayed in the corresponding colour of the curve displayed in the part "Graphic".

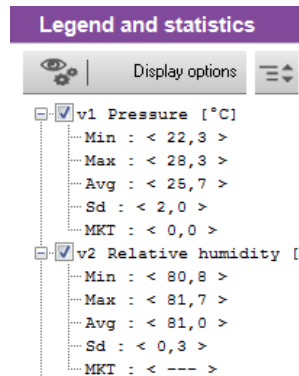
It is possible to display :

- the statistics on the whole graphic
- the statistics on the visible zone (zoomed period)
- the statistics on the whole graphic and on the visible zone

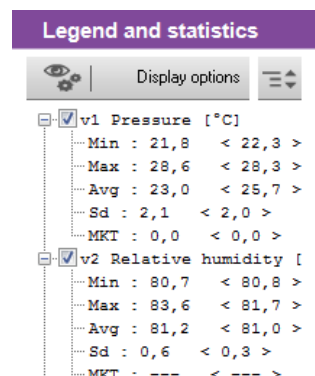
Ex :



Statistics on the whole dataset



Statistics on the zoomed period



Statistics on the whole dataset and on the zoomed period














The statistics on the zoomed period are specified between "< >". Ex : < 25.7 >.







9.3 Take action on the graphic


It is possible to carry out several actions on the graphic with its specific tool bar :




- **Details of the different buttons :**

	Reinitialize the graphic		Zoom out		Add a note
	Display the curves in 3D		Dynamic zoom		
	Display or mask the points		Browse cursor		
	Display or mask the curve		Selection pointer		
	Zoom in		Hand of displacement		

- **Reinitialize the graphic :** 
 - Click on this button to return to the global view of the graphic
- **Make a zoom in** 
 - Click on the button
 - Click and keep clicking at the begin of the zoom period required.
 - Slide the mouse until the end of the zoom period required.
 - Release the mouse button.
The graphic displays exclusively the zoomed period.
- **Make a zoom out** 
 - Click on the button
 - Click on the graphic.
A zoom out is realized.
- **Make a dynamic zoom** 
 - Click on the button
 - Click and keep clicking in the graphic.
 - Slide the mouse towards the right to make a zoom in or slide the mouse towards the left to make a zoom out.
- **Browse the curves** 
 - Click on the button
 - Click and keep clicking on the graphic.
 - Slide the browse cursor with the mouse towards the right or towards the left.
The cursor browses the curves and frames the corresponding values to the browse cursor at the level of the scales in ordinate axis. The table of measuring points displays also these values.
- **Browse the whole graphic** 
 - Click on the button
 - Click on the graphic and slide the mouse towards the left or the right to browse the whole graphic.

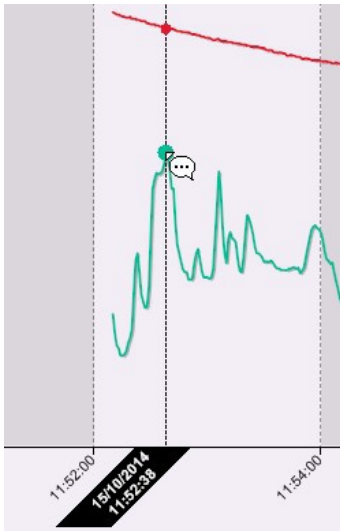
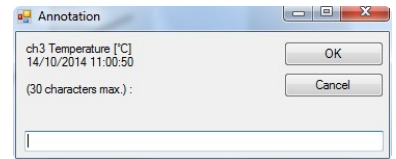
- **Selection pointer**  to come back to the selection pointer.

- **Add a note on a specific point :** 
 - Click on this button and go on the point of the curve where place the note.
 - Make a click with the mouse.

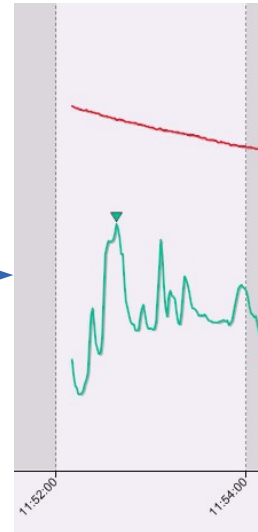
The window above opens :

- Enter the note.
- Click on OK.

A triangle coloured as the curve appears at the level of the point indicating that a note is existing.




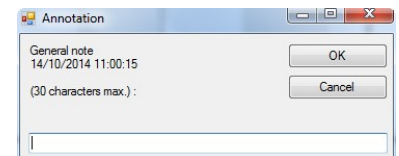
Positioning of the note



Green triangle indicating the presence of the note

- **Add a general note (in relation with all the curves) :**

- Click on the button 
 - The cursor browses the curve(s).*
 - Make a click with the mouse.
- The window above opens :*
- Enter the note.
 - Click on OK.



*A white triangle appears on the top of the part "**Graphic**" indicating that a note is existing.*



To read a previously added note, run the mouse over the triangle : the date, the time and the note appear.

- **Remove a note :**
 - Click on the triangle of the note.

The window of the note appears.

 - Delete the text of the note and click on "**OK**".

The note is removed.

9.4 Display the tables

Two types of table can be displayed :

- the table of the whole measuring points of the datasets
- the table of the dataset statistics

The display of the single tables or of the tables and the curve must be active.



Enables to display only the graphic



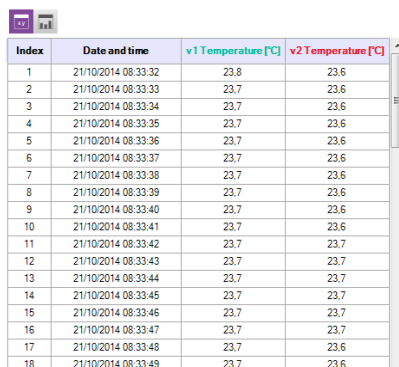
Enables to display only the table



Enables to display table and graphic


- Click on the button  Then on the button 

The table of the dataset points is displayed :



Index	Date and time	v1 Temperature [°C]	v2 Temperature [°C]
1	21/10/2014 08:33:32	23,8	23,6
2	21/10/2014 08:33:33	23,7	23,6
3	21/10/2014 08:33:34	23,7	23,6
4	21/10/2014 08:33:35	23,7	23,6
5	21/10/2014 08:33:36	23,7	23,6
6	21/10/2014 08:33:37	23,7	23,6
7	21/10/2014 08:33:38	23,7	23,6
8	21/10/2014 08:33:39	23,7	23,6
9	21/10/2014 08:33:40	23,7	23,6
10	21/10/2014 08:33:41	23,7	23,6
11	21/10/2014 08:33:42	23,7	23,7
12	21/10/2014 08:33:43	23,7	23,7
13	21/10/2014 08:33:44	23,7	23,7
14	21/10/2014 08:33:45	23,7	23,7
15	21/10/2014 08:33:46	23,7	23,7
16	21/10/2014 08:33:47	23,7	23,7
17	21/10/2014 08:33:48	23,7	23,6
18	21/10/2014 08:33:49	23,7	23,6

This table displays the date and the time of the registered points for each measuring channel.

- Click on the button 

The tables of the dataset statistics is displayed :

Table of statistics				
		v1Pressure [°C]	v2Relative humidity [%RH]	v3Temperature [°C]
On the whole dataset	Minimum	21,8	80,7	25,4
	Maximum	28,6	83,6	32,1
	Average	23,0	81,2	26,6
	Standard deviation	2,1	0,6	2,2
	MKT	0,0	---	0,0
On the visible area	Minimum	21,8	80,7	25,4
	Maximum	28,3	83,6	31,9
	Average	22,9	81,2	26,5
	Standard deviation	2,1	0,6	2,2
	MKT	0,0	---	0,0

This table displays the minimum, the maximum, the average, the standard deviation and the MKT value of each way for the whole dataset and for the visible part of the graphic (in the case of zoom for example).

10 Export the datasets

It is possible to export the graphic of a dataset and its values table.

10.1 Export the graphic

The exportation of the graphic can be made in .jpeg or in pdf.



At least one dataset must be opened.

- Click on the menu **"File"** then go on **"Export"**.
- Click on **"Graphic to image file"** or **"Graphic to PDF file"**.
- Select the folder in which the file must be saved.
- Click on **"OK"**.



The exportation concerns the displayed graphic in the graphic part and table part. If a zoom is made for example, the exportation will concern the zoomed period.

10.2 Export the table

The exportation of the table can be done in .csv, type of file which can be read by a spreadsheet like Excel® or in pdf.



At least one dataset must be opened.

- Click on the menu **"File"** then go on **"Export"**.
- Click on **"Table to CSV file"** or **"Table to PDF file"**.
- Select the folder in which the file must be saved.
- Click on **"OK"**.



The exportation concerns table displayed in the graphic part and table. If a zoom is carried out for example, the exportation will concern this zoomed period.

10.3 Export the report

The report brings together the following elements of the measuring dataset :

- a first page indicating the device and the probes and modules used, the dataset parameters
- a page concerning the dataset graphic
- one or several page(s) concerning the values table.

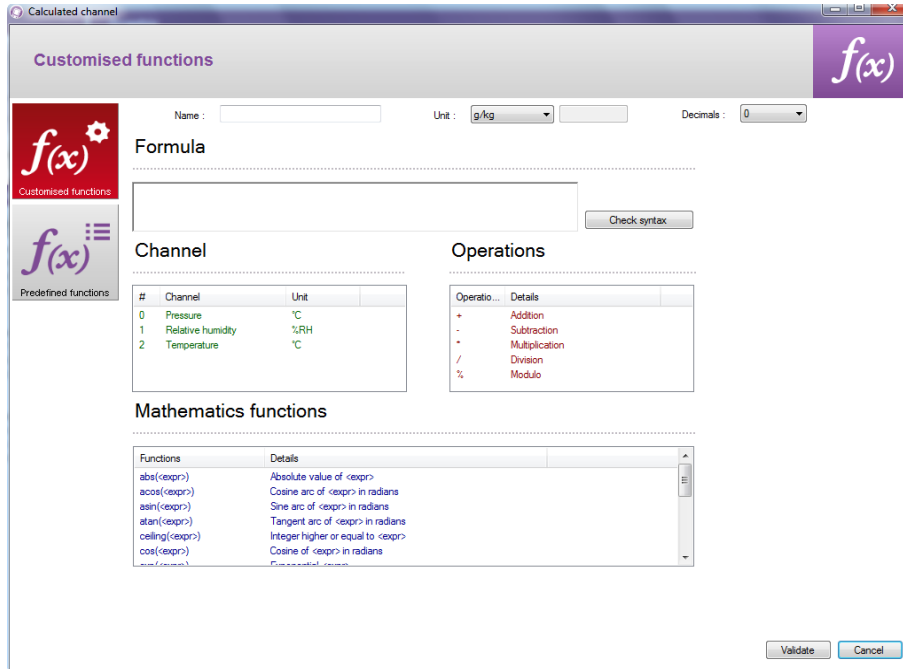
- Click on the menu **"File"** then go to **"Export"**.
- Click on **"Report to PDF file"**.
- Select the folder in which the file must be saved.
- Click on **"OK"**.

11 Manage the calculated functions

11.1 Add a calculated function

- Click on the menu "Dataset" then go on "Calculated functions".
- Click on "Add function".

The following window opens :



It is possible to add a customised function or a predefined function.

11.1.1 Add a customised function : the operations

- Click on the button "Customised functions".
- Create the formula : double click on the concerned way(s) and double click on the operator (see below the tables of operators).
Ex : #001 - #008.
- Verify the syntax.
If the syntax is correct, take the next step, or correct the formula.
- Determine the properties of the way (name, unit, decimals).
- Click on the button "Validate".

+ , - , * , /	Addition, subtraction, multiplication and division.
%	Modulo (remainder of division of integers). Example : 13 % 3 = 1

11.1.2 Add a customised function : the mathematical functions

- Create the formula : double click on the mathematical function (see on page 26 the table of mathematical functions) then double click on the concerned way(s) or insert the appropriate number.
- Verify the syntax.
If the syntax is correct, take the next step, or correct the formula.
- Determine the properties of the way (name, units, decimals).
- Click on the button "Validate".

Mathematical functions :

abs (<expr>)	Gives the absolute value of the expression. ABS(<i>Way1Name</i>) gives the value of the way <i>Way1Name</i> if it is positive, or its opposite value. ABS(V(<i>Way1Name</i>)*10.3+V(<i>Way2Name</i>)) evaluates the expression V(<i>Way1Name</i>)*10.3+V(<i>Way2Name</i>) and gives its absolute value.
acos (<expr>)	Arc cosine of the expression in radians acos (0) gives 1.5708 acos (-1) gives 3.1416
Asin (<expr>)	Arc sine of the expression in radians asin (1) gives 1.5708 asin (0) gives 3.1416
Atan (<expr>)	Tangent arc of the expression in radians atan (1) gives 0.7854 atan (0) gives 0
Ceiling (<expr>)	Integer number above or equal to the expression CEIL (2.9) gives 3 CEIL (-2.9) gives -2
Cosinus (<expr>)	Cosinus of the expression in radians cos (1.5708) gives 0 cos (3.1416) gives -1
Exp (<expr>)	Exponential of the expression
Floor (<expr>)	Integer number below or equal to the expression Floor (2.9) gives 2 Floor (-2.9) gives -3
Ln (<expr>)	Neperian logarithm of the expression (The expression must be positive)
Log10 (<expr>)	Decimal logarithm of the expression Log 100 gives 2. Log(V(<i>Way1Name</i>)*10.3+V(<i>Way2Name</i>)) evaluates the expression V(<i>Way1Name</i>)*10.3+V(<i>Way2Name</i>) and gives its decimal logarithm. The expression must be positive.
Pow (<expr> ; <pw>)	Raising to a power : <expr> raised to a power <pw>. Ex : pow (5;3) = 125
Round (<expr>)	Round the operator value to the closer integer. Round (2.4) gives 2 Round (2.6) gives 3
Sin (<expr>)	Sine of the expression in radians Sin (1.5708) gives 1 Sin (3.1416) gives 0
Sqrt (<expr>)	Square root of the expression
Tangent (<expr>)	Tangent of the expression in radians Tan (0.7854) gives 1 Tan (3.1416) gives 0

11.1.3 Add a predefined function

- Click on the button "Predefined functions".
The following window opens :

- Choose the function (see the table below for details).
- Choose the corresponding ways to the involved parameters in the calculation.
- Determine the properties of the way (name, unit and decimal).
- Click on the button "Validate".

Combination ratio	The combination ratio of an air volume appoints to the ratio of the water vapour mass it contains to the dry air mass. g/kg.
Absolute humidity	Mass of water vapour in an unitary humid air volume on a temperature and pressure given. g/Kg.
Dew-point	The air dew-point is the temperature in which, all in keeping unchanged the current barometric conditions, the air becomes saturated in water vapour. °C td.
Wet temperature	Value which puts through the dry air temperature and the relative humidity percentage contained in the air. °C tw.
Enthalpy	State function of thermodynamics which variation enables to express the amount of the heat involved during a system transformation when it receives or provides a mechanical work. Kj/Kg.
Indoor WBGT	Wet Bulb Globe Temperature (black ball). Globe temperature and in humid et au thermometer. Calculates the WBGT index indoor and outdoor.
Outdoor WBGT	
Enthalpy	Function which enables to convert a currant or voltage way in a range specified by the user. (Ex : input 0-10 V corresponding to a pressure of 0 to 500 Pa)

11.2 Modify a calculated function

- Click on the menu "Dataset" then on "Calculated functions".
- Click on "Modify function".
The window of the calculated functions opens.
- Select the function to modify then click on the button "Validate".

- Modify the function.
- Click on the button **"Validate"**.

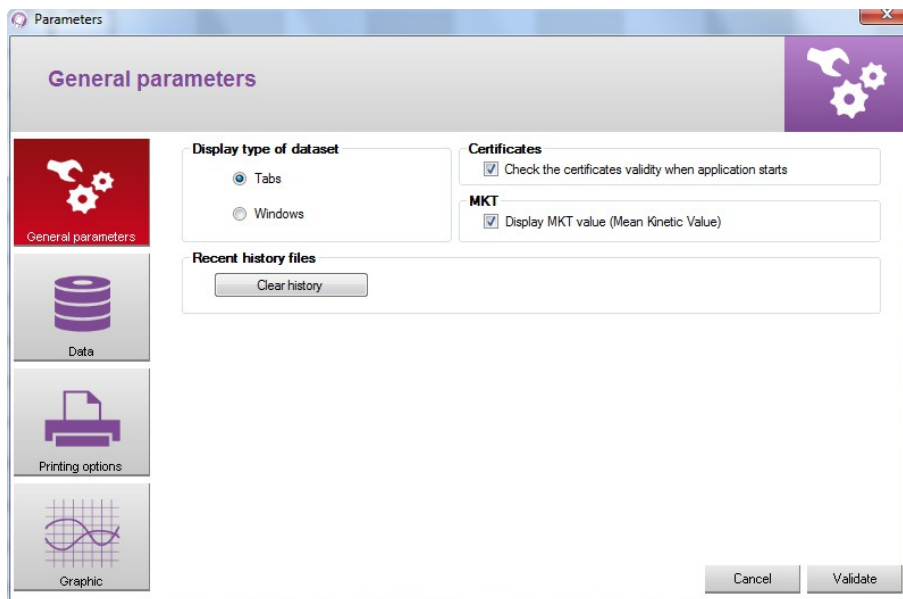
11.3 Delete a calculated function

- Click on the menu **"Dataset"** then go on **"Calculated functions"**.
- Click on **"Delete function"**.
The window of the calculated functions opens.
- Select the function to delete then click on the button **"Validate"**.

12 Datalogger parameters

12.1 General parameters

- Click on the menu "Tools" then on "Preferences" or on "Options" from the homepage of the software.
The following window opens :

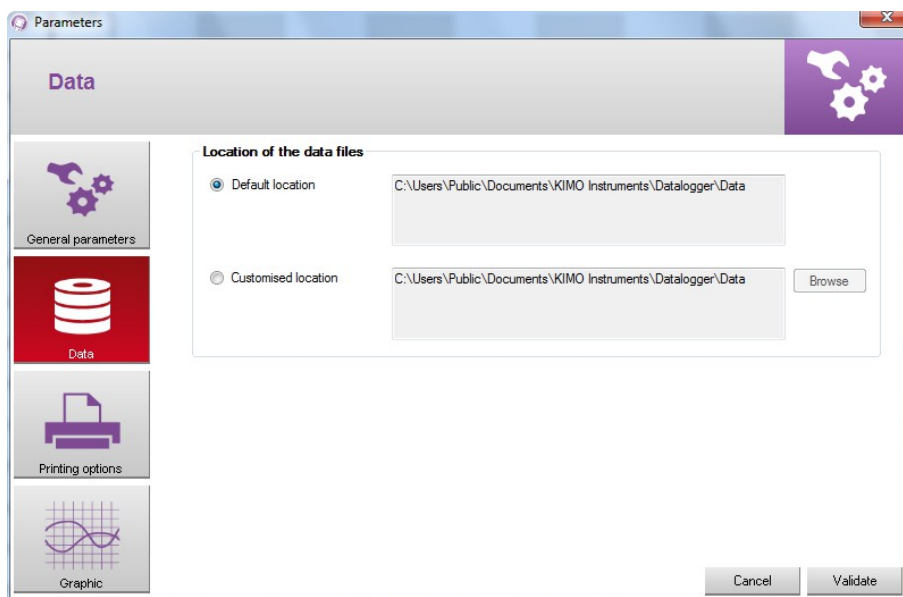


In the part "General parameters" :

- Mark "Tabs" or "Windows" to display the datasets
- Tick the box in the part "Certificates" : the software will verify the validity of the certificates at every start.
- Click on the button "Clear history" to remove the recently opened files.
- Tick the box "Display MKT value" to display it. *The MKT value (Mean Kinetic Temperature) enables to express on an easy way the global effect of temperature variations when perishable goods are stored or transported.*

12.2 Data

- Click on the button "Data".
The following window opens :

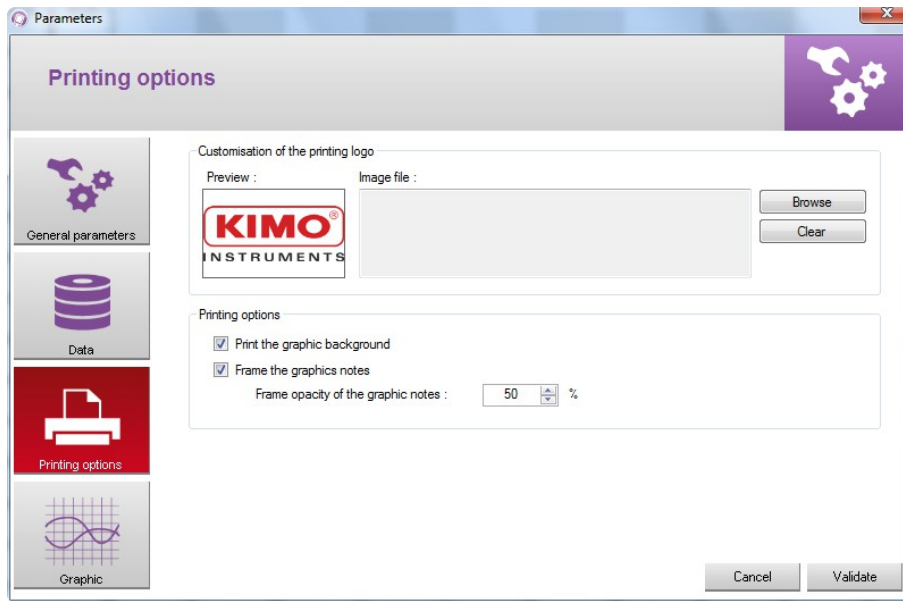


This window enables to select the folder where the dataset files are saved.

- Tick **"Default location"**.
The files will be saved in the following folder : C:\Users\Public\Documents\KIMO Instruments\Datalogger\Data OR
- Tick **"Customised location"**.
- Click on the button **"Browse"** and select the folder location required.

12.3 Printing options

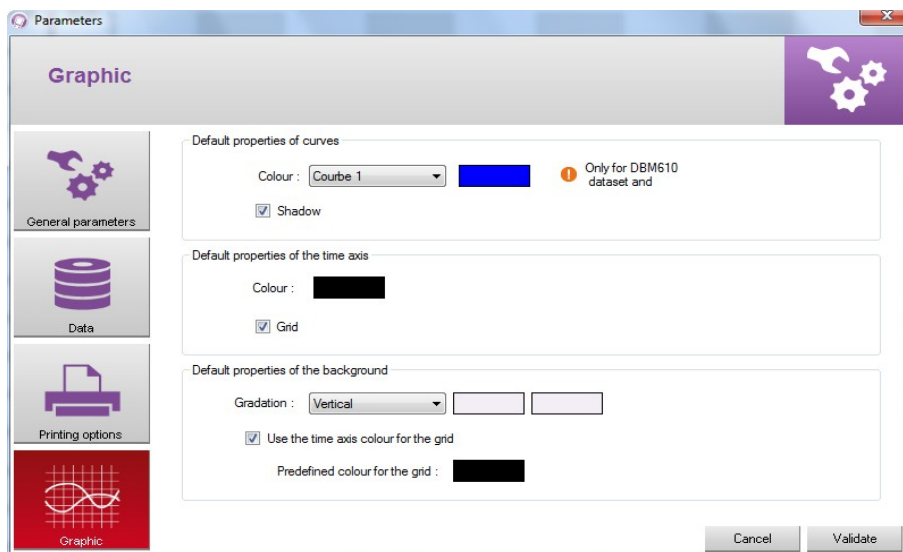
- Click on the button **"Printing options"**.
The following window opens :



- Click on the button **"Browse"** to select the required logo.
- Tick or not the boxes to print the graphic background.
- Tick or not the boxes to frame the graphic notes.
- Select the frame opacity of the graphic notes.

12.4 Graphic

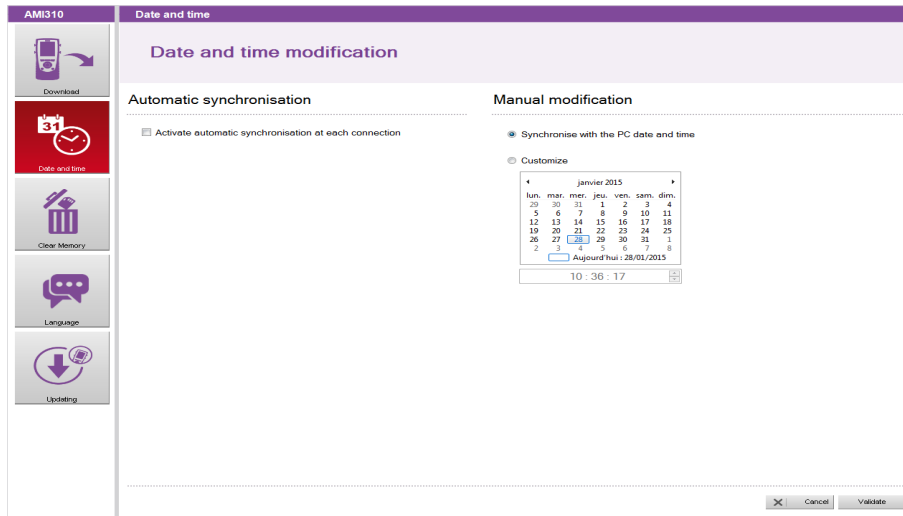
- Click on the button **"Graphic"**.
The following window opens :



- Select the default colour of curves.
- Select the default colour of the time axis.
- Select the different default properties of the background.

13 Set time on the device

- Click on the button "Device reading".
The window **"Device information"** opens.
- Click on the button **"Date and time"**.
The following window opens :



In **"Automatic synchronisation"** :

- Tick the box.
Time will be automatically synchronized with the computer at every connection of the device to the PC.

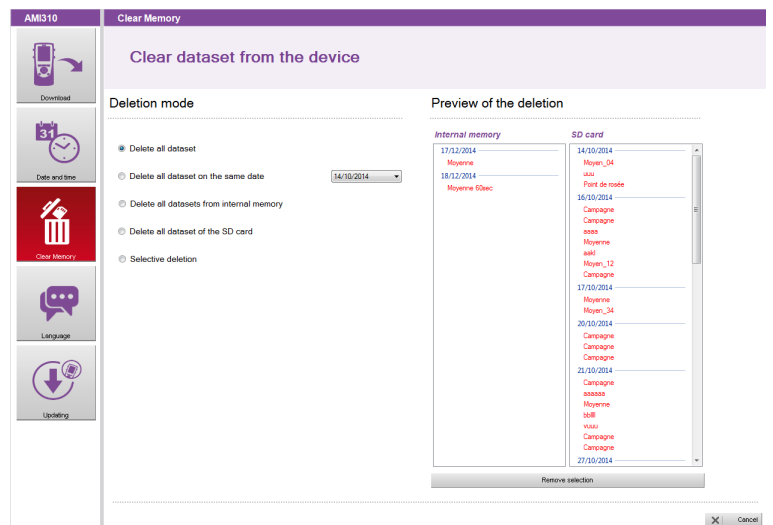
OR

In **"Manual modification"** :

- Tick **"Synchronise with the PC date and time"** to adjust the device on the PC date and time.
OR
- Tick **"Customize"** then choose the date and time in the calendar.
- Click on the button **"Validate"**.

14 Clear memory

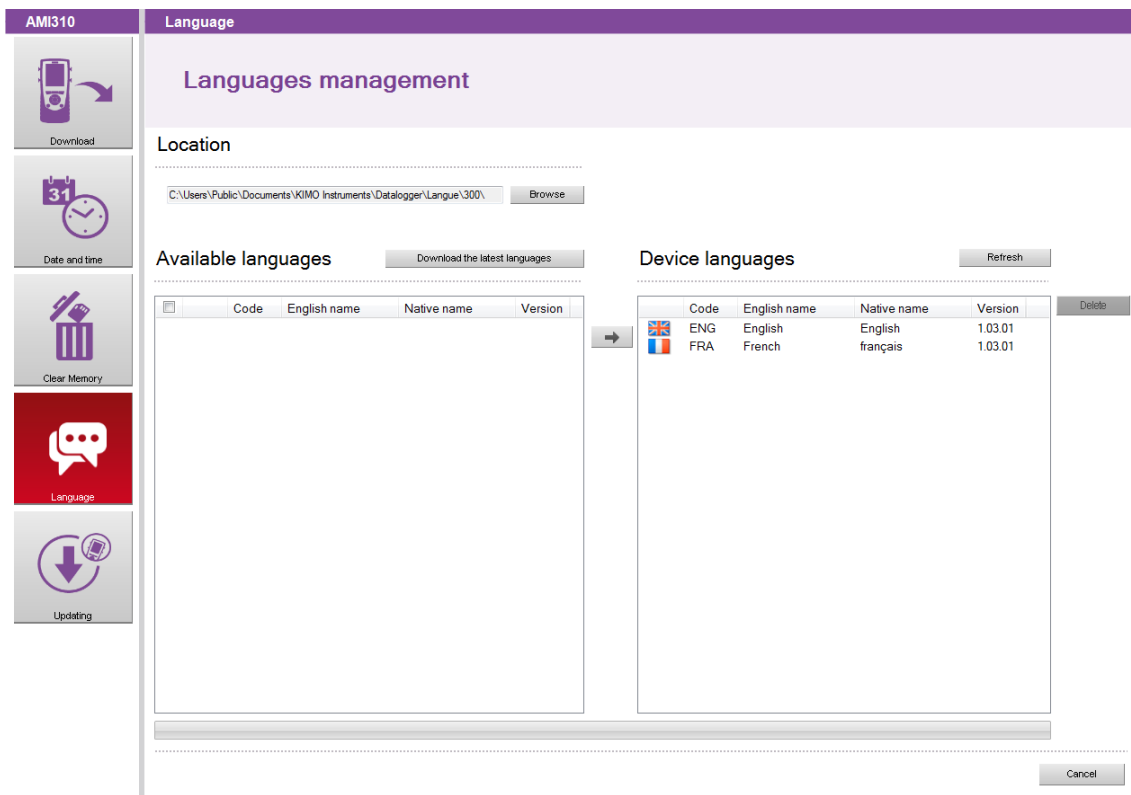
- Click on the button "Device reading".
The window **"Device information"** opens.
- Click on **"Clear memory"**.
The following window opens :
- Select the delete mode.
The preview displays in red the dataset which will be deleted.
- Click on the button **"Remove selection"**.





This operation is irreversible. The selected datasets will be permanently deleted.

15 Languages management

- Click on the button **"Device reading"**.
The window **"Device information"** opens.
- Click on the button **"Language"**.
The following window opens :



- Click on the button **"Download the latest languages"**.
The list of the available languages displays in the part **"Available languages"**.
- Click on the language to install in the device.
- Click on the button  to send the selected language in the device.

 In the part **"Available languages"**, it is possible to tick the box at the top left. The software will select all the available languages in the limit of 10.

The device can contain up to 10 languages.

To delete one :

- Click on the language to delete in **"Device languages"**.
- Click on the button 

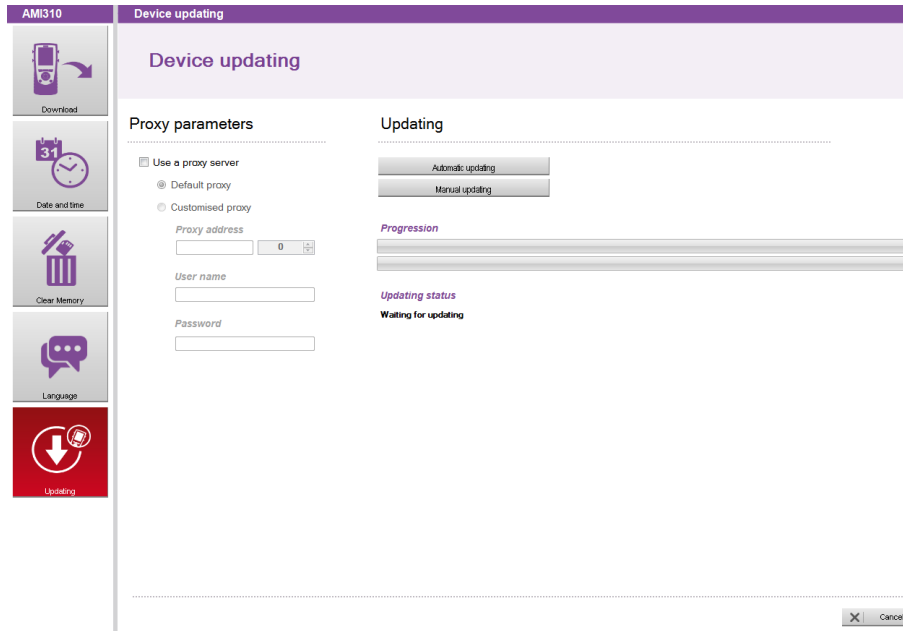
To update the list of the existing languages in the device :

- Click on the button **"Refresh"**.

16 Updating the device

It is possible to update the device by connecting it on the datalogger.

- Click on the button "Device reading".
The window "Device Information" opens.
- Click on the button "Updating".
The following window opens :



16.1 Make a manual updating

- Click on the button "Manual updating" to update the device.
- Take the file of updating given by the after-sales service of the company (file type .zip).
The progress of the updating displays in the progression bar.
A message indicates that the updating is finished displays at the end and the device switches off.
- Restart the device.
A grey screen with a progression bar displays on the device.
At the end of this step, the device displays the homepage.
- Go in the menu "Information" to verify the effective updating.

16.2 Make an automatic updating

The automatic updating necessitates an internet connection to internet. The connection can be protected by a proxy server. In that case :

- Tick the box "Use a proxy server".
- Choose "Default Proxy" : the datalogger uses the Proxy parameters of the computer's internet connection OR
- Choose "Customised Proxy" : enter the Proxy address then the user name and the password.

Then :

- Click on the button "Automatic updating" to update the device.
The updating progression displays in the progression bar.
A message indicating that the updating is finished displays at the end and the device switches off.
- Restart the device.
A grey screen with a progression bar displays on the device.
At the end of this step, the device displays the homepage.
- Go in the menu "Information" to verify the effective updating.

www.kimo.fr

EXPORT DEPARTMENT
Boulevard de Beaubourg - Emerainville - BP 48
77312 MARNE LA VALLEE CEDEX 2
Tel : + 33.1.60.06.69.25 - Fax : + 33.1.60.06.69.29

