## **USER MANUAL**



# Operating Software for KISTOCK Dataloggers

## > SAUERMANN Software Typ KILOG Lite 2015





#### **USER MANUAL**

KILOG Lite 2015
OPERATING SOFTWARE FOR
KISTOCK DATA LOGGERS

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## 1 INTRODUCTION

**KILOG Lite 2015** software allows the user to set their KISTOCK and to save and use data with great simplicity. KILOG Lite software allows the viewing and use of measurement datasets performed with the autonomous KISTOCK classes 50, 120, 220 and 320 data loggers.

#### Its main functions:

- Viewing the results of the measurement datasets
- Setting up the data loggers
- Data recovery and creation of PDF files

## 2 SOFTWARE INSTALLATION

## 2.1 Minimum configuration required

Minimum configuration: Windows, XP, VISTA, 7, 8

• Communication port: USB 2.0

RAM: 128 MB

Free disk space: 125 MB

#### 2.2 Software installation on Windows 7 / Vista / 8

- ➤ Go to <a href="https://sauermanngroup.com/en-INT/resource-center/softwares">https://sauermanngroup.com/en-INT/resource-center/softwares</a>
- Click "KilogLite" to download the software on the computer.

  A .zip archive file is created on the computer.
- > Unzip this archive file then open the created folder.
- Double-click "SetupKilog-lite.exe".
- > Follow instructions.



Before starting installation process, make sure the USB cable is unplugged.

When the software has been properly installed, a launching icon is created on computer desktop.

> Then connect the Kistock in USB on the computer.



The following window appears.

> Click "Install".

#### 2.3 Software installation on Windows XP

- ➤ Go to https://sauermanngroup.com/en-INT/resource-center/softwares
- Click "KilogLite" to download the software on the computer.
  A .zip archive file is created on the computer.





- Unzip this archive file then open the created folder.
- Double-click "SetupKilog-lite.exe".
- Follow instructions.



#### Before starting installation process, make sure the USB cable is unplugged.

When the software has been properly installed, a launching icon is created on computer desktop.

Drivers must be then installed.

Then connect the Kistock in USB on the computer. *The following window appears.* 



> Select "No, not this time" then click "Next".

The following window appears.

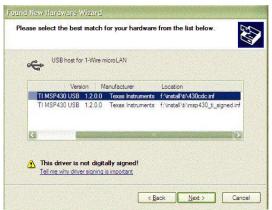


> Select "Install from a list or a specific location (Advanced)" then click "Next". The following window appears.



SOFTWARE INSTALLATION 5

- > Select "Search for the best driver in these locations".
- > Tick the box "Include this location in the search".
- Click Browse then select "Install\USBCable" folder located on the "KILOG Lite vx.x.x.x" folder created after the downloaded .zip archive extraction (ex: C:\Users\Default\Downloads\KILOG Lite v1.0.0.0\Install\USBCable). The following window can be displayed:



Select one of the two drivers then click "Next".
The following window appears:



- Click "Continue Anyway" to confirm the driver installation.
  The driver installs then the window "Completing the Found New Hardware Wizard" opens.
- Click "Finish".

6 SOFTWARE INSTALLATION

## 3 CONNECT THE DATA LOGGER TO THE COMPUTER

#### **Class 50 KISTOCK**

KISTOCK of the class 50 are equipped with a micro-USB connector. Thanks to the USB — micro-USB cable, you can connect your data logger to the computer.

- 1. Connect the male USB connector to the computer USB port.
- 2. Open the USB cap on the bottom of the data logger.
- 3. Connect the male micro-USB connector to the female micro-USB connector of the data logger.







#### Class 120 KISTOCK

KISTOCK of the class 120 are equipped with an integrated male USB connection. You can connect it directly to the computer.



#### Class 220 KISTOCK

KISTOCK of the class 220 are equipped with a micro-USB connector. Thanks to the USB — micro-USB cable, you can connect your data logger to the computer.

- 1. Connect the male USB connector of the cable to the computer USB port.
- 2. Open the USB cap on the bottom of the data logger.
- 3. Connect the male micro-USB connector to the female micro-USB connector of the data logger.







#### Class 320 KISTOCK

KISTOCK of the class 320 are equipped with a micro-USB connector. Thanks to the USB — micro-USB cable, you can connect your data logger to the computer.

Perform the same procedure as for KISTOCK class 220.

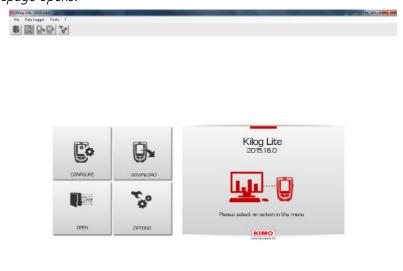
## **4 SOFTWARE PRESENTATION**

## 4.1 Launch the application



> Go to "Start", then "KILOG Lite 2015".

The following homepage opens:



#### 4.2 Main menu buttons



**Data logger settings:** displays the devices state and a configuration menu (channels, instrument and a configuration summary).



**Download the datasets saved in the data logger:** displaying of the global view, legend and statistics, graphs and table of data.



**Application parameters:** location of the data files, MKT value, printing options, graph properties



**Open files**: recent files and measurement datasets.

8 SOFTWARE PRESENTATION

#### 4.3 Menu bar

#### File menu

- **Open:** opens recent files or datasets. For each selected file, details of the document are displayed (type of recording, interval, preview etc.)
- Close: closes the current file
- **Export:** exports the report in PDF
- **Properties:** displays information about the dataset
- **Exit:** closes the software

#### Data logger menu

- Configuration: data logger state and configuration menu (channels, data logger and summary)
- **Downloading:** download the datasets saved in the data logger and save them in the computer.

#### Tools menu

- Language: select the desired language
- **Options:** application parameters: data files location, MKT value, printing options, graph properties

#### "?"<u>menu</u>

- About: software version, users base, global base and language
- **Help:** link to the software user manual



## 4.4 Toolbar description

The toolbar has shortcuts to go to the functions menu more quickly.



Open a dataset



**Export** data



**Download** the connected data logger



**Configure** the connected data logger



**Options** to set parameters of the application

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<sup>\*</sup> Only available for classes 220 and 320 KISTOCK.

## 5 TOOLS: APPLICATION PARAMETERS

## 5.1 Options of the application

There are several options to navigate to the options of the application menu:

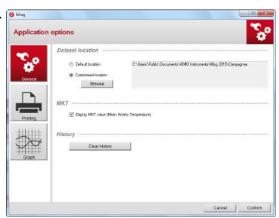
From the homepage, click or



From the toolbar, click or

> From the menu bar, select "Tools" then "Options"

The following window opens:



#### 5.1.1 General options

> Set the recording location of data files: select the default location or click to customise it.



- Tick or untick the "Display MKT value" box (Mean Kinetic Temperature) to activate or deactivate the displaying of this value: the MKT temperature is a simplified way to express the overall effect of temperature fluctuations during storage or transit perishable goods
- > Delete the recent history files clicking Clear history

## 5.1.2 Printing options

Click to set the printing parameters.

The following window opens:



- ➤ Define a printing logo. Default logo is the KIMO logo. To modify it, click and select an image file.
- > Set the printing options of the graph: print or not the graph background, frame or not notes and set the opacity of the graph notes.
- Click Clear to restore the KIMO logo.

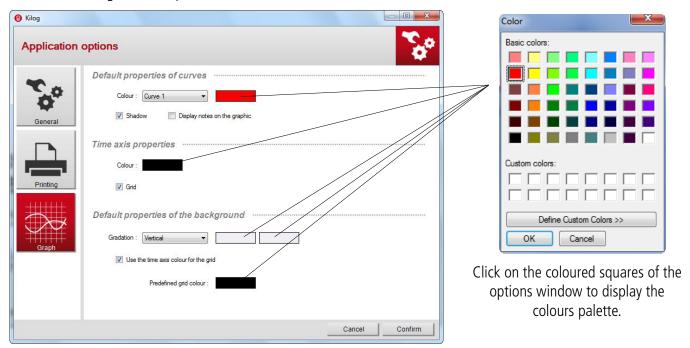
## 5.1.3 Graph options

> Click



to set the graph parameters.

The following window opens:



- > Define the colour of the different curves, display or not the shadow of the curves and display or not notes on the graph.
- > Define the time axis colour and activate or deactivate the grid.
- > Define the required colours for a gradation on the background, activate or deactivate the use of time axis colour for the grid or customize it.

There are several options to navigate to the KISTOCK configuration menu:

From the homepage, click or



From the toolbar, click or



#### 6.1 Device state

Once in the "Configuration" menu, the software displays a summary of the device state.



In the upper part of the screen, the software displays:

- Name
- Serial number
- Firmware version
- Battery state

#### In "Dataset summary", the following information is displayed:

- Dataset name and the potential comments that have been recorded
- Type of start and stop
- Number of recording points
- Interval of recording and measurement
- Mode and recording duration
- Dataset state (in progress or finished)

Finally, a summary table of channels is displayed with:

- Channel name
- Measurement unit
- Measurement ranges
- High and low thresholds
- Channel number
- Type of probe\*

\*Only for classes 220 and 320 KISTOCK

## 6.2 Configure the device and the recording mode

There are several options to navigate to the KISTOCK recording configuration:

From the homepage, click or



and select

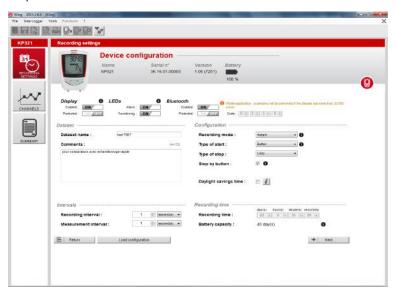


➤ In the menu bar, click "Data logger" then "Configuration" and select or



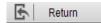
> From the "Device state" window, click "New configuration".

The following window opens:





At any time, it is possible to back to the state summary of the device clicking



#### 6.2.1 Set the display and the LEDs

From the "Recording" window:

Set the display of the KISTOCK\* "ON" or "OFF" by clicking ON OFF



- Set the protected mode of the KISTOCK\* "ON" or "OFF" by clicking ON OFF

  If the protected mode is activated, the measured values will be not displayed on the data logger.

  To deactivate the protected mode, set it on "OFF" or hold the "Selection" key of the data logger for 3 seconds.
- Set the alarm by LEDs\*\* "ON" or "OFF" by clicking ON OFF
- Set the operating LEDs\*\* "ON" or "OFF" by clicking ON OFF

<sup>\*</sup> Only for models with display

<sup>\*\*</sup> Only for classes 220 and 320 KISTOCK

#### 6.2.2 Name and comment a dataset

From "Device configuration" window:

> Name the dataset in the "Dataset name" field and write a comment in the "Comment" field.

#### 6.2.3 Change daylight time

From the "Recording" window:

Activate or deactivate the automatic setting of the daylight time ticking or unticking the box.

Daylight savings time :

Click the information button to display the time changes.

#### 6.2.4 Set the date and time format

From the "Recording" window:

Set the date and time format\*.

Date and time format:

#### 6.2.5 Activate or deactivate the automatic generation of the PDF report (Class 120 Kistock)

Tick or untick the "Automatic generation of the PDF report" box to activate or deactivate the automatic generation of the PDF report when connecting your data logger to the computer\*.

Automatic generation of the PDF report :

12h

#### 6.2.6 Set the recording mode

From the "Recording" window:

- > Select the required recording mode:
  - **Instantaneous**: values are recorded at defined recording interval
  - Minimum\*\*: configuration of this mode requires 2 intervals: one measurement interval and one recording
    interval. The recorded value will be the minimum measured by the data logger according to the defined
    intervals.

Example: recording interval = 10 minutes

measurement interval = 1 minute

The KISTOCK performs a measurement every minute but only records the minimum value found over the period of 10 minutes.

1 min.	2 min.	3 min.	4 min.	5 min.	6 min.	7 min.	8 min.	9 min.	10 min.
26.5°C	26.5°C	26.4°C	26.5°C	26.5°C	26.6°C	26.7°C	26.7°C	26.5°C	26.6°C

10 measurements

Recording of the minimum measured: **26.4°C** 

- **Maximum**\*\*: same principle as minimum mode but the maximum value is recorded.
- **Average\*\***: same principle as minimum and maximum modes but the recorded value is the average of all the measurements during the recording interval defined.
- **Monitoring\*\***: this recording mode requires two intervals:
  - one "classic" recording interval
  - one "in alarm" recording mode

The data logger performs a measurement every second and stores values at "classic" interval when the measurement are between two defined thresholds, or at "in alarm" interval when measurements are out of thresholds.

<sup>\*</sup> Only for class 120 KISTOCK

<sup>\*\*</sup> Only for classes 220 and 320 KISTOCK

#### 6.2.7 Set the recording intervals

From the "Recording" window:

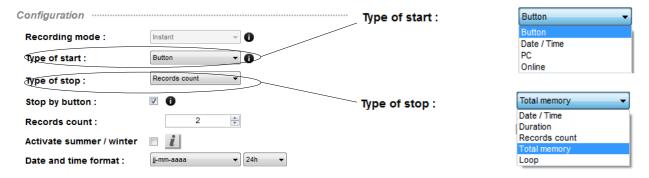
Set the recording interval and potentially a second one\* whose role is variable according to the type of operation selected:



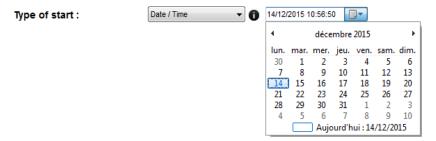
- **Instantaneous mode:** the 1<sup>st</sup> interval is the recording interval of values, the 2<sup>nd</sup> one allows to define a reloading interval of the displayed value on the screen (for classes 50 and 120, this interval is by default 1 minute).
- Minimum, Maximum, Average modes\*\*: both intervals are compulsory, one recording interval and one
  measurement interval.
- **Monitoring mode\*\*:** both intervals are compulsory, one "normal" recording interval and one "in alarm" recording interval.

#### 6.2.8 Types of dataset start and stop

From the "Recording" window:



- Select a type of start:
  - "Button": set a start by a long press on the "OK" button of the data logger



• "PC": triggers a measurement start directly from the KILOG Lite software. For that, once the configuration of the data logger is completed, the software will ask to start the dataset immediately: click "Yes" to start the dataset or on "No" to start it later from the "Device state" menu clicking on "Start".

<sup>\*</sup> The "seconds" unit is available only for classes 220 and 320 KISTOCK

<sup>\*\*</sup> Only for classes 200 and 320 KISTOCK

- > Select a type of stop:
  - "Date / time": set a stop according to a defined date and a time, only if the "Date and time" start has been selected before. Set the required date and time.

Type of stop : 

Date / Time 

14/12/2015 11:01:18 

▼

• "Records count": stop measurements from a number of recordings. Set the required number of recordings.

Records count: 4500

- "Total memory": stop measurements when the memory of the data logger is full.
- "Loop": set a continuous recording. When the memory is full, the first recorded values are overwritten by the new ones.
- Tick the "Stop by button" box to activate the stop by button. It allows to stop the measurement at any time thanks to the "OK" button of the data logger.
- **Recording time:** the **"Recording time"** is calculated according to the recording interval and the recording number that have been set. For example, if a 1-minute recording interval and a recording number of two have been set, the recording time will be two minutes:



Change this duration selecting a type of stop by **"Duration"**. Set the required recording duration: days, hours, minutes and seconds\*. According to the set duration and measurement interval, the number of recording points is automatically calculated.

- "Date/time" and "Recording time" types of stop and "Loop" storage mode are not available with the "Monitoring" mode.
  - Once the configuration is completed, click on to go to the "Channel configuration" menu or Return on to go back to the "Device state".

## 6.3 Configure the channels

- From the homepage, click

  Or

  CONFIGURE

  Select

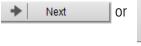
  CONFIGURATION

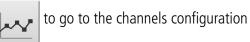
  Then

  CONFIGURATION
- In the menu bar, click "Data logger" then "Configuration", select



From the recording configuration menu, click menu.





At any time, to back to the previous configuration menu, click

<sup>\*</sup> The "seconds" unit is available only for classes 220 and 320 KISTOCK

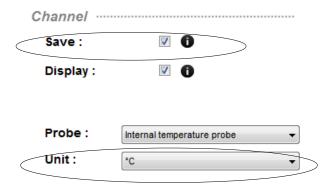
#### The software displays the channels summary:

#### Channels summary .....

CHANNEL	NAME	PROBE	UNIT	CONV.	RANGE	LOW THRESHOLD	HIGH THRESHOLD
✓ Vint1		Internal thermo-hygro probe	°C		-20/70		
✓ Vint2		Internal thermo-hygro probe	%RH		0/100		
Vint3		None					
V1		None					
V2		None					

Select the line of the channel to be configured

- Select the line of the channel to configure.
- > Tick or untick "Save" box to activate or deactivate the recording of measured values.
- > Tick or untick "Display" box to activate or deactivate the displaying of the channel\*.
- Select the probe to link to this channel.
- > Select the required unit.

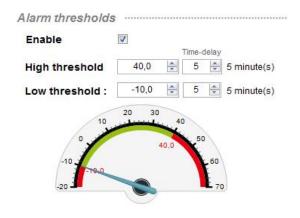


When the recording option on the selected channel is active, the vicon appears on the line of the concerned channel.

#### 6.3.1 Set the alarm thresholds

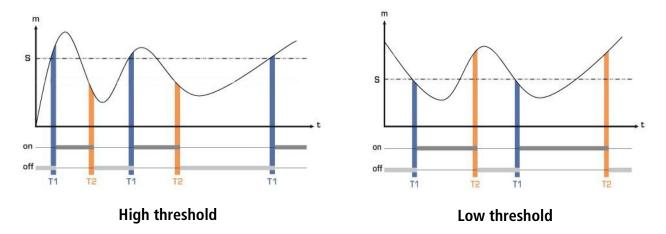
From the "Channels configuration" window:

- > Select the channel to set in the channel summary table by clicking on the line on the concerned channel.
- > Tick the **"Enable"** box in the "Alarm thresholds" part.
- > Set the high and low thresholds. If the measured value exceeds the defined value for the high threshold, or if it is below the defined value for the low threshold, the alarm will go off.
- > Set the time-delay. The time-delay corresponds to the period of time that passes before the alarm goes off when the threshold has been reached. If 0 minute is selected, the alarm will go off immediately after a threshold exceeding or when the measured value is lower than the defined low threshold.



<sup>\*</sup> Only for models with display

- High threshold: the alarm goes off when the measurement **exceeds** the threshold and stops when it is **below** the threshold.
- Low threshold: the alarm goes off when the measurement is **below** the threshold and stops when it **exceeds** the threshold



## 6.4 Summary

From the home menu, click



, choose





or

On the menu bar, click "Data logger" then "Configure", choose



From the channel setting menu, click



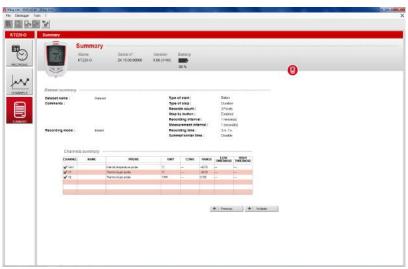




At any time, to go back to the previous setting menu, click | Previous



Summary window:



Settings summary: the dataset name and possible notes, the recording mode and recording settings, the summary table of channels.

To modify the device configuration, click Previous

#### 7.1 Download the KISTOCK

There are several possibilities to download the device:

> From the home menu, click "Download"



On the toolbar, click "Downloading" icon.



From the menu bar, go to "Data logger" and click "Downloading". or

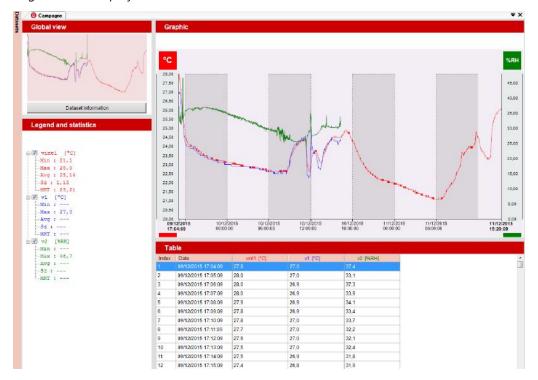
From the "Device state" configuration window, click



The screen displays the following progress bar: Please wait a few seconds...

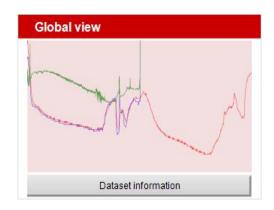


The following screen is displayed:

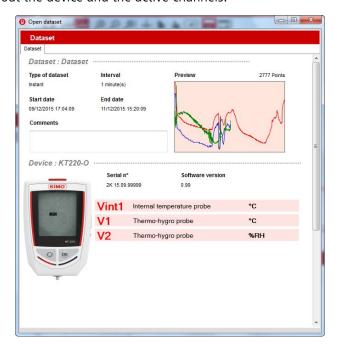


#### 7.1.1 Global view

On the top left of the screen, the global view of the measurement data graph is displayed:



Click "Dataset Information" to display the summary of the recording configuration, an overview of the global view and information about the device and the active channels:



#### 7.1.2 Legend and statistics

On the lower left-hand corner are "Legend and Statistics":

Details concerning each channel are displayed: for example for temperature measurements, the minimum and maximum values, average, standard deviation and MKT temperature are displayed.

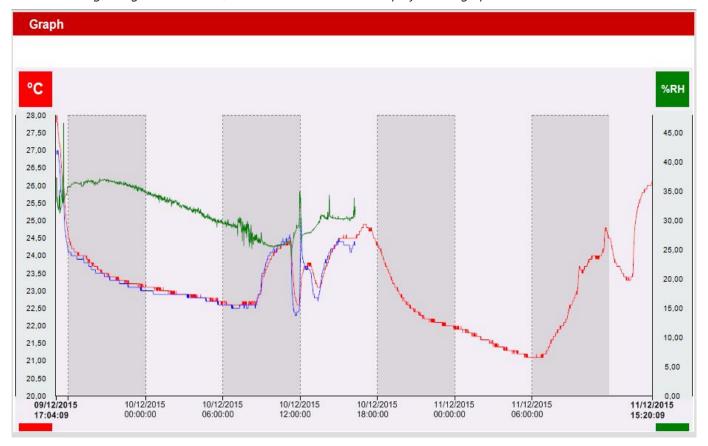
The measurement units are between [] square brackets: [C°], [%RH], [lux], [A]...

> Tick or untick the box corresponding to the concerned channel to display it or not on the graph.

```
Legend and statistics
□ vint1 [°C]
   -Min : 21,1
   -Max : 28,0
   -Avg : 23,14
   Sd : 1,18
    MKT : 23,21
₩ v1 [°C]
   ---- Min : ---
    Max : 27,0
    Avg : --
    Sd : ---
    ---- MKT : ---
■ V2 [%RH]
   ---- Min : ---
    Max : 46,7
   ---- Sd : ---
   MKT : ---
```

#### 7.1.3 Graph

On the higher right-hand corner, the measured values are displayed as a graph:



## 7.2 Download data collector (optional)

#### 7.2.1 Download data collector on PC

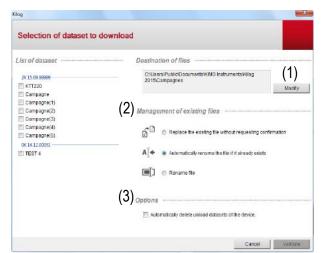
- Plug the data collector on an USB port of the computer.
- Launch the Kilog Lite 2015 software by double clicking on icon.



The following window opens.

- Tick the boxes of datasets to transfer.
- If necessary, define the files saving location by clicking "Modify". (1)
- > Select the required option about "Management of existing files" (2).
- ➤ To delete automatically the datasets which are transferred from the data collector to the computer, tick the corresponding box in "Options" (3).
- Click "Confirm".

The measurement datasets are displayed and automatically saved in the defined location.



## 7.2.2 Display data collector state, delete memory and set date and time

Plug the data collector on an USB port of the computer

Launch the Kilog 2015 software by double clicking on

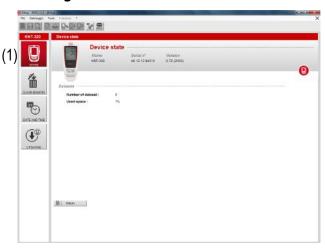


Click "Configure", or go to "Data logger" menu and select "Configuration"

The "Device state" (1) window opens.

The device name, serial number and version number are indicated on top of the window.

The number of recorded datasets and the used storage capacity are displayed.



# Click "Clear memory" (2) A diagram summarises the memory state and a list of the recorded datasets is displayed.

- Select the datasets to delete by ticking the corresponding box then click "Confirm"
  - A confirmation message is displayed: click **Yes** to confirm or **No** to cancel.
- > Click "Date and time" (3)
- Set a date and time synchronisation with PC or customise them, then click "Confirm".





#### 7.2.3 Update the data collector

It is possible to update the **KNT 320** data collector by connecting it on the **Kilog 2015** software: the procedure is the same as for Kistock devices, see page 24.

## 7.3 Export data under PDF format

Export the whole dataset as a measurement report as PDF file.

Integrate easily pictures or tables to documents and edit customised dataset reports which summarise all information about measurements.

#### Several possibilities:

- Click directly on "Export" in the toolbar or
- In the menu bar, go to "File" then "Export"
- ➤ Choose "Dataset report to PDF"

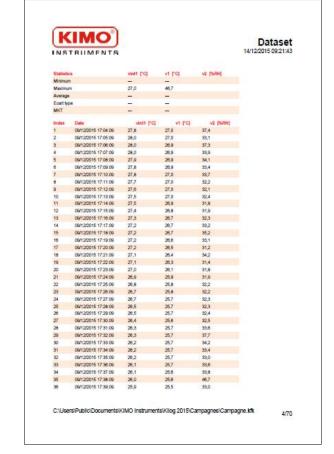
  During the dataset export to a PDF format file, the following window is displayed:
- > Select the elements to display on the PDF report: dataset report, graph and/or values table.
- Confirm by clicking on "Confirm".
- Choose the required location to save this file on the computer.
- Confirm to save the document.
  A message confirms the report has been successfully exported.

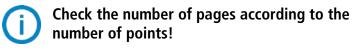


#### Example of PDF report:









## 8 UPDATE THE DEVICE

Update the device by connecting it to the KILOG Lite software:

From the home menu, click or



From the toolbar, click or



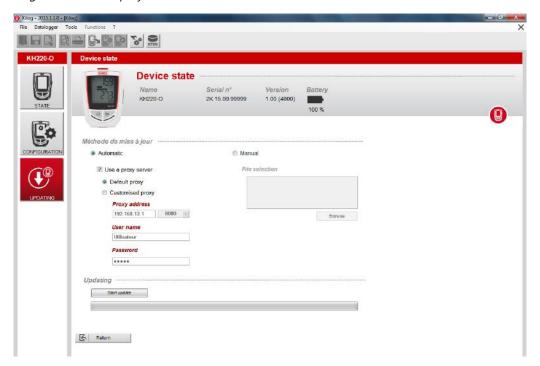
From the menu bar, click "Data logger" then "Configuration".

Once in "Configuration" menu, the software displays a summary of the device state.

Click



The following window is displayed:





Please check that no dataset is currently recorded before carrying out an update.

## 8.1 Automatic update

The automatic updating needs an internet connection. It can be protected by a proxy server. In this case:

- > Tick the "Automatic" box.
- > Tick the "Use a proxy server" box.
- > Choose "**Default proxy**": the KILOG Lite software uses the proxy parameters of the computer internet connection.

Or

> Choose "Customised proxy": indicate the Proxy address then the user name and password.

Then:

Click Start update to start the device updating.

The progress of the updating displays in the progression bar.

A message indicating the updating is finished displays at the end.

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## 8.2 Manual update

- > Tick the "Manual updating" box.
- Click Browse and take the updating file given by the after-sales service of the company (.zip file type).
- Click Start update to start the device update.

The progress of the updating displays in the progression bar. A message indicating the updating is finished displays at the end.

## 8.3 Verify the effective updating

> To verify the effective updating, check the version number indicated in the device references of the device state window:



## 9 UNINSTALL THE SOFTWARE

To uninstall the KILOG Lite software, suitable rights are needed. Use the Windows tool provided for that purpose:

- ➤ Go to "Start" menu, "Parameters", "Control panel", then "Add/Remove programs".
- > In the index "Install/Uninstall", click the "KILOG Lite" line and follow Windows indications.

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