sauermann®

USER MANUAL

VT 210

THERMO-HYGROMETER-ANEMOMETER

Table of contents

1. PRESENTATION 5
   1.1 . Instrument description 5
   1.2 . Key description 5
   1.3 . Remove battery 6
   1.4 . Directive 2014/53/EU 6
2. CONNECTIONS OF THE VT 210 7
   2.1 . Main features 7
   2.2 . Connections 7
3. INFORMATION 9
4. SET THE INSTRUMENT 10
   4.1 . Set language 10
   4.2 . Set date and time 10
   4.3 . Activate or deactivate the beep key 10
   4.4 . Set auto-off 10
   4.5 . Set backlight 11
   4.6 . Set security 11
   4.7 . Set code 11
   4.8 . Set printing 11
5. SET THE PROBES 12
   5.1 . Use of the wire probes and modules 12
   5.2 . Special precautions for air velocity probes 12
   5.3 . Use of wireless probes 13
6. CHANNEL CONFIGURATION 14
   6.1 . In airflow mode 14
   6.2 . Delta T 15
7. START AND RECORD DATASETS 16
   7.1 . Start and record datasets 16
      7.1.1 Manual dataset 16
      7.1.2 Automatic dataset 16
      7.1.3 View the recorded datasets 17
   7.2 . Launch and save averages 17
      7.2.1 Point/Point average 17
      7.2.2 Automatic average 18
      7.2.3 Automatic Point/Point average 18
   7.3 . Hold-Min./Max 19
8. SETTING OF MEASUREMENT PARAMETERS 20
   8.1 . Thermocouple module 20
      8.1.1 Unit 20
      8.1.2 Type 20
      8.1.3 Alarm 20
   8.2 . Climatic conditions module 20
      8.2.1 Unit 20
      8.2.2 Alarm 20
   8.3 . Vane probe and hotwire probe 21
      8.3.1 Unit 21
      8.3.2 Integration 21
      8.3.3 Alarm 21
      8.3.4 Normative value 21
      8.3.5 Atmospheric pressure 21
   8.4 . Hygrometry probes 22
      8.4.1 Unit 22
      8.4.2 Alarm 22

8.4.3 Atmospheric pressure 22
8.5 . Tachometry 22
8.5.1 Unit 22
8.5.2 Type 22
8.6 . Multifunction probe 22
8.6.1 Unit 22
8.6.2 Atmospheric pressure 23
8.6.3 Integration 23
8.6.4 Normative values 23

1.1 Instrument description

1.2 Key description

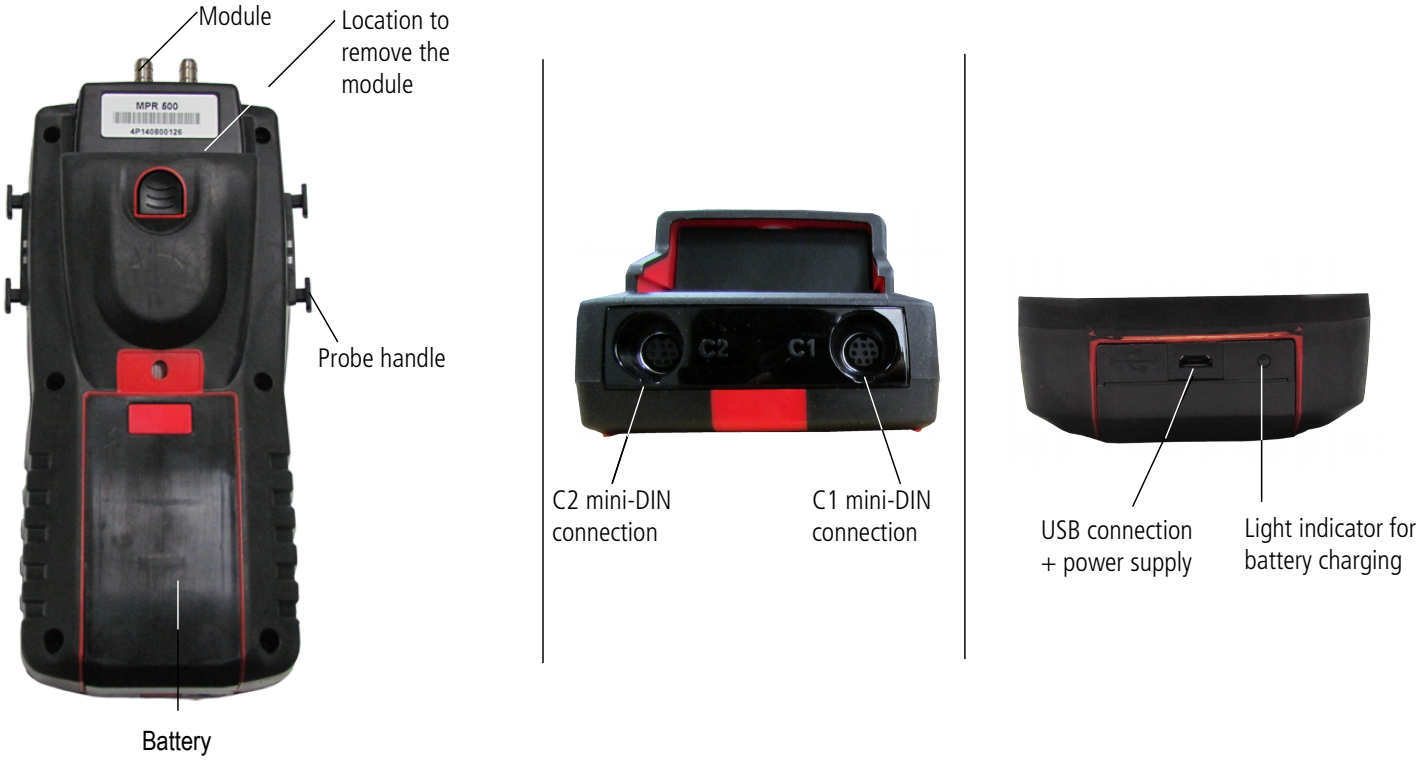
- **Left key:** allows to navigate from left to right
- **Right key:** allows to navigate from right to left
- **Up key**: increments a value or a level
- **Down key**: decrements a value or a level
- **OK key**: validates an action
- **Esc key:** cancels the action or backs to previous step

1.3 Remove battery

- Turn off the instrument.
- Turn it over.
- Press the red button while sliding down the battery.

1.4 Directive 2014/53/EU

Hereby, Sauermann Industrie SAS declares that the radio equipment type VT 210 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.sauermanngroup.com



2.1 Main features

- **Screen**

120 x 160 pixels graphic display and backlight. Display of 6 measurements, 3 simultaneously. Size 50 x 67 mm.

- **Printer (available as option)**

The paper of the instrument is a thermal paper with a 10-year guarantee. It has an easy replacement system of the paper (Easyload). In addition, printing is fast.

- **Battery**

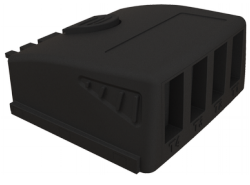
Rechargeable Li-ion battery inside the instrument, 16 h battery-life with a pressure module or 14 h a hotwire probe. The instrument is supplied with a 5 V, 1 A power adapter to load the internal battery. The current loading is indicated by a battery symbol on the top left of the screen. The orange led on the bottom of the instrument is also on until the full loading of the battery (the led turns green).

2.2 Connections

Interchangeable modules

The interchangeable modules have the SMART-2014 system and are automatically recognized once the connection is made on the instrument.

- **Thermocouple module:**



Allows to measure temperature on Tc1, Tc2, Tc3 and Tc4 channels with wired thermocouples K, J, T or S probes ended with a male miniature connector

- **Climatic conditions module:**

Allows to measure hygrometry, ambient temperature and atmospheric pressure.

- **Wire probes with SMART-2014 system**

Wire probes with SMART 2014 system are automatically recognized when connected to the instrument.

C2 mini-DIN connection

C1 mini-DIN connection

Probes are connected on min-DIN connectors **C1** and / or **C2** (excepted thermocouple probes)

Overmolded mini-DIN connector with foolproofing system. Cable length lg. 450 mm, extension 2.4 m.

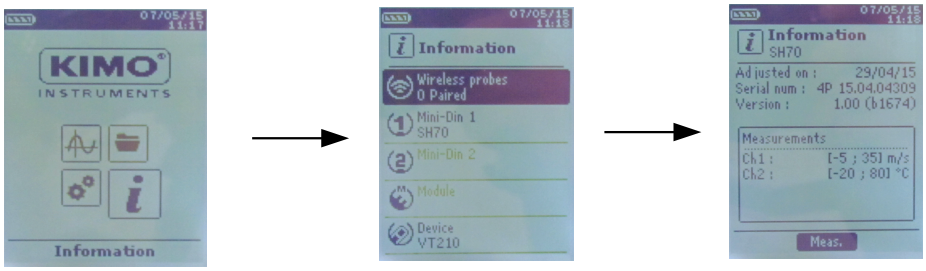
- **Wireless probe / instrument communication**

Wireless communication between probe and instrument with automatic recognition after power-up.

Wireless probes shall be located near the instrument for initial recognition. Connection between VT 210 and wireless probes must be established.

3. INFORMATION

"Information" menu allows to view information about the instrument, probes and module connected to the **"Wireless probe"**, **"Mini-DIN 1"**, **"Mini-DIN 2"** or **"Module"** connections**.** To enter in this menu from home screen, select the **"Information"** menu with the arrow keys then press **OK**.



Available information for probes and module is:

- Type of probes and module
- Date of the last calibration or adjustment
- Serial number
- Firmware version
- Measuring range

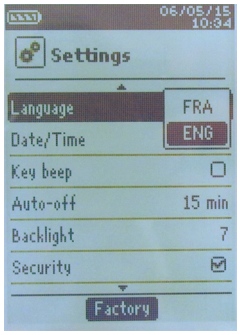
Available information for the instrument is:

- Type of instrument
- Serial number
- Firmware version

➢ The function key **"Measurement"** allows to access directly to the **"Measurement"** menu.

The instrument is on.

- With the arrow keys, go to **"Configuration"** menu.
- Press **OK.**



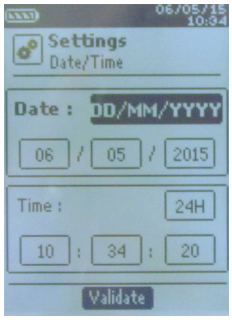
4.1 Set language

"Configuration" *screen is displayed.*

- Select **"Language"** with the arrow keys then press **OK.**
  Available languages are displayed.
- Press Up and Down arrows to select the required language: FRA, ENG...
- Press **OK.**

4.2 Set date and time

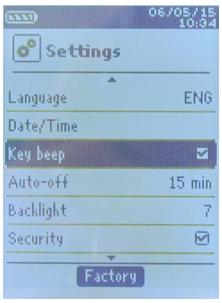
"Configuration" *screen is displayed.*



- Select **"Date/time"** with the arrow keys then press **OK.**
  The screen of configuration for date and time is displayed.
- Go to the **"Date"** format with arrow keys then press **OK**.
- Select: DD/MM/YYYY, MM/DD/YYYY or YYYY/MM/DD then press **OK**.
- Go to the day then press OK.
- With Up and Down keys, set the first digit of the day then go to the following one with right arrow.
- Press **OK** to validate.
  Perform the same procedure to set the month and year.
- Go the **"Time"** format with arrow keys then press **OK**.
- Select the time format: **"12H"** or **"4H"** then press **OK.**
  *If **"12H"** is selected, it is possible to choose between "AM" for ante meridiem or **"PM"** for post meridiem.*
- Press **OK**, select **"AM"** or **"PM"** then press OK to validate.
- Go the time then press OK.
- With Up and Down keys set the first digit of the day then go to the following one with right arrow.
- Press **OK** to validate.
  Perform the same procedure to set minutes and seconds.
- Press function key **"Validate"** to leave the screen and to save modifications or press **Esc** to cancel.

4.3 Activate or deactivate the beep key

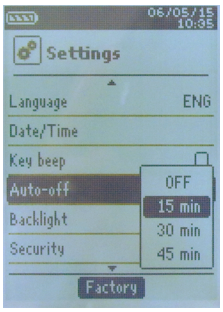
"Configuration" *screen is displayed.*



- Select **"Key beep"** with arrow keys.
- Press OK to activate or deactivate the beep key.
  The box is ticked if the beep is activated and unticked when the beep is deactivated.

4.4 Set auto-off

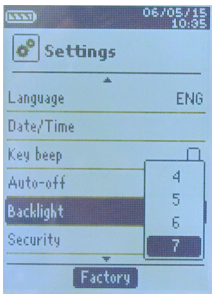
The auto-off function turns off the instrument after a moment of unused.
It is possible to set the auto-off of the instrument at 15 / 30 / 45 / 60 / 75 / 90 / 105 or 120 minutes or to deactivate it.



"Configuration" *screen is displayed.*

- Select **"Auto-off"** with arrow keys then press **OK.**
- Select the required duration or OFF to deactivate it with Up and Down keys.
- Press **OK** to validate.

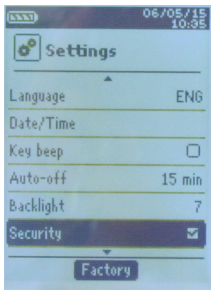
4.5 Set backlight



"Configuration" *screen is displayed.*

- Select "Backlight" with arrow keys then press **OK.**
- Select the backlight level between **1 and 9** or **"Auto"** with Up and Down keys.
- Press **OK** to validate.

4.6 Set security

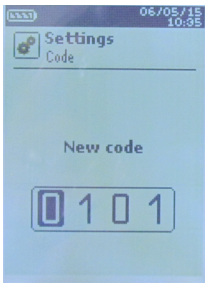


This part allows to activate or deactivate a security code. This code will be asked when starting the instrument.

"Configuration" *screen is displayed.*

- Select **"Security"** with arrow keys.
- Press **OK** to activate or deactivated the security.
  If the security is activated, please create a security code.

4.7 Set code



If the security is activated, the selected code will be asked when starting the instrument.
"Configuration" *screen is displayed and the security is activated.*

- **Go to "Code"** then press **OK.**
- With arrow keys, set each digit then press OK when the last digit is set.
  Modifications are validated, the instrument backs to ***"Configuration"*** *screen.*

4.8 Set printing

"Configuration" *screen is displayed.*

- Select **"Printing"** with arrow keys then press **OK.**
- Go to **"Format"** then press **OK.**
- Select the ticket format: long or short then press **OK**.
  Long ticket format: *prints the measurement results + header (operator name, date and time of the intervention, type of instrument and its serial number)*
  Short ticket format: *prints only the measurement results and the serial number of the instrument*
- Go to **"Logo"** then press **OK** to activate or deactivate it.
  The box is ticked when the logo is activated and unticked when the logo is deactivated.
- Go to **"Operator"** to enter an operator name then press **OK**.
  Keypad is displayed on the bottom of the screen.
- Select the letters with arrow keys then press **OK**.

To go from the lower case keypad to the upper case keypad then to the numeric keypad: press the function key: **aA1**
To delete a letter press the function key ***"Delete"****.*

- Press the function key "Validate" to validate the name.
- Go to **"Header 1"** to enter the header name then press **OK**.
  Keypad is displayed on the bottom of the screen.
- Select the letters with arrow keys then press **OK**.
- Press the function key **"Validate"** to validate the header 1.
- Perform the same procedure to enter a name for the **"Header 2"**, **"Header 3"** and **"Header 4"**.
- Press **ESC** to back to the "**Configuration"** screen and to validate the modifications.

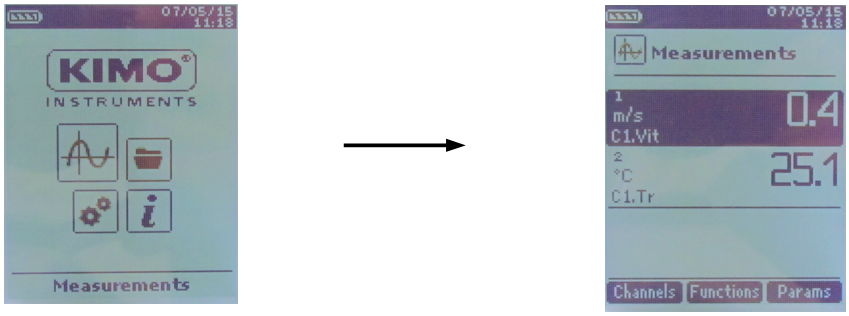
5.1 Use of the wire probes and modules

- **Connect a probe**
  - ➢ Connect the mini-DIN cable on the mini-DIN connection of the probe.
  - ➢ Connect the mini-DIN cable with the probe on the instrument.
    A beep indicates that the operation has been correctly performed.

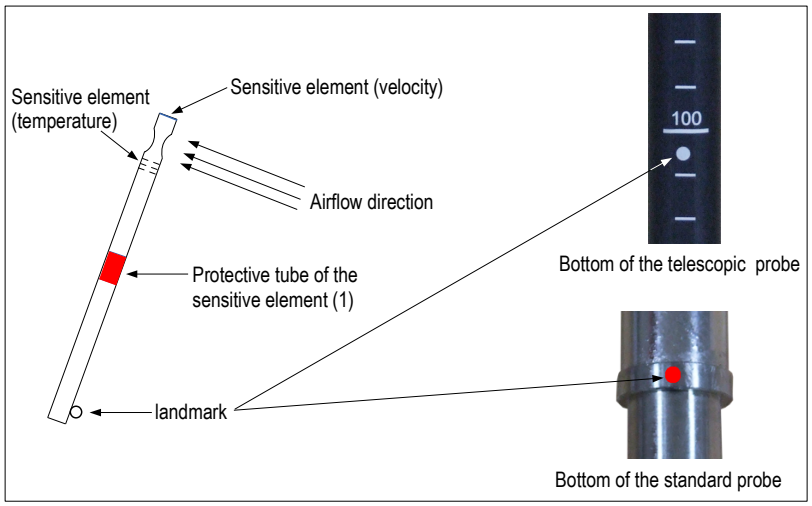
Probe connection

Instrument connection

- ➢ Go to **"Measurement"** menu from the home screen.
- ➢ Press OK
  Measurement are displayed.



5.2 Special precautions for air velocity probes

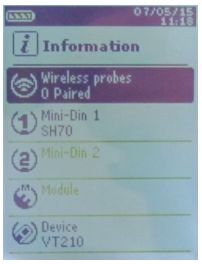


Before any use of the device with an air velocity probe, please lower the protective tube (1) of the sensitive element (except vane probe).
Always use the standard air velocity probe with the red point in front of the flow.
Always use the telescopic probe with the white point in front of the flow.

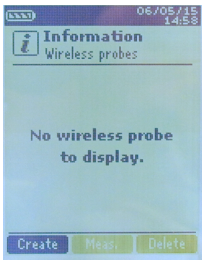
5.3 *Use of wireless probes*

- **Add a wireless probe**

With arrow keys, go to **"Information"** menu then press **OK**.

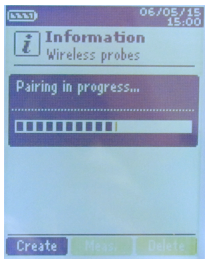


In **"Information"** menu go to **"Wireless probe"** then press **OK.**



On the bottom of the screen press the function key **"Create"**.

Turn on the wireless probe and keep it press until the light blinks



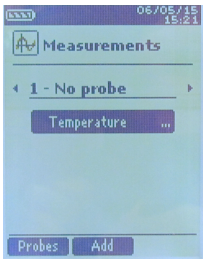
Pairing is in progress

The probe information is displayed With the function key **"Meas."** It is possible to back to the measurement screen. It is also possible to delete the wireless probe pressing the function key **"Delete"**.

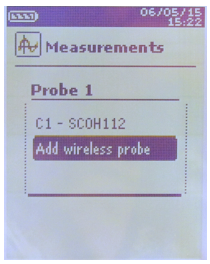
OR

With arrow keys, go to **"Measurements"** menu then press **OK**.

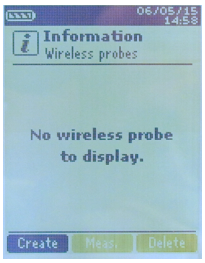
In **"Measurement"** menu, press the function key **"Channels"**.



Press the function key **"Probes".**



With the arrow keys, select **"Add wireless probe..."** then press **OK.**



On the bottom of the screen press the function key **"Create"**.

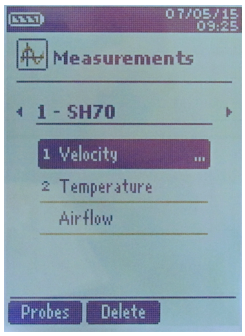
Turn on the wireless probe and keep it press until the light blinks

Pairing is in progress

The probe information is displayed With the function key **"Meas."** It is possible to back to the measurement screen. It is also possible to delete the wireless probe pressing the function key **"Delete"**.

6. CHANNEL CONFIGURATION

The channel configuration allows to modify the displaying of the measured parameters.



The instrument is on.

- With the arrow keys, go to "**Measurement"**.
- Press **OK.**
- Press the function key **"Channels"**.
  The different functions of the probe are displayed.

It is possible from the **"Channels"** menu to add or delete some measurements.

- Press the function key **"Delete"** in order to delete the selected measurement.
- Press the function key **"Add"** to display the selected measurement.
- Press **"Add"** to add a measurement on the screen (the default measurement displayed on the screen are the primary measurements).

It is possible from the **"Channels"** menu to choose the displaying order of the measurement on the screen.

- With arrow keys, select the measurement to modify and press **OK**.
- Go to the line **"Channel num."** then press **OK**.
- Select the channel number and press **OK**.

6.1 In airflow mode

Airflow:

In the **"channels"** menu:

- Select with arrow key the sub-menu **"Airflow"** then press **OK**.
- Select **"Channel num."** and press **OK.**
- Select a channel number and press **OK**.
- Go to the line **"Type"** then press **OK**.
- Select the required type: **"Rect", "Circ"** or **"K factor"** and press **OK*.**

- If **Rect** is selected, go to the line **"Rect"** then select its dimension: 100x100, 200x200, 300x300, 400x400, 500x500, 600x600, 700x700, 800x800, 900x900 and 1000x1000 mm. Press **OK** to validate.
  OR
- If **Circ**. is selected, go to the line **"Diam"**, then select its dimension : 100, 200, 300, 400, 500, 600, 700, 800, 900 and1000 mm .
  - Go to the line **"Areas"** then press **OK**.
    It is possible to change units and size.
  - Select **"Unit"** with the arrow keys then press OK. Select **mm** or **in** and press **OK**.
  - To modify areas, select with arrow keys **"Rect."** or **"Circ."** and press **OK**.
  - Select the size to modify in the list and press **OK**.
  - Set the size with arrow keys between **1 and 2500 mm** then press **OK**.
  - Press **ESC** to back to the **"Airflow"** menu**.**
  - Go to **"d/p elem."** to select the differential pressure element then press OK.
  - Select the element between **"Pitot L"** (coefficient: 1.0015), **"Pitot S"** (coefficient: 0.84), **"Debimo"** (coefficient: 0.8165) and **"Other"**

- Go to the line **"K2 fact."** and press **OK** to select or unselect the K2 factor.
  K2 factor is a coefficient which is applied to correct the flow rate only for the rectangular or circular surfaces.

- To select **"Cone"**, go to the line **"Cone"** then press **OK.**
  - Select the type of cone**: K35**, **K75**, **K120** or **K150** and press **OK**.

- Press **"Measures"** to display the measurements.

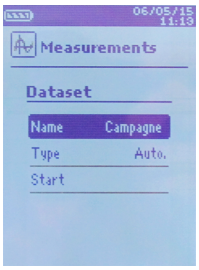
6.2 Delta T

Delta T is a function which allows to define a temperature difference calculated between two temperature channels of the same type.

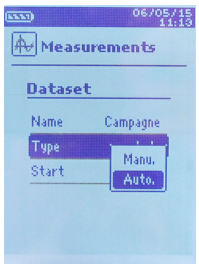
- Connect the thermocouple module then the probes.
  In the **"Channels"** menu:
- Select with arrow keys the sub-menu **"Delta T"** then press **OK**.
- Select **"Channel number"** and press **OK**.
- Select a channel number and press **OK**.
- Select the channels in which Delta T will be calculated.
- Go to **"Channel A"** with arrow keys and press **OK.**
- Select the channel T1, T2, T3 or T4 and press **OK**.
- Go to **"Channel B"** with arrow keys and press **OK.**
- Select the channel T1, T2, T3 or T4 and press **OK**.
- Press the key **"Measurement"**.
  The instrument displays the measurements.

The instrument in on.

- Select with arrows keys **"Measurement"** menu.
- Press **OK.**
- Select with arrows keys the measurement in which the dataset will be performed.
- Press **"Functions"** key then select **"Dataset"** with arrow keys and press **OK**.
  Dataset menu is displayed.
- Go to line "**Name"** with arrow keys and press **OK.**
  A keypad is displayed on the bottom of the screen.
- Select the letters with arrow keys then press **OK**.
  To go from the lower case keypad to the upper case keypad then to the numeric keypad:
- *press the function key:* **aA1**
  *To delete a letter press the function key **"Delete"**.*
- Press the function "Validate" to validate the name of the dataset.



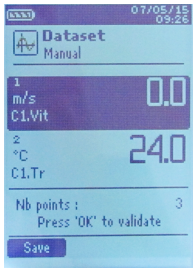
- A dataset is composed of several dated measuring points. You can choose between an automatic dataset or a manual dataset.



- Go to **"Type"** with arrow keys then press OK.
- Select **"Manu."** for manual or **"Auto."** for automatic.
  Go to **"Start"** then press **OK.**

7.1 Start and record datasets

7.1.1 Manual dataset

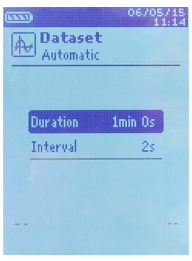


A **manual dataset** is composed of measuring points selected by the operator.

Manual mode is selected, measurements are displayed.

- Press **OK** to validate a measuring point.
- Press **OK** as many time as the required number of points.
- Press the function key **"Save"**.
  The instrument displays the measuring dataset: type of dataset, number of points, date, minimum, maximum, average and standard deviation.
  The dataset is automatically recorded.
- Press **OK** to display the graph of the results.
- Press the function key **"Zoom+"** to display the detail of the calculated points.
- Press **Esc** key to back to the dataset screen.
- Press the function key **"Print"** to print the dataset.
  Printing mode is displayed.
- Go to the line **"Channels info"** and press **OK** to print the channels on the printing ticket.
- Go to the line **"Details"** and press **OK** to print details of the dataset on the printing ticket.
- Press the function key **"Validate"** to print.
  The instrument backs to the dataset display.
- Press **Esc** to back to **"measurement"** menu.

7.1.2 Automatic dataset



An **automatic dataset** is composed of measuring points with interval of time.

Automatic mode is selected, measurements are displayed.

- Press the function key **"Duration"** to set the dataset duration.
- Press **OK** on the line **"Duration"**.

- Go to **"Hour"** with the arrow keys then press **OK**, set the duration with arrow keys then press OK**.**
- Perform the same procedure for the minutes and seconds.
- Press the function key **"Validate"** when the duration is set.
- Press **OK** on the line **"Interval"**.
- Go to **"min"** with the arrow keys then press **OK**, set the duration with arrow keys then press OK**.**
- Perform the same procedure for the seconds.
- Press the function key **"Validate"** when the interval is set.
- Press **Esc** to back to measuring dataset.
- Press the function key **"Start"** to launch the measuring dataset.
  The countdown starts.
  - It is possible to stop the measuring dataset by pressing the function key **"Stop"**.
  - Press "**Start"** to restart the dataset.
  - Press **"Duration"** to modify the duration.
  - *Press **"Save"** to save the dataset.*

  The instrument displays the measuring dataset: type of dataset, number of points, date, minimum, maximum, average and standard deviation.
  The dataset is automatically recorded.
- Press **OK** to display the graph of the results.
- Press the function key **"Zoom+"** to display the detail of the calculated points.
- Press **Esc** key to back to the dataset screen.
- Press the function key **"Print"** to print the dataset.
  Printing mode is displayed.
- Go to the line **"Channels info"** and press **OK** to print the channels on the printing ticket.
- Go to the line **"Details"** and press **OK** to print details of the dataset on the printing ticket.
- Press the function key **"Validate"** to print.
  The instrument backs to the dataset display.
  Press **Esc** to back to **"Measurement"** menu.

7.1.3 View the recorded datasets

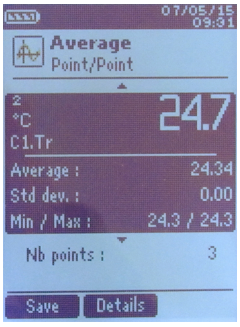
- Go to the **"Dataset"** menu with the arrow keys from the home screen.
  The different measuring datasets are displayed. They are listed by date.
- To delete all the datasets: press the function key **"Del all"**.
- To delete just one dataset: go to the dataset to delete with the arrow keys and press the function key **"Delete"**.
- A confirmation window opens: select **YES** to confirm the deletion or **NO** to cancel.

7.2 Launch and save averages

The instrument is on.
- Go to **"Measurement"** with the arrow keys.
- Press **OK.**
- Press the function key **"Functions"** then select **"Averages"** then press **OK**.
  ***"Average"** menu is displayed.*

7.2.1 Point/Point average

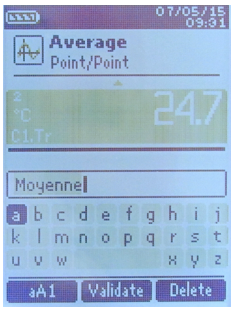
This function allows to calculate the average value of various points that you can select.



- Go to **"Point/Point"** line in the "**Averages"** menu and press **OK**.
- Press OK to add measuring points.
  The instrument displays the type of dataset, number of points, date, minimum, maximum, average and standard deviation.
- Press the function key **"Details"** to get details for each point.
- Press the function key **"Save"** to save the Point/Point average.

A keypad is displayed on the bottom of the screen.

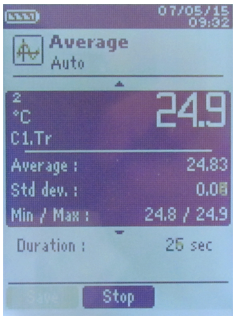
- Select the letters with arrow keys then press **OK**.
  To go from the lower case keypad to the upper case keypad then to the numeric keypad: press the function key: **aA1**
  *To delete a letter press the function key **"Delete"**.*



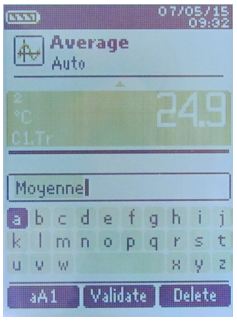
- Press the function key **"Validate"** to validate the name.
  The recap of the Point/Point average is displayed.
- Press OK to display the graph.
- Press the function key **"Zoom+"** to display the detail of the calculated points.
- Press **Esc** key to back to the dataset screen.
- Press the function key **"Print"** to print the dataset.
  Printing mode is displayed.
- Go to the line **"Channels info"** and press **OK** to print the channels on the printing ticket.
- Go to the line **"Details"** and press **OK** to print details of the dataset on the printing ticket.
- Press the function key **"Validate"** to print.
  The instrument backs to the Point/point average display.
- Press **Esc** to back to **"Measurement"** menu.

7.2.2 Automatic average

This function allows to calculate an average value that the device measured in an interval chosen time.



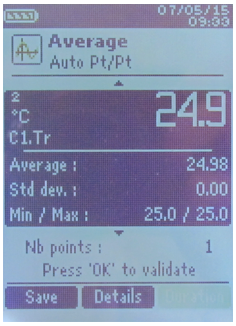
- Go to **"Automatic"** line in the "**Averages"** menu and press **OK**.
- Press the function key **"Start"** to start the measurement.
  Duration is displayed.
- Press the function key **"Stop"** to stop the measurements.
  Measurements, average, minimum and maximum values, standard deviation and duration are displayed.
- Press the function key **"Start"** to launch a new automatic average.
- Press the function key **"Save"** to save the results.
  A keypad is displayed on the bottom of the screen.



- Select the letters with arrow keys then press **OK**.
  To go from the lower case keypad to the upper case keypad then to the numeric keypad:
- *press the function key:* **aA1**
  *To delete a letter press the function key **"Delete"**.*
- Press the function key **"Validate"** to validate the name.
  The recap of the automatic average is displayed..
- Press OK to display the graph.
- Press the function key **"Zoom+"** to display the detail of the calculated points.
- Press **Esc** key to back to the dataset screen.
- Press the function key **"Print"** to print the dataset.
  Printing mode is displayed.
- Go to the line **"Channels info"** and press **OK** to print the channels on the printing ticket.
- Go to the line **"Details"** and press **OK** to print details of the dataset on the printing ticket.
- Press the function key **"Validate"** to print.
  The instrument backs to the automatic average display.
- Press **Esc** to back to **"Measurement"** menu.

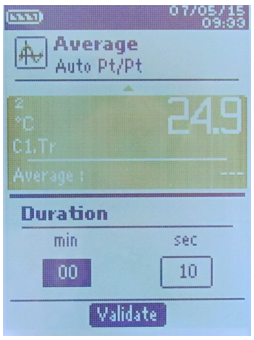
7.2.3 Automatic Point/Point average

This function allows to calculate the average value of various points, calculated themselves on a duration beforehand defined.

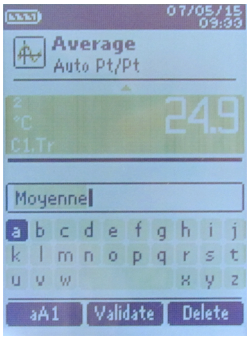


- Go to **"Auto Pt/Pt"** line in the "**Averages"** menu and press **OK**.
  A duration is displayed on the bottom right of the screen.

- Press the function key **"Duration"** to modify the duration if necessary.
- Go to **"min"** with the arrow keys then press **OK**, set the duration with arrow keys then press OK**.**
- Perform the same procedure for the seconds.
- Press the function key **"Validate"** when the interval is set.
- Press **OK** to start the measurement.
  A the end of the measuring dataset, measurements, average, minimum and maximum values, standard deviation and duration are displayed.



- Press **OK** to add a new measuring point to the calculation.
  The countdown starts.
- Press the function key **"Details"** to get details of the results.
- Press the function key "**Save"** to save the results of the automatic average.
  A keypad is displayed on the bottom of the screen.
- Select the letters with arrow keys then press **OK**.
  To go from the lower case keypad to the upper case keypad then to the numeric keypad: press the function key: **aA1**
  *To delete a letter press the function key **"Delete"**.*



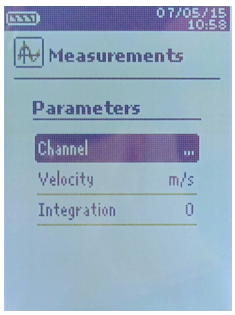
- Press the function key **"Validate"** to validate the name.
  The recap of the dataset is displayed.
- Press **OK** to display the graph.
- Press the function key **"Zoom+"** to display the detail of the calculated points.
- Press **Esc** key to back to the dataset screen.
- Press the function key **"Print"** to print the dataset.
  Printing mode is displayed.
- Go to the line **"Channels info"** and press **OK** to print the channels on the printing ticket.
- Go to the line **"Details"** and press **OK** to print details of the dataset on the printing ticket.
- Press the function key **"Validate"** to print.
  The instrument backs to the automatic point/point average display.
- Press **Esc** to back to **"Measurement"** menu.

7.3 Hold-Min./Max.

- Go to **"Measurement"** menu with the arrow keys and press **OK**.
  Measurements are displayed.
- Press OK.
  Measurements are frozen on the screen and the minimum and maximum values are displayed.

The instrument is on.

- Go to **"Measurement"** menu with the arrow keys and press **OK**.
- Select the measurement to set with the arrow keys.
- Press the function key **"Params"**.
  The different parameters are displayed.



- For all probes and modules, it is possible to modify the channel number.
- Select **"Channels"** with the arrow keys and press **OK**.
- Select **"Channel num."** and press **OK**.
  Select a channel number for the parameter, and press **OK**. This number defines the order display of the parameters.

8.1 Thermocouple module

8.1.1 Unit

- Go to the line **"Temperature"** and press **OK**.
- Select the required unit: °C or °F
- Press OK to validate the unit selection.

8.1.2 Type

- Go to the line **"Type Tc"** and press **OK**.**« »**.
- Select the type of thermocouple: K, T, J and S
- Press OK to validate.

8.1.3 Alarm

- Go to the line **"Temp.alarm"** and press **OK**.
- Select **"High alarm"** and/or **"Low alarm"** by pressing **OK**.
  It is possible to set the high and low thresholds.
- Go to the line **"High threshold"** and press **OK**.
- Set the threshold with the arrow keys between -9999.9 and 9999.9°C then press **OK**.
- Go to the line **"Low threshold"** and press **OK**.
- Set the threshold with the arrow keys between -9999.9 and 9999.9°C then press **OK**.

8.2 Climatic conditions module

8.2.1 Unit

Temperature:

- Go to the line **"Temperature"** and press **OK**.
- Select the required unit: °C or °F
- Press OK to validate the unit selection.

8.2.2 Alarm

Temperature:

- Go to the line **"Temp.alarm"** and press **OK**.
- Select **"High alarm"** and/or **"Low alarm"** by pressing **OK**.
  It is possible to set the high and low thresholds.
- Go to the line **"High threshold"** and press **OK**.
- Set the threshold with the arrow keys between -9999.9 and 9999.9°C then press **OK**.

- Go to the line **"Low threshold"** and press **OK**.
- Set the threshold with the arrow keys between -9999.9 and 9999.9°C then press **OK**.

8.3 Vane probe and hotwire probe

8.3.1 Unit

Air velocity:

- Go to the line **"Air velocity"** and press **OK**.
- Select with the arrow keys the required unit: m/s, fpm, km/h or mph.
- Press **OK** to validate the unit selection.

Temperature:

- Go to the line **"Temperature"** and press **OK**.
- Select the required unit: °C or °F
- Press OK to validate the unit selection.

Airflow:

- Go to the line **"Airflow"** and press **OK**.
- Select with the arrow keys the required unit: m^3/h, L/s, cfm or m^3/s
- Press **OK** to validate the unit selection.

8.3.2 Integration

Airflow and air velocity

- Go the line **"Integration"** and press **OK**.
- Select the integration coefficient between **0 and 9** with the arro keys.
- **Press OK to validate.**

8.3.3 Alarm

Temperature:

- Go to the line **"Temp.alarm"** and press **OK**.
- Select **"High alarm"** and/or **"Low alarm"** by pressing **OK**.
  It is possible to set the high and low thresholds.
- Go to the line **"High threshold"** and press **OK**.
- Set the threshold with the arrow keys between -9999.9 and 9999.9°C then press **OK**.
- Go to the line **"Low threshold"** and press **OK**.
- Set the threshold with the arrow keys between -9999.9 and 9999.9°C then press **OK**.

8.3.4 Normative value

Airflow

- Go to the line **"Normo Values"** and press **OK**.
- Select **None, DIN1343 or ISO2533** and press **OK**.

For a hotwire probe, it is possible to modify the atmospheric pressure.

8.3.5 Atmospheric pressure

- Go to the line **"Atmo. Press."** and press **OK**.
- Select the atmospheric pressure with the arrow keys between 800 and 1200 hPa.
- Press **OK** to validate.

8.4 Hygrometry probes

8.4.1 Unit

Temperature:

- Go to the line **"Temperature"** and press **OK**.
- Select the required unit: °C or °F
- Press OK to validate the unit selection.

8.4.2 Alarm

Temperature:

- Go to the line **"Temp. alarm"** and press **OK.**
- Select **"High alarm"** and/or **"Low alarm"** by pressing **OK**.
  It is possible to set the high and low thresholds.
- Go to the line **"High threshold"** and press **OK**.
- Set the threshold with the arrow keys between -9999.9 and 9999.9°C then press **OK**.
- Go to the line **"Low threshold"** and press **OK**.
- Set the threshold with the arrow keys between -9999.9 and 9999.9°C then press **OK**.

8.4.3 Atmospheric pressure

- Go to the line **"Atmo. Press."** and press **OK**.
- Select the atmospheric pressure with the arrow keys between 800 and 1200 hPa.
- Press **OK** to validate.

8.5 Tachometry

8.5.1 Unit

- Go to the line "**Tachometry"** and press **OK**.
- Select the required unit: tr/min or RPM.
- Press OK to validate the unit selection.

8.5.2 Type

- Go to the line **"Tacho type"** and press OK**.**
- Select the required type: Optic or Contact
- Press OK to validate the type.

8.6 Multifunction probe

8.6.1 Unit

Air velocity:

- Go to the line **"Air velocity"** and press **OK**.
- Select with the arrow keys the required unit: m/s, fpm, km/h or mph.
- Press **OK** to validate the unit selection.

Temperature:

- Go to the line **"Temperature"** and press **OK**.
- Select the required unit: °C or °F
- Press OK to validate the unit selection.

Airflow:

- Go to the line **"Airflow"** and press **OK**.
- Select with the arrow keys the required unit: m^3/h, L/s, cfm or m^3/s

- Press **OK** to validate the unit selection.

8.6.2 Atmospheric pressure

Airflow and air velocity

- Go to the line **"Atmo. Press."** and press **OK**.
- Select the atmospheric pressure with the arrow keys between 800 and 1200 hPa.
- Press **OK** to validate.

Temperature:

- Go to the line **"Temp. alarm"** and press **OK.**
- Select **"High alarm"** and/or **"Low alarm"** by pressing **OK**.
  It is possible to set the high and low thresholds.
- Go to the line **"High threshold"** and press **OK**.
- Set the threshold with the arrow keys between -9999.9 and 9999.9°C then press **OK**.
- Go to the line **"Low threshold"** and press **OK**.
- Set the threshold with the arrow keys between -9999.9 and 9999.9°C then press **OK**.

8.6.3 Integration

Airflow and air velocity

- Go the line **"Integration"** and press **OK**.
- Select the integration coefficient between **0 and 9** with the arro keys.
- Press **OK to validate.**

8.6.4 Normative values

Airflow

- Go to the line **"Norm Values"** and press **OK**.
- Select **None, DIN1343 or ISO2533** and press **OK.**

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Once returned to Sauermann, required waste collection will be assured in the respect of the environment in accordance to guidelines relating to WEEE.