



# LOG 200 / LOG 210 / LOG 220 / LOG 200 TC / LOG 210 TC / LOG 200 E / LOG 220 E

PDF data logger for temperature, humidity \*, pressure \*\* and CO<sub>2</sub>...

PDF Data logs for temperature, humidity \*, pressure \*\* and CO<sub>2</sub>...

PDF Registrar of Température, Humidity \*, Pressure \*\* and CO<sub>2</sub>...

5005-0200 / 5005-0210 / 5005-0220 / 5005-0204 / 5005-0214 / 5005-0202 / 5005-0222

\*only / only / uniquement LOG210 / LOG220 /  
LOG210 TC / LOG220 E

\*\*only / only / unique LOG220 / LOG220 E

\*\*\* only / only / unique LOG220 E

**LOG200**  
**SERIE**



Operating Instructions

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Operating Instruction

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Mode d'emploi

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FIG. A



FIG. B

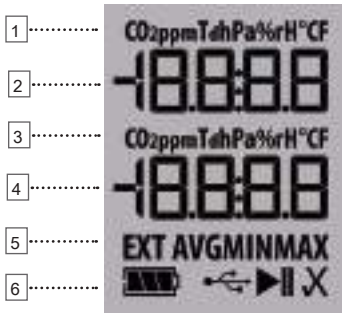
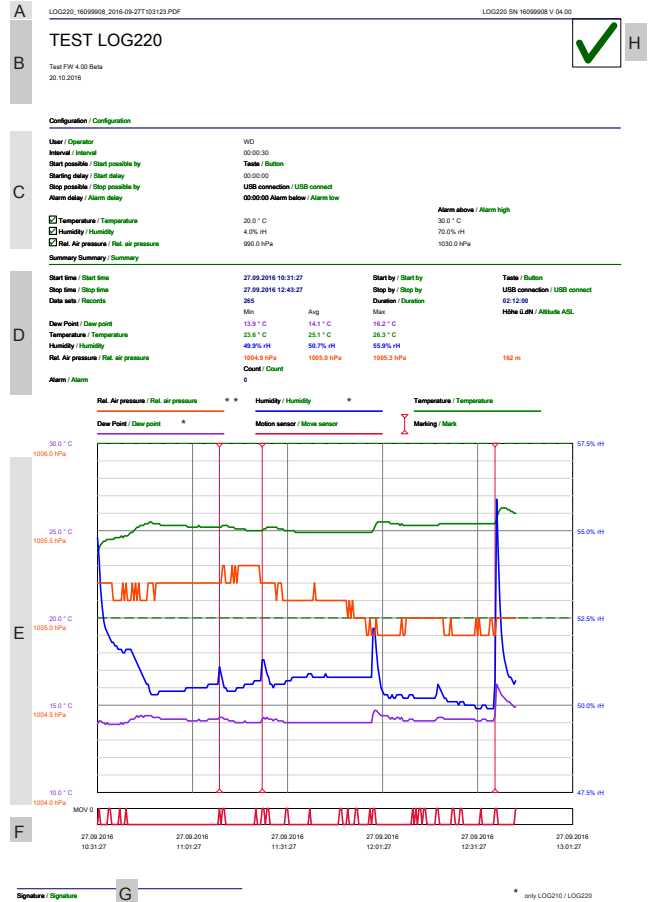


FIG. C



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## 1. Introduction

Very good customer, very good customer, heartfelt thanks for buying these products. Before commissioning, please read the operating instructions carefully. That way, you get valuable information and become familiar with the measuring device.

## 2. Note / Please note

- The contents of the packaging can be checked for insecurity and completeness.
- Remove the protective film over the display.
- To clean the instrument, do not use an aggressive cleaning agent, but only with a dry or damp cloth. There is no liquid in the interior of the dish.
- Store the measuring instrument in a dry and clean place.
- Avoid violent effects such as size or pressure.
- For no correct or incomplete measurements and no consequences, no gun exists. The liability for consequential consequential damages is excluded.
- Do not use the device in explosion-hazardous areas. Lebensgefahr!
- Do not bring the device in an environment that is hotter than 85 ° C. Lithium Battery Explosion Hazard!
- Turn off the device with no microwave radiation. Lithium Battery Explosion Hazard!

## 3. Scope of delivery

- Battery 3.6 Volt (prepared individually)
- Data loggers
- Wall bracket
- USB cover, 2x Thermocouple Type K (only TC)
- 2x Screws and Double

## 4. Scope of delivery and use

The measuring devices of the LOG200 series are for recording, alarm, visualization of **temperature, humidity \*, dew point \*. Pressure measurement values \*\* and CO<sub>2</sub> only LOG210 / 220, \*\* only LOG220, \*\*\* only LOG220 E**) suitable. LOG200 TC and LOG210 TC have 2 external inputs for thermocouples. LOG200 E and LOG220 E have an external sensor input for **temperature sensors or CO<sub>2</sub>. Humidity sensor (only LOG220 E). Areas of focus are the monitoring of storage and transport conditions or other temperature-, humidity- and / or pressure-sensitive processes.** LOG210 TC is additionally suitable for sensing wall molding. The logger has a direct USB connection and can be connected to any cable on any Windows PC, Apple computer or tablet (gfalls with USB adapter).

The display shows the current measurement values, extremes and average values per measurement size. In the status bar, information is displayed for battery status, recording mode and alarms. The green LED flashes during recording every 30 seconds. The red LED serves as an indicator of border alarms. The logger also had an internal buzzer (beep tone) that supports the operator's management and is used for alarms.

The product is suitable only for the above described range. Do not use the product otherwise, as provided in this manual. No proper repair, alteration or modification of the device is required.

## 5. Operation of the device

### 5.1 Device description

#### FIG. A ( see page 2)

- |                           |                                   |
|---------------------------|-----------------------------------|
| 1. USB protective cap     | (Position of Sensors)             |
| 2. USB connection         | 6. Battery compartment            |
| 3. LCD display see FIG. B | 7. Fashion key                    |
| 4. LED: red / green       | 8. Start / Stop key               |
| 5. Sensor compartment     | 9. closable wall mount            |
|                           | 10. External connectors (only TC) |
|                           | 11. External connector (only E)   |

#### FIG. B ( see page 2)

- |                                       |  |
|---------------------------------------|--|
| 1. Units in Measurement Value Line 1  | 6. Status bar (left to right): Battery                         |
| 2. Measurement value Line 1           | display, USB connection display,                               |
| 3. Units in Measurement Value Line 2  | Logger started, Logger configured,                             |
| 4. Measured value line 2              |  |
| 5. Extreme sail                       |  |
| EXT = external sensor (only TC) AVG = | <input checked="" type="checkbox"/> iO, (without ► symbol) and |
| average value, MIN = minimum value,   | alarm not found iO (without ►                                  |
| MAX = maximum value                   | <input checked="" type="checkbox"/> symbol)                    |

(no symbol) = current measurement value

Should the display (via Software Log Connect) be deactivated, only the battery symbol, the symbol logger started (►) and / or logger configured (||) will be displayed in the status display.

### 5.2 Installation of the device

**NOTICE! Please note our battery recommendation only: Use only the manufacturer's battery type SAFT LS 14250 3.6 Volt or DYNAMIS Lithium Battery. LI-110 1/2 AA / S respectively. vom Manufacturer release type Battery type. To commission, remove the logger from its packaging and remove the display protective film. The logger is ready to be programmed and ready for delivery. It can be used without software!**

Before starting operation, the data logger will indicate for 2 seconds FS (Factory setting) in motion or key press and then the current measurement values will be displayed for 2 minutes, then the display will switch off. Moving or key presses the measuring device again for 2 minutes in the described mode.



#### 5.2.1 Default setting on extradition

The default parameters are entered as default. With the LogConnect \* software you can change the parameters of your wishes accordingly. Memory Interval:

5 minutes LOG210 / LOG220, / LOG200 TC / LOG210 TC / LOG220 E 15 minutes LOG200 / LOG200 E

Measurement interval: during the data recording, the measurement interval corresponds to the storage interval (If the logger is not started, the logger should be measured for 15 minutes at a 6 second rate, then for 24 hours at 15 minute rate, then measured at the hourly rate. measured in 6-second clock.

|                                |                |
|--------------------------------|----------------|
| Start possible by:             | Taste          |
| Stop possible by:              | USB connection |
| Alarm:                         | out of         |
| Alarm delay:                   | 0 s            |
| Display values in the display: | in the         |
| Display Power Save Mode:       | in the         |

### 5.2.1.1 Power Save Mode for Display

On delivery, the power save mode is activated. The display switches off automatically after 2 minutes. In the background, the data logger remains active. It will be measured and / or stored according to condition. The internal clock runs. Moving the loggers will activate the display again.

### 5.2.2 Windows Software for LOG200 Series

The LOG200 series data loggers are pre-programmed and can be installed without any software!

It still provides a free software that can be downloaded directly from the following website:

See 5.2.2.1 LogConnect configuration software

#### 5.2.2.1 LogConnect Configuration Software

With this software, configuration parameters can be changed or changed. be created. For example: measurement interval, alarm limit values, start parameters (eg at a fixed time point, set / correct time, deactivate the display... etc.) One online direct aid in operation! Download the free LogConnect Software:

[www.dostmann / electronic.de -> Downloads -> Software / <Your Logger> / Software / LogConnect\\_XXX.zip](http://www.dostmann / electronic.de -> Downloads -> Software / <Your Logger> / Software / LogConnect_XXX.zip) (choose XXX latest version)

### 5.3 First Start & Record Start



Key 2 sec. Holds, current date used and time of loggers as well as signal tone for approx. 2 seconds.



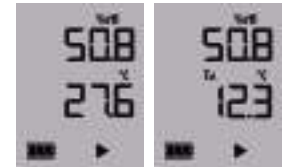
LED illuminates approx. 2 seconds green. Logger has been started.



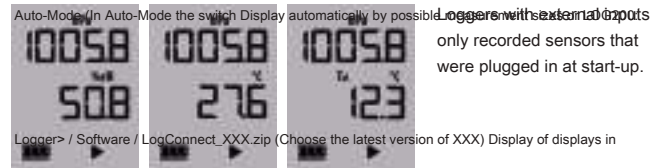
LED flashes every 30 seconds



LOG200



LOG210



LOG220

To change the configuration, the software LogConnect \* is needed.

\* Download the free LogConnect Software: [www.dostmann / electronic.de -> Downloads -> Software / <Your Logger> / Software / LogConnect\\_XXX.zip](http://www.dostmann / electronic.de -> Downloads -> Software / <Your Logger> / Software / LogConnect_XXX.zip) (Choose the latest version of XXX)

#### 5.3.1 Restart Recording

See 5.3 Starting and recording first. In the default setting, the logger is started via the Start / Stop button at the push of a button and is stopped via USB connection. These values were automatically graphically represented in PDF.

#### NOTICE!

When you start again, the existing PDF file will be overwritten.

**Important!** Secure the extracted PDF files on your PC. If you open LogConnect when you connect the loggers to the PC and activate AutoSave (default), this automatically saves the measurement data.

### 5.3.2 Memory used (%), date, time displayed



By briefly pressing the start key (after logger start), it will be in row 1 MEM and in row 2 in percent of the previously stored memory for 2 sec. display, then the image changes and it is displayed for 2 sec. Date and time displayed.

### 5.4 Stop recording / erase PDF (default setting)



Connect loggers with USB interface. Signalton pours for approx. 1Sec.

LED blinks green until the PDF is displayed (can take up to 40 seconds).

The symbol ► in the status bar is not displayed anymore. The logger has stopped! Signal tone is on and LED lights green.



Logger is displayed as a changeover data carrier LOG200 / LOG210 / LOG220 / LOG200 TC / LOG210 TC / LOG200 E / LOG220 E.



Open and secure PDF.

**PDF will be overwritten at the next launch!**

**NOTICE!** At the logger-start, the Extreme (Max- and Min-Value), as well as the average value, were reset!

#### 5.4.1 Stop recording via key or time point

is customizable via Software LogConnect.

In the corresponding setting, the Start key is also the Stop key.

### 5.5 PDF Statement (Fig. C)

Filename: eg

LOG220\_16099908\_2016-09-27T103123.PDF LOG220:

|   |                                      |  |
|---|--------------------------------------|--|
| A | 16099908:<br>2016-09-27:<br>T103123: | Dish<br>Serial no.<br>Begin recording (date)<br>Time: HHMMSS |
| B | Description:                         | can only be described with the LogConnect * software.        |
| C | Configuration:                       | preset parameters  |
| D | Summary:                             | Overview of knife results                                    |
| E | Graphics:                            | Visual representation of the measurement values              |
| F | PURPLE:                              | Tells when whether Logger is moving                          |
| G | Signature:                           | In case of need to understand PDFs.                          |
| H | ✓: Measurement OK                    | ✗ : Measurement is not in order                              |

\* Download the free LogConnect Software: [www.dostmann.com/electronic.de](http://www.dostmann.com/electronic.de) -> Downloads -> Software / <Your Logger> / Software / LogConnect\_XXX.zip (choose XXX latest version)

### 5.6 USB connection

To configure or evaluate the data loggers, the data logger must be connected to the USB connection of your PCs. For configuration read the corresponding section in the manual or in the help text of the LogConnect software.

## 5.7 Display modes and mode key: EXT, AVG, MIN, MAX



The first line shows the current measurement value of the main measurement channels: LOG200: Temperature, LOG210: Humidity, LOG220: Air pressure, LOG200 TC / LOG210 TC: External temperature 1, LOG200 E: Internal temperature, LOG220 E: Air pressure

The display of the second row depends on the selected mode. There are two display modes:

### 1. AUTO MODE ( Preset for LOG200, LOG210, LOG220) - the second line alternates every 3 seconds :: LOG200:

Minimum (MIN) / Maximum (MAX) / Average (AVG) LOG210:  
Temperature and Dew Point (Td)

LOG220: Humidity, temperature and dew point LOG200 TC: Internal temperature and external temperature 2

LOG210 TC: Internal Temperature, Internal Humidity, Internal Dew Point, External Temperature 2 LOG200 E: Current Temperature / Minimum (MIN) / Maximum (MAX) / Average (AVG) temperature (external) and minimum (MIN) / maximum (MAX) / average (AVG) temperature (internal)

LOG220 E: Current measurement values of external connected sensors / current measurement values internal measurement channels humidity, temperature, dew point You recognize the value in the physical unit over the measurement value (° C / ° F = temperature, Td + ° C / ° F = dew point, % rH = humidity, hPa = pressure, ppm = CO<sub>2</sub>)

as well as the additional symbols <no symbol> = current measurement value, MIN = minimum, MAX = maximum, AVG = average, EXT = external channel 2, EXT flashing = external channel 1.

The AUTO mode gives you an overview of the measurement values of all channels in a short time. By pressing the MODE key (left key) they go from AUTO mode to manual mode:

### 2. MANUAL Mode ( Preset for LOG200 TC, LOG210 TC) - the MODE key flashes in the second row through all available measurement channels in the order of current measurement value (no symbol), minimum (MIN), maximum (MAX), average (AVG). Details:

- For the main mass channel in the upper row, only MIN, MAX, AVG are displayed.
- For LOG200 TC and LOG210 TC, MIN, MAX, AVG are indicated with a flashing EXT for the external sensor 1 (main channel) and a standing EXT for the external sensor 2.

The manual mode allows the display of an optional measurement channel in addition to the main measurement channel, for example, the maximum pressure for the current pressure. Press and hold the MODE key until the display AUTO appears to return to AUTO Mode.



### 5.7.1 The Special Function of the Mode Key

#### 5.7.1.1 Inserting Markers

At particular events during the recording to hold, the sex Brands are set. To place a marker (marker) in the graphics of the PDFs, the mode key must be held for 2.5 seconds (see marker on the PDF image Fig.C). The successful marking is confirmed by a short signal tone. The marking will then be stored with the next measurement (note the interval).

#### 5.7.1.2 Removing the MAX-MIN display memory

The logger has a MIN / MAX function for holding the extreme values over a given time frame. Press and hold the MODE key for 5 seconds until a small tune is reached. Damit is reset to the measurement period. They can, for example, capture the highest / lowest daytime temperatures. Die MIN / MAX Function works independently of Log operation.

#### Please note:

- At the start of recording, the MIN / MAX memory is reset to indicate the MIN / MAX / average values appropriate for recording.
- During the recording, when setting the MIN / MAX / average values, a single mark will be set.

## 5.8 Battery change / battery status display

**NOTICE!** Please note our battery recommendation only: Use only the manufacturer's battery type SAFT LS 14250 3.6 Volt or DYNAMIS Lithium Battery. LI-110 1/2 AA / S respectively. vom Manufacturer release type Battery type.





Turn the battery cover to the bottom 20 ° to the left, the battery compartment opens.



Remove empty battery and new battery was pictured.



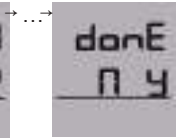
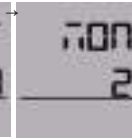
Battery change OK: Both LEDs illuminate for approx. 1 sec. on and one signal tone caught on.

- The empty battery icon  says that you have that battery in short interchangeable mice. They can now about Carry out correct measurements for 10 hours.
- The battery symbol indicates up to 3 segments.
- If the battery symbol on the display is blinking  then rich it Battery charge is no longer available for measurements.

**NOTICE!** After the battery change, please check the clock (internal clock) and correct it if necessary. See 5.2.2.1 Log Connect configuration software or 5.8.1 Set date / time after battery change by keyboard

## 5.8.1 Set date / time to battery change by keyboard

After a battery change or a power failure, the device automatically goes into a special mode for date / time / interval.



Can you correct the date? N = No by pressing the Mode key, the logger returns to Normal Mode. Or select Y = Yes by pressing the start key, the following sequence begins:

Mode key increases the respective value, Start key confirms and jumps to the next value. After date-time query, memory interval (INT) can be changed.

N = No... acquires setting Y = Yes, new settings are stored

## 5.9 Alarm signals in boundary overrides



Signal tone caught every 30 seconds, for 1 sec. and the LED flashes red (3 sec.). Those boundary values were set via Software LogConnect \*. If a limit value is exceeded, an X will appear in the right, lower display corner. Along with the corresponding PDF print, the alarm is set-

if described and visible. Only by restarting the loggers will X be removed on display! Logger not in recording mode



LED flashes every 4 sec. rot. Battery change. LED blinks many red hardware errors!

\* Download the free LogConnect Software: [www.dostmann/electronic.de](http://www.dostmann/electronic.de) -> Downloads -> Software / <Your Logger> / Software / LogConnect\_XXX.zip (choose XXX latest version)



## 6. Technical data

|  |   |  |               |
|--|---|--|---------------|
| <b>Temperature</b>                         |   | <b>Rel. Humidity only LOG210 / LOG220 / LOG210 TC / LOG220 E</b> |               |
| Area of measurement:                       | -+ 40 ° C   | Area of measurement:   | 0..100% rF    |
| Resolution:                                | 0.1 ° C   | Resolution:  | 0.1% rF       |
| <b>Air pressure only LOG220 / LOG220 E</b> |   | <b>CO<sub>2</sub> only LOG220 E</b>                              |               |
| Area of measurement:                       | 300-1100hPa   | Area of measurement:   | 400-10000 ppm |
| Resolution:                                | 0.1 hPa   | Resolution:  | 1 ppm         |
| <b>Memory:</b>                             |   |  |               |
| LOG200:                                    | 150,000 data sets (temperature and motion)  |  |               |
| LOG210:                                    | 100,000 data sets (temperature, relative humidity, dew point and motion)                            |  |               |
| LOG220:                                    | 60,000 data sets (temperature, relative humidity, pressure, dew point and motion)                   |  |               |
| LOG200 TC:                                 | 60,000 data sets<br>(Temperature + 2 external thermocouples T1, T2 + movement)                      |  |               |
| LOG210 TC:                                 | 60,000 data sets (humidity + temperature + dew point + 2 external thermocouples T1, T2 + movement)  |  |               |
| LOG200 E:                                  | 100,000 data sets (temperature and motion)  |  |               |
| LOG220 E:                                  | 60,000 data sets (temperature, relative humidity, pressure, CO <sub>2</sub> Dew Point and Movement) |  |               |
| <b>Interface:</b>                          | USB (integral)  |  |               |
| <b>Measurements:</b>                       | 91.5 x 42 x 20 mm   |  |               |
| <b>Weight:</b>                             | approx. 83 g incl. Wall bracket   |  |               |
| <b>Battery:</b>                            | 1 x 3.6 Volt Lithium ½ AA   |  |               |

### 6.1 Safety information

- Keep the batteries and devices out of the reach of children.
- Batteries contain harmful acids and can be life-threatening if swallowed. If a battery is swallowed, this can lead to severe internal damage and to death within 2 hours. If you suspect a battery could be swallowed or otherwise in the body, seek medical help immediately.
- Do not fire, short-circuit, recharge, or recharge batteries. Explosions danger!

- To avoid running out of batteries, weak batteries should be replaced quickly. Never use old and new batteries or batteries of different types at the same time.
- Wear chemical-resistant protective gloves and goggles when handling batteries that have run out!

### 7. Sign Statement



With this sign, we confirm that the product meets the requirements set out in the EC guidelines and is to examine the established test procedures.

### 8. Disposal

This product will be repaired using more valuable materials and components that can be recycled and reused. Batteries and rechargeable batteries are not allowed in the garbage! As a consumer you are



legally obligated, used batteries and rechargeable batteries for environmentally friendly disposal during trade or appropriate collection according to national or local regulations. The designations for contained heavy metals are: Cd = Cadmium, Hg = Mercury, Pb = Lead

This device is in accordance with the EU directive on the disposal of electrical and electronics devices (WEEE).



This product must not be disposed of with the household garbage. The user is obliged to submit the Altgerät to the environmentally friendly disposal of a selected facility for the disposal of electrical and electronics equipment.

### 9. Labeling only LOG200

CE marking, EN 12830, EN 13485, Suitability for storage (S) and transport (T) for food and distributor (C), accuracy class 1 (-30 .. + 70 ° C). In accordance with EN 13486, we recommend an annual recalibration.

### 10. Storage & Cleaning

The device is stored at room temperature (10 ... 40 ° C). Cleaning Only use a soft cotton cloth with water or medical alcohol.

Do not immerse the device in liquids.

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## 1. Introduction

Dear Sir or Madam,

Thank you very much for purchasing one of our products. Before operating the data logger please read this manual carefully. You will get useful information for understanding all functions.

## 2. Kindly note / Safety Instructions

- Check if the contents of the package is undamaged and complete.
- Remove the protection foil above the display.
- For cleaning the instrument please do not use an abrasive cleaner only a dry or moist piece of soft cloth. Do not allow any liquid into the interior of the device.
- Please store the measuring instrument in a dry and clean place.
- Avoid any force like shocks or pressure to the instrument.
- No responsibility is taken for irregular or incomplete measurement values and their results, the liability for subsequent damages is excluded!
- Do not use the device in explosive areas. Danger of death!
- Do not use the device in an environment hotter than 85 ° C! The lithium battery may explode!
- Do not expose the unit to microwave radiation. The lithium battery may explode!

## 3. Delivery contents

- Data logging
- Wall holder
- Battery 3.6 Volt (already inserted)
- USB protective cap, 2 x thermocouple type K (TC only)
- 2x screws and dowels

## 4. Equipment and usage

LOG200 / LOG210 / LOG220 series loggers are suitable for recording, alarm tracking and display of **temperature, humidity \*, dew point temperature \*, barometric \*\* and CO<sub>2</sub> only LOG210 / 220, \*\* only LOG220, \*\*\* only LOG220 E** measurements. LOG200 TC and LOG210 TC feature 2 external inputs for thermocouples. The LOG200 E and LOG220 E feature one external input for temperature or CO<sub>2</sub>. Humidity probes (LOG220 E only). Areas of application include monitoring of storage and transport conditions or other temperature, moisture and / or pressure-sensitive processes. LOG210 TC additionally supports wall mold detection. The logger has a built-in USB port and can be connected without cables to all Windows PCs, Apple computers or tablets (USB adapter may be required). The USB port is protected by a plastic cap. Beside the actual measurement result, the display shows MIN-MAX and AVG measurements of each measurement



### 5.2.1.1 Power-Save Mode for Display

The Power-Save Modes is activated by default. The display switches off when for 2 minutes no button has been pressed or the instrument has not moved. The logger is still active, only the display is switched off. The internal clock runs. Moving the logger will reactivate the display.

### 5.2.2 Windows Software for Log200 Series

The instruments of series Log200 are already preset and ready for launch. It can be used without any software! However, there is a Windows Application free for download. Please note the free-to-use link:

see below 5.2.2.1 Log Connect Configuration Software

#### 5.2.2.1 Log Software Configuration Software

With this software, the user can change configuration parameters like measuring interval, start delay (or other start parameter), creating alarm levels or changing the internal clock time. The Software Log Connect contains an online help. Download free LogConnect software:

[www.dostmann-electronic.de/home.html](http://www.dostmann-electronic.de/home.html) -> Downloads -> Software / <your logger> / Software / LogConnect\_XXX.zip (XXX choose latest version)

### 5.3 First start / start recording



Press button for 2 seconds, beeper sounds for 1 second, the actual date and time will be displayed for 2 further seconds.



LED lights green for 2 seconds - logging has started!



LED blinks green every 30 sec.

Display in Auto-Mode (Display shows all measurement channel in a 3 second sequence)



LOG 200



LOG 210



LOG 220



Loggers with external inputs only record the sensors that are already attached at the start of logging.

By using the LogConnect software, the presets can easily be changed.

\* Download free LogConnect software:

[www.dostmann-electronic.de/home.html](http://www.dostmann-electronic.de/home.html) -> Downloads -> Software / <your logger> / Software / LogConnect\_XXX.zip (XXX choose latest version)

#### 5.3.1 Restart recording

See 5.3. First start / start recording. The logger is started by default by button and stopped by USB port plug-in. The measured values are plotted automatically to the PDF file.

**NOTE:** When you restart the existing PDF file is overwritten.

**Important!** Always save the generated PDF files to your PC. If LogConnect is open when connecting the loggers and AutoSave is selected in Settings (Default), the log results are copied to a backup location immediately by default.

### 5.3.2 Display used memory (%), date and time



After pressing the start button while the logger is recording, the first line shows MEM and the second line (line 2) displays the used memory percentage (%). Afterwards the logger displays date and time for 2 seconds.

### 5.4 Stop recording / create PDF



Connect logs two to a USB port. Beeper sounds for 1 second. LED blinks green until result PDF is created (can take up to 40 seconds). The symbol ► disappears in the status line. Now the logger is stopped.



The Logger is shown as removable drive LOG200 / LOG210 / LOG220 / LOG200 TC / LOG210 TC LOG200 E / LOG220 E



View PDF and save. PDF will be overwritten with next log start!

**Note:** With the next recording the Extrema (Max and Min value), and the AVG value will be reset.

#### 5.4.1 Stop recording by button.

To stop the Logger via button it is necessary to change the configuration by Software LogConnect. If this setting is done the start button is also the stop button.

### 5.5 Description of PDF result file (see Fig. C)

Filename: eg

LOG220\_16099908\_2016-09-27T103123.PDF LOG220:

|          |  |  |
|----------|--|--|
| <b>A</b> | 16099908:<br>2016-09-27:<br>T103123:       | Device<br>Serial<br>Start of recording (date)<br>hour: HHMMSS    |
| <b>B</b> | Description:                               | Log run info, edit with LogConnect * software                    |
| <b>C</b> | Configuration:                             | preset parameters  |
| <b>D</b> | Summary:                                   | Overview of measurement results                                  |
| <b>E</b> | Graphics:                                  | Diagram of measured values                                       |
| <b>F</b> | PURPLE:                                    | Indicates whether instrument has been moved (with date and time) |
| <b>G</b> | Signature:                                 | Sign PDF if required.  |
| <b>H</b> | ✓: Measurement OK    ✗: Measurement failed |  |

\* Download free LogConnect software:

[www.dostmann-electronic.de/home.html](http://www.dostmann-electronic.de/home.html) -> Downloads -> Software / <your logger> / Software / LogConnect\_XXX.zip (XXX choose latest version)

### 5.6 USB Connection

For configuration the instrument has to be connected to the USB port of your Computer. For configuration please read the chapter and use the online direct help of the LogConnect software.

## 5.7 Display Modes and Mode - Button: EXT, AVG, MIN, MAX



The first line always shows the current measurement value of the main measurement channel: LOG200: Temperature, LOG210: Humidity, LOG220: Air pressure, LOG200 TC / LOG210 TC: External temperature 1, LOG200 E: Internal temperature.

LOG220 E: Internal air pressure. The second line display depends on the selected mode. There are two display modes:

**1. AUTO mode ( default for LOG200, LOG210, LOG220) - the second line shows alternating values each 3 seconds: LOG200:**

Minimum (MIN), maximum (MAX) / average (AVG) or temperature LOG210:  
Temperature and dewpoint

LOG220: Humidity, temperature and dewpoint LOG200 TC: Internal temperature and external temperature 2 LOG210 TC: Internal temperature, internal humidity, internal dewpoint and external temperature 2 LOG200 E: current temperature Minimum (MIN), maximum (MAX) / average (AVG) or

temperature (external) and Minimum (MIN), maximum (MAX) / average (AVG) or temperature (internal)

LOG220 E: current measurements of connected external sensors / current measurements of internal humidity, temperature and dewpoint.

The displayed measurement channel can be identified by the physical unit ( $^{\circ}\text{C}$  /  $^{\circ}\text{F}$  = temperature, Td +  $^{\circ}\text{C}$  /  $^{\circ}\text{F}$  = dewpoint, % rH = humidity, hPa = air pressure, ppm = CO<sub>2</sub>) along with the extension symbols <no symbol> = current measurement value, MIN = Minimum, MAX = Maximum, AVG = average.

AUTO mode provides a quick overview of the current measurement values of all channels. Pressing the MODE key (left key) leaves AUTO mode and enters MANUAL mode:

**2. MANUAL mode (default for LOG200 TC, LOG210 TC) - MODE key flips the second line through all available measurement values, following the sequence current value (no symbol), minimum (MIN), maximum (MAX), average (AVG). LOG200 TC and LOG210 TC show MIN, MAX and AVG with a blinking EXT for external sensor 1 (main measurement channel) and a steady EXT for external sensor 2.**

MANUAL mode is handy to view any meas channel along with the main meas channel. Eg. air pressure maximum vs. main channel air pressure. Hit MODE key until display shows Auto to resume AUTO mode.



## 5.7.1 Special function of Mode Button

### 5.7.1.1. Set marker

To mark special events during the record, markers can be set. Hit MODE key for 2.5 seconds until a short beep sounds (see mark on PDF Fig. C). The marker is stored along with the next measurement (respect record interval!).

### 5.7.1.2 Reset MAX-MIN buffer

The logger has a MIN / MAX function to record extreme values for any period. Hit the MODE key for 5 seconds, until a short melodic sounds. This restarts the measurement period. One possible use is the finding of day and night external temperatures. The MIN / MAX function runs independent of data recording. Please note:

- At the start of record, the MIN / MAX / AVG buffer is also reset to show MIN / MAX / AVG values that fit the recording
- During recording, resetting the MIN / MAX / AVG buffer will force a marker.

## 5.8 Battery replacement / Battery status indication

**ATTENTION!** Please observe our battery recommendation strictly. Use only the LS 14250 3.6 volt battery from the manufacturer SAFT or DYNAMIS Lithium Batt. LI-110 1/2 AA / S, respectively, only batteries authorized by the manufacturer.





To replace the battery, please open the battery cover on the rear side. Therefore you have to turn the battery cover 20 ° to the left. Use a coin to open / close the battery lid.



Remove empty battery and insert new battery as shown.



Battery change ok: both LEDs light for 1second, beep sounds.

- The empty battery symbol indicates that the battery needs to be replaced. Device will only work correctly for 10 more hours. 
- The battery symbol indicates the battery status between 0 and 3 segments. 
- If battery symbol is flashing, the battery is empty. The instrument does not operate!

**Note!** After replacing the battery please check the correct time and date of the internal clock. For setting the time see next chapter or 5.2.2.1 LogConnect configuration software.

### 5.8.1 Set Date and Time after battery replacement via button

After battery replacement or power, the instrument automatically interrupts changes in configuration mode to set date, time and interval. If no button will be pressed for 20 seconds the unit proceeds with the last date and time in memory:



Press N =  
No change of date and time, or Press Y = Yes for changing date and time

Press Mode button to increase the value, press Start button to jump to the next value.  
After date-time request the Interval (INT) can be changed.

Press N = No to abort changes, or Press Y = Yes to confirm changes

### 5.9 Alerts



Beeper sounds once every 30 seconds for 1 second, red LED blinks every 3 seconds - measured values exceed selected alarm settings (not with default settings). LogConnect can set alarm levels via Software.

If an alarm level has occurred an X will be displayed on the display bottom. On the corresponding PDF report the alarm status will be indicated, too. If the measurement channel is displayed where an alarm occurred the X on the right bottom of the display is blinking.

The X disappears when the instrument has been restarted for recording!



Red LED blinks once every 4 seconds. Replace battery.

Blinks twice or more each 4 seconds. Hardware fault!

\* Download free LogConnect software:

[www.dostmann-electronic.de/home.html](http://www.dostmann-electronic.de/home.html) -> Downloads -> Software / <your logger> / Software / LogConnect\_XXX.zip (XXX choose latest version)

## 6. Technical data

### Temperature

Measuring range: -+ 40 ° C  
Resolution: 0.1 ° C

### Rel. Humidity only LOG210 / LOG220 / LOG210 TC / LOG220 E

Measuring range: 0..100% rF  
Resolution: 0.1% rF

### Pressure only LOG220 / LOG220 E

Measuring range: 300-1100hPa  
Resolution: 0.1 hPa

### CO<sub>2</sub> only LOG220 E

Measuring range: 400-10000 ppm  
Resolution: 1 ppm

### Memory:

LOG200: 150,000 measurements (Temp. + Exercise)  
LOG210: 100,000 data set (Temp., Humidity, dewpoint and motion)  
LOG220: 60,000 data sets (Temp., Humidity, pressure, dewpoint and motion)  
LOG200 TC: 60,000 measurements (Temp. + 2 external thermocouples T1, T2 + motion)  
LOG210 TC: 60,000 measurements (Temp., Humidity, dewpoint, + 2 external thermocouples T1, T2 and motion)

LOG200 E: 100,000 measurements (Temp. + Exercise)

LOG220 E: 60,000 measurements (Temp. Humidity, pressure, CO<sub>2</sub> dew point and motion)

**Interface:** USB (integral)

**Dimensions:** 91.5 x 42 x 20 mm

**Weight:** Approx. 83 g, Incl. Wall holder

**Battery:** 1 x 3.6 Volt Lithium ½ AA

### 6.1 Risk of injury:

- Keep these devices and the batteries out of reach of children.
- Batteries contain harmful acids and may be hazardous if swallowed. If a battery is swallowed, this can lead to serious internal burns and death within two hours. If you suspect a battery might have been swallowed or otherwise caught in the body, seek medical help immediately.

- Batteries must not be thrown into a fire, short-circuited, taken apart or recharged. Risk of explosion!
- Low batteries should be changed as soon as possible to prevent damage caused by leaking. Never use a combination of old and new batteries together, nor batteries of different types.
- Wear chemical-resistant protective gloves and safety glasses when handling leaking batteries.

## 7. Explanation of symbols



This sign certifies that the product meets the requirements of the EEC directive and has been tested according to the specified test methods.

## 8. Waste disposal

This product has been manufactured using high-grade materials and components that can be recycled and reused



Never dispose of empty batteries and rechargeable batteries in household waste.

As a consumer, you are legally required to take them to your retail store or to an appropriate collection site depending on national or local regulations in order to protect the environment.

The symbols for the heavy metals contained are: Cd = cadmium,  
Hg = mercury, Pb = lead



This instrument is labeled in accordance with the EU Waste Electrical and Electronic Equipment Directive (WEEE). Please do not dispose of this instrument in household waste. The user is required to take end-of-life devices to a designated collection point for the disposal of electrical and electronic equipment, in order to ensure environmentally compatible disposal.

## 9. Marking only LOG200

CE conformity, EN 12830, EN 13485, Suitability for storage (S) and transportation (T) for food storage and distribution (C), Accuracy classification 1 (-30 .. + 70 ° C), according to EN 13486 we recommend a recalibration once a year.

## 10. Storage and cleaning

It should be stored at room temperature. For cleaning, use only a soft cotton cloth with water or medical alcohol. Do not submerge any part of the thermometer.

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## 1. Introduction

Nous vous remercions pour l'achat de notre produit. Avant de l'utiliser, lisez le manuel et le manuel de l'utilisateur. Vous y trouverez des informations utiles sur les fonctions.

## 2. Conseils / Consignes de Sécurité

- Vérifiez que le contenu du colis est complet et incontestable.
- Fournir la protection de couplage avec le détachement et la lumière LED.
- Pour nettoyer l'appareil, ne pas utiliser de produits abrasifs; utilisez un chiffon doux sec ou humide.  
Ne pas laisser entrer de liquide dans l'appareil.
- En stock, la mesure de durée est inchangée et est.
- Mettre l'appareil à l'abri de choc et de pression.
- Maintenant, certains sont non comptabilisés et la mesure est irrégulière ou incomplète et les résultats sont éducatifs; notre responsabilité pour les dommages consécutifs est exclue!
- N'utilisez pas l'appareil dans des zones explosives. Danger de mort!
- Utiliser l'appareil dans un environnement de 85 ° C. Laissez la batterie et le lithium exploser!
- N'exposez pas l'appareil au rayonnement micro-onde. Laissez la batterie et le lithium exploser!

## 3. Contenu

- Register the data
  - Pile 3.6 volts (inclue)
- Support mural
  - Hood protection USB 2 thermocouples, type K (TC uniquement)
  - 2 piles rechargeables

## 4. Distribution et utilisation

Lisez le manuel de mesure de la série LOG200 pour l'adéquation de la mesure, la lecture, la visualisation de la température, l'humidité et la valeur de mesure de l'air \*\* (\* Exclusivité de la LOG210 / 220, \*\* et la LOG220). LOG200 TC et LOG210 TC ont 2 entrées externes pour les thermocouples. LOG200 E et LOG220 ont des entrées séparées pour la température CO<sub>2</sub>, l'humidité (régulation LOG220 E). Les mesures suivent la situation géographique et les conditions de transport ou du processus sont sensibles à la température.

à l'humidité et / ou à la pression. La LOG210 TC est un excellent choix pour la formation de moisissures sur les murs. Rester connecté à un port USB directement à un PC qui fonctionne sur un système Windows, des tablettes ou des régulateurs Apple (dans le cas d'un adaptateur USB) sans aucun besoin de câble. Et parce que la valeur du message sur l'écran, l'écran sur les extrêmes et la moyenne de la grande mesure. Lisez les informations sur le niveau de la batterie, le mode de mesure et les détails des écrans. La lumière verte clignote tous les 30 secondes pendant la mesure. La lumière rouge sert à indiquer le seuil d'alarme. Le registre dispose d'un buzzer interne (Piepton), qui aide à l'utilisation et à l'alerte.

Le produit est conçu exclusivement pour l'utilisation actuelle. Ne pas utiliser l'appareil autrement que ce qui est décrit ici. La réparation, l'adaptation ou les modifications de l'appareil ne sont pas autorisées.

## 5. Manipulation de l'appareil

### 5.1 Description de l'appareil

#### FIG. A ( Voir page 2)

1. USB protection hood (Position of captain)
2. Port USB
3. Display LCD cf. FIG. B
4. LED: rouge / vert
6. Battery compartment
7. Bouton Mode
8. Bouton Désarmement / Arrest
9. Support mural confidentiel
10. external captain (TC uniquement)
11. external captain (E uniquement)

#### FIG. B ( Voir page 2)

1. Unity of the value measure 1
2. Value mesurée ligne 1
3. Unite the value measure 2
4. Value measurement ligne 2
5. Equation of the extreme EXT = external captain (TC uniquement) AVG = average, MIN = value minimum, MAX = value maximum (adjust the symbol) = value of the current measurement
6. Barre de statut (de la gauche vers la droite): Battery compartment, Port USB, Registrar and marche, Configurator,
  - ☐ iO, (sense ► Symbols) an alarm product sense iO (sense ►
  - ☒ Symbol)

Affiliate Displays (via Log Logiel).

## 5.2 Mise en service de l'appareil

**Attention!** For added convenience, attention is paid to the use of the battery: Utilize battery exclusivity for fabrication of type SAFT LS 14250 3.6 Volts, or DYNAMIS Lithium Batt. LI-110 1/2 AA / S old types of batteries approved by the manufacturer. Avant the utilization of the I registrar, veuillez le retir de son packaging, and retir de le film de protection de l'aficheur.

The registrar is the program of the sorting service and is ready for utilization. The only way to make instant use of logic! Avant the mise en service initial, the store poster, après l'avoir secué ou appuyé sur les boutons pendant 2 seconds, FS (Factory setting), ensuite poster of the vales de mesure, fin il s'éteint. The measurement reveals a configuration that is new to the décor and securely connected to the boutons pendant 2 minutes



### 5.2.1 Configuration by default at the livraison

The parameters by default (default) see the present commute suit: You can change the parameters of your guise in the logic logic LogConnect. Intervals of the cleaners:

5 minutes to LOG210 / LOG220, / LOG200 TC / LOG210 TC / LOG220 E 15 minutes to LOG200 / LOG200 E

Plage de mesure:

Lors de l'enregistré des données, la plage de mesures correspond to the intervals of the dairy gardens (lorsque I registrar n'est pas démarré, il prend des mesures toutes les 6 sec. Pendant 15 minutes, puis toutes les 15 minutes pendant 24 heures, a nice après chaque une heure. An appuyant sur n'importe quel bouton ou and secouant I registrar, les mesures sont reprises toutes les 6 seconds

Determination possible pair: Bouton  
Arrest possible couple: Connexion USB  
Alarms: arrêtée  
Retarded the alert: 0 s  
Display of value measurement: a march Mode of display Power-Save: and a march

### 5.2.1.1 Mode of Displaying Power-Save

in the live season, the Power-Save mode is the most active. The display of automation and many après 2 minutes. Cependant, the registrar of the last remaining activist and career plan, ie, the measurements taken at various prices in the case and / or sauvegardées. The watch internal continues the function. Movement of the registrar permits the reactive display.

### 5.2.2 Logical Windows for the LOG200 Series

Read the register of the log200 data on the program and its function sans logics!

Cependant, il ya deux products logicians gratuits quon direct direct telecharger on the part of the site:

Voir ci-dessous 5.2.2.1 LOGICIAL CONFIGURATION LogConnect

### 5.2.2.1 LOGIC THE CONFIGURATION LogConnect

in the live season, the Power-Save mode is the most active. The display of automation and many après 2 minutes. Cependant, the registrar of the data remaining activist and career plan, ie, mesures to be taken on prizes selon le cas et / ou sauvegardées. The watch internal continues the function. Movement of the registrar permits the reactive display.

## 5.3 Premier allumage & debit registration



Maintains the bouton appendant pendant 2 seconds, the date and date of the registrar change; le beep sonore se fait selector entendre pendant environment 2 seconds.

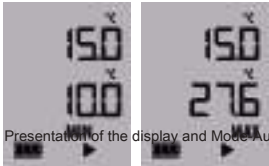


La lumière verte clignote pendant enviroment 2 seconds, registrar and march.



La lumiere LED clignote for up to 30 seconds.

(The display of automation and Mode Car, Value Max / Min

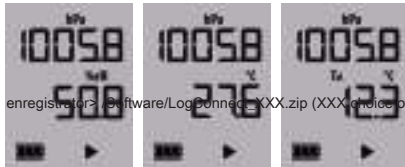


Presentation of the display and Mode Auto

LOG200



LOG210



LOG220

Only those who register are externally admitted, while their officers are responsible for their registration without registration.

enregistreur -> Software/LogConnect\_XXX.zip (XXX choice of version)

Pour modifier configuration, LogConnect logic is important. Téléchargez le logiciel gratuit LogConnect:

[www.dostmann-electronic.de/home.html](http://www.dostmann-electronic.de/home.html) -> Download -> Software / <voter

### 5.3.1 Reprint registration

Cf. 5.3 Premier allumage & debit registration. The registrar does not miss a march and an appliance on the bouton of the detachment or arrestee is in a standard configuration 8.) Arrange via the USB port. Read the data of the measurement seront automatic representation and graphique

#### INDICATION:

L cause you need to register, read the existing PDF serant écrasées.

**Important:** Secure two hours of PDF download on your PC. The LogConnect logic is based on the connection of the registrar to the coordinator of the personnel and the function AutoSave and the asset (by default), a automatic guarantee for this data measuring effect.

### 5.3.2 Display of the utilization of memory and (%), de la date, de l'ure



An appeals courtesy of the bouton d'allumage (before the demurrage of the registrar), MEM's poster for the 1st and the 2nd for the second time available and for pendant 2 seconds, and the poster for the change and date it hurts

device pendant for seconds. (Image) Panel MEM + 2. Image de la date / heure

### 5.4 Arrange the registration / generation of PDF ( configuration standard)



Connect I register to USB interface. Le beep sonor est émis pendant 2 seconds environ. Une lumière verte clignote jusqu'à la génération du PDF (which takes just 40 seconds). The symbols ► no sera plus posters dance to the bar. The registrar's arrest!



The beep sonor's fact is switching on the LED light. The registrar's present comme un supportable LOG200 / LOG210 / LOG220 / LOG200 TC / LOG210 TC / LOG200 E / LOG220 E



before and secure it to PDF The PDF will be renamed and unpublished

**Attention:** By decrement, the extremes (the maximum and minimum values) and the average monthly interest rate!

### 5.4.1 Arrange the registration via le bouton ou la programming

Arranging the registration via the bouton or programming is based on the logic of LogConnect. A function you type in registration,

le bouton de démarrage est exi celui

the arrest.



### 5.5 Interpretation PDF (Fig. C)

After this: Couple example  
LOG220\_16099908\_2016-09-27T103123.PDF LOG220:

**A** Appareil  
16099908: N ° de sawie  
2016-09-27: Debit Registration (Date)  
T103123: temps: HHMMSS

**B** Description: No need to decipher the logic of LogConnect logic.

**C** Configuration: Parameter prediction

**D** Recapitulation: Take a look at the results

**E** Graphique: Representation of the graph of the data measured

**F** PURPLE: Montre quand et / ou are registered as a movement

**G** Signature: And then you need the PDF authentication

**H** ✓ : Relevant OK      ✗ : Relevant non ordonné

### 5.6 Connexion USB

Check out the configuration or utilization of the data recorder of the data, the USB port of the data recorder of the data will be connected to your PC. Read the configuration guide to read the section corresponding to manual or text based logic LogConnect.

### 5.7 Modes display and touch mode: EXT, AVG, MIN, MAX



The premiere is similar to the posters of the value measurement of the current value of the principal: LOG200: température, LOG210: humidity, LOG220: pression, LOG200 TC / LOG210 TC: external temperature 1,

LOG200 E: température internal, LOG220 E: pression L'affiche de la deuxième is similar to the fashion choice. The following modes of display:



**1. Mode AUTO 1.** (Prefill for LOG200, LOG210, LOG220) - the same poster for up to 3 seconds per roll:

LOG200: minimum (MIN) / maximum (MAX) / average (AVG) LOG210: température et point de rosée (Td)

LOG220: humidity, température and point de rosée LOG200 TC: température internal and température external 2 LOG210 TC: température internal, humidity internal, point de rosée internal,

external temperature 2

LOG200 E: température current / minimum (MIN) / maximum (MAX) / average (AVG) of the external temperature LOG220 E:

Valuation of current measurement of external sensors / Value of current measurement of measurement of internal humidity, temperature, point of view Recognition of value posters in the unit of physical value measurement (° C / ° F = temperature, Td + ° C / ° F = point de rosée, % rH = humidity,

hPa = pressure, ppm = CO<sub>2</sub>,

ainsi qu'aux symbols supplementary <pass the symbol> = value measurement actualization, MIN = minimum, MAX = maximum, AVG = average, EXT = channel external 2, EXT clignotant = channel external 1.

The AUTO mode can be found at just below the temps and at the value of the fair to the canoe. An appliance sur la touche MODE (touche de gauche), which can be used by mode AUTO or mode manual:

**2. Mode MANUAL ( Prefix of the LOG200 TC, LOG210 TC) - The mode MODE permits the fair defiler to be measured in the measure available in the value order of the value of the current measurement (only symbol), minimum (MIN), maximum (MAX), average (AVG). Particularités:**

- Pour the canal of the measuring principal of the premiere ligne, seules les valeurs MIN, MAX, AVG s'affichent and bass.
- Pour LOG200-TC and LOG210-TC, valued at MIN, MAX, AVG, as the official address for EXT client to external 1 (canal de mesure principal) and to EXT for external 2.

The manual mode permits the posters to import ques canal de mesure en plus du canal de mesure principal, for example, the value of the maximum de la pression by report à la pression current.

Returns in AUTO mode, applique sur la toche MODE jusqu'à ce que l'affichage AUTO device.



## 5.7.1 Features of the bouton Mode

### 5.7.1.1 Rules for markers

Pour retention of events by private pendants of registration, by way of regulator of markers. You place the marker in the PDF graphic, as the basis of the bouton Mode appuyée pendant 2.5 (for the marker in the figure C of the illustration PDF). The marking is confirmed by a bip sonor. The marquee sera ensuite cleaning guard on prochain enregistrement (tenure of the cleaning interval).

### 5.7.1.2 Effacer la mémoire d'affichage MAX, MIN

The registrar dispose of the MIN / MAX function permitting the conservator to add value over a period of time. Appuyez sur la touche MODE pendant 5 seconds jusqu'à ce qu'une mélodie retentisse. The period of measurement is based on the initial realization. For example, by way of example, températures diurnes les plus élevées / les plus basses. The MIN / MAX function is a subscription to the registration function.

Note:

- The memory MIN / MAX is the minimum initial registration of the poster of the poster's value, maximum and maximum manner of adjustment to the registration.
- Pendant l'initialisation, un marqueur et un placement accessoire pour l'initialisation de la valeur, maximum and average.

## 5.8 Changing the battery / Battery level display

**Attention!** For added convenience, learn about the battery guide: Utilize exclusivity with a battery of the type SAFT LS 14250 3.6 Volt or DYNAMIS Lithium Batt type battery. LI-110 1/2 AA / S old types of batteries approved by the manufacturer.





Tourner la batterie de la 20 ° batterie gauges, the battery of the battery



Retire the battery and insure the new battery is done.



Change the battery OK: Read the LED lights on the pendant environment for 1 second and the beep will be switched off.

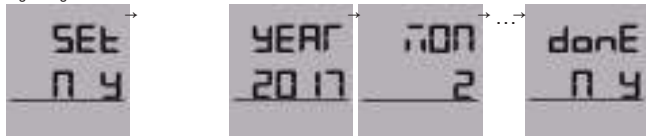
- L'icône de la batterie vide  apparait, signifiant qu'il faut aussitôt la brake plate. Certainly, you will be able to secure an environmental impact statement at 10 days.
- The battery of the poster displays a selection of cases in three segments.
- Lorsque l'icône de la battery a l'ecran clignote, a veut  dire que la Charge the battery with no surcharge for prendre des mesures.

**Attention!** The battery change, the battery verifier's watch (internal watch) and the case, the modifier. Cf.

5.2.2.1 Logical configuration Log Connect or 5.8.1 Controller Date / Height on the keyboard for the change of the battery controller Date / Heure on the keyboard.

### 5.8.1 Ruler Date / Height of the keyboard for the change of battery regulator Date / Heure of the keyboard

For a change of battery or rupture and alimentation, the device of automatic and a special mode for regulating the date and time.



Voulezvous régler la date? N = Non en appuyant le bouton Mode, The registrar revises the mode normal ou Y = Oui and appuyant sur le bouton de démarrage, la sequence suivant commence

The bouton-mode augmented the current value, the bouton of the demerger confirms a fit of the following value. The interrogation of the date and the cure is possible to change the intervals of memory.

N = Non... Cancel  
Cancellation Y = Oui,  
New Cancellation Sera  
Enrollment

### 5.9 Alerts on the sail lorsque I register



#### est a course of registration

Le beep sonore est émis toutes les 30 sec. et la lumière LED rouge clignote (3 seconds). Read ropes that are fixed by LogConnect \* logic.

Lorsque is very comfortable, with an X device in the middle of the screen. Imprinted on the page PDF, the alarms y

est visiblement inscrite tout de même. It is necessary to redirect the registrar to le X of disparity.

L'enregistreur n'est pas en mode d'enregistrement



Une lumière rouge clignote tous les 4 seconds. Brake discs charge the battery.

The lumineaire LED router clignote with intermittent pour signals to you material.

Téléchargez le logiciel gratuit LogConnect:

[www.dostmann-electronic.de/home.html](http://www.dostmann-electronic.de/home.html) -> Download -> Software / <voter enregisterer> /Software/LogConnect\_XXX.zip (XXX choisissez la dernière version)

## 6. Data techniques

### Température

Sensitivity: + 40 ° C

Resolution: 0.1 ° C

### Atmospheric pressure LOG220 / LOG220 E

Sensitivity: 300-1100hPa

Resolution: 0.1 hPa

### Memoir:

LOG200: 150,000 registrations (Température et Movement)

LOG210: 100,000 registrations (Température Rel. Humidity, Point of Movement and Movement)

LOG220: 60,000 registrations (Température Rel. Humidity, Point of Movement and Movement)

LOG200 TC: 60,000 registrations (Température + 2 thermocouples external T1, T2 + Movement)

LOG210 TC: 60,000 registrations (Température, Humidity, Point de rosée, + 2 thermocouples external T1, T2 and Movement)

LOG200 E: 100,000 registrations (Température and Movement)

LOG220 E: 60,000 registrations (Temperature, Humidity, Pressure, Point of Movement and Movement CO<sub>2</sub>)

### Interface:

USB (integral)

### Dimensions:

91.5 x 42 x 20 mm

### Poids:

environmental 83 gy compris le support mural

### Battery:

1 x 3.6 Volt Lithium ½ AA

### Rel. Humidity (exclusivement)

LOG210 / LOG220 / LOG210 TC / LOG220 E

Sensitivity: 0..100% rF

Resolution: 0.1% rF

### CO<sub>2</sub> (exclusivement) LOG220 E

Sensitivity: 400-10000 ppm

Resolution: 1 ppm

### 6.1 Danger the injury

- Gardez of appliances and piles on the port of the enfants.
- Read the contents of the Acts only for the purpose and purpose of mortality of the case. They are a pillar and an avalanche, or the only entrant of the user's internal graves as well as the mortar of the space. They can cope with the pile of a new avalée or ingredient in its own way, as well as contact with the agency.
- No jamais de piles dans le feu, no court circuits, no de démontez pas et no les recharges pas. Risk the explosion!

- Une pile faible doit être remplacée le plus rapidement possible afin d'éviter toute fuite. At the same time, the tools are simultaneously displayed in the new files or the different types of files.
- Pour manipulator of the piles qui ont coulé, utilize the gants de protection chimique specialty adaptes and portes of the lunettes de protection!

## 7. Lying



They are certified to produce and conform to the EEC directive and to a specific test using the methods specified.

## 8. The Maintenance

It produces and produces elaborate materials and compositions of high quality for recycling and recycling.



No jamais jeter les piles et les piles rechargeables avec les déchets ménagers. A quality consumer, which is in demand for the windows of our company and dance in a center suitable for the recuperation of agricultural or national government in the protégé environment. Read the symbols for the content of the content of the content: Cd = cadmium; Hg = mercure; Pb = plomb. It is the unit of choice of the European directive for the electronics and electronics (WEEE). Do not wait until the next avec les your managers. The utilization of the bond of the remittance of appliances and the fine of the point of recuperation of the electric and electronic equipment for the purpose of rebuilding so compatible with the protection of the environment.



## 9. Characteristic exclusive to LOG200

Signs CE, EN 12830, EN 13485, Storage capacity (S) and transport (T) For distribution and distribution (C), precision class 1 (-30 .. + 70 ° C) Conformance to L'En 13486 , nous preconisons to recalibration annually

## 10. Conservation & netyage

Preserve the appliance at a low temperature ambient (10 to 40 ° C). It's a plaque, utilizes exclusivity in tissus blanc and cotton, l'imber dance l'eau ou l'alcool pour netyer l'appareil. No more plunge l'appareil dance to liquid.

## Quick start with default settings



1.

Start recording: Press Start key until Signal tone is detected



2.

LED glows green for 2 seconds - Recording started. RUN symbol appears



3.

Logging into USB port



4.

wait



5.

View and secure PDF

## Quick Start with default settings



1.

Start Recording: Press until beep sounds



2.

LED lights green for 2 seconds  
- recording started. RUN icon appears



3.

Insert logger into USB port



4.

wait



5.

View and save PDF

## Allumage is fast Avec reads by default



1.

Commencer l'enregistrement: Appuyer le bouton d'allumage, jusqu'à l'émission du bip sonore



2.

The luminodiode (LED) is remote for 2 seconds, the registration is determined.  
The symbol RUN device



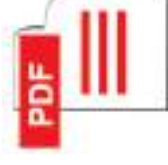
3.

Attendre que register so connect to the USB interface



4.

attendre



5.

Present and secure PDF





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