

Manual XC250

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Notes regarding the operating manual

Symbols



Danger!

Warns of a hazard which can lead to personal injury.



Risk from laser radiation!

Warns of injury risk from laser radiation.



Caution!

Warns of a hazard which can lead to damage to property.

The current version of the operating manual can be found at: www.lufft.de

Legal notice

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The scope of delivery may vary from product images. This document was created with all due care. Lufft® accepts no liability whatsoever for possible mistakes or omissions.

The only party responsible for determining measured results to be valid, drawing conclusions and deriving actions is the user! Lufft® accepts no claims of warranty for correctness of detected measured values or measured results. Further, Lufft® accepts no liability whatsoever for possible mistakes or damage which have been caused by utilising the detected measured results. © Lufft®

Warranty

The warranty is for 12 months. Damages caused by incorrect use by untrained people or startup by unauthorised people are excluded from the warranty.

The device complies with the fundamental health and safety requirements of the applicable EU regulations and was tested at the factory for perfect functionality multiple times. However, if faults in the functionality occur and cannot be remedied with the measures in the chapter Errors and faults, please get in touch with your dealer or distributor. When manufacturer's instructions or legal regulations have not been followed, or after unauthorised changes to the device are made, the manufacturer is not responsible for the resulting damages. Changes to the device or unauthorised replacement of individual parts can drastically impact the electrical safety of this product and leads to the forfeit of the warranty. Liability does not extend to damages to people or property caused by the device being used other than as described in the instructions in this operating manual. Subject to changes to technical design and model changes as part of constant development and product improvement without prior notice.

No liability is accepted for damages resulting from improper use. In such cases, entitlements to a warranty are then also forfeited.

Information about the device

Description of the device

The infrared thermohygrometer comes equipped with the functions of a thermohygrometer and a pyrometer.

The device can capture the following measured values:

- Air temperature (°C, °F),
- Relative (% RH) and absolute humidity (g/m³),
- Dew point temperature (dp °C, dp °F),
- Surface temperature (°C, °F).

The device features three different operating modes: TH mode, IR mode and IR DP mode.

In TH mode the device can use the functions of a thermohygrometer. The device measures air temperature, humidity and dew point temperature.

In IR mode the device can use the functions of a pyrometer. The device measures the surface temperature of objects.

The IR DP mode serves to detect critical surfaces on which condensation could take place due to drops below dew point. The device simultaneously indicates the surface temperature of the measuring object and the dew point temperature within the measurement environment.

A minimum, maximum and average function is available for the direct analysis of the measured data. Besides, the currently measured value can be recorded via the hold function.

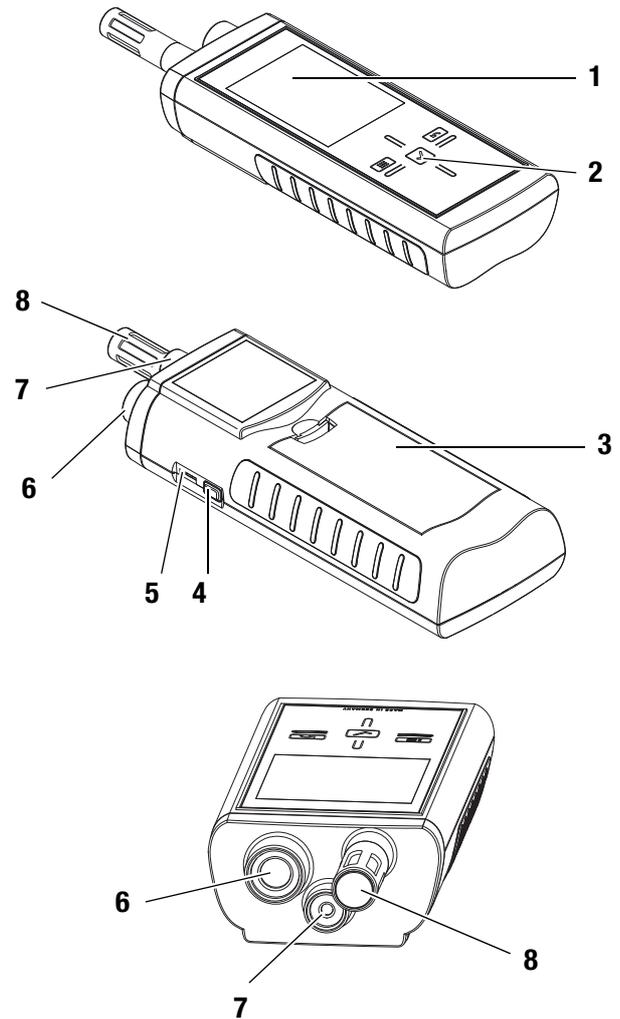
The device can be operated via a capacitive touchscreen control panel.

When not in use, an automatic switch-off saves the battery.

The device is only intended for use inside buildings, because solar radiation (also scattered or indirect sunlight) compromises the measurement accuracy.

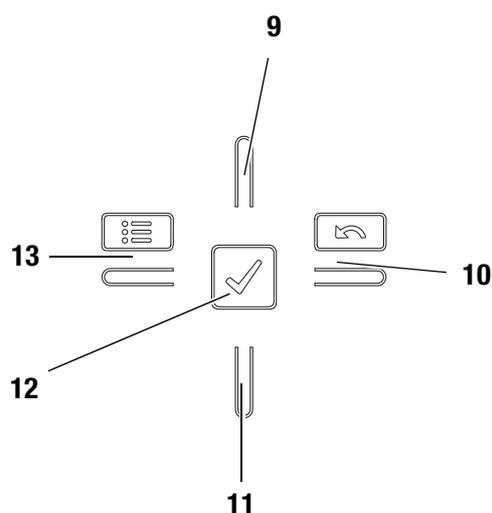
You can connect the device to a computer by using the USB cable included in the scope of delivery. Then you can extract and analyse your measured results with the optional SmartGraph software.

Device depiction



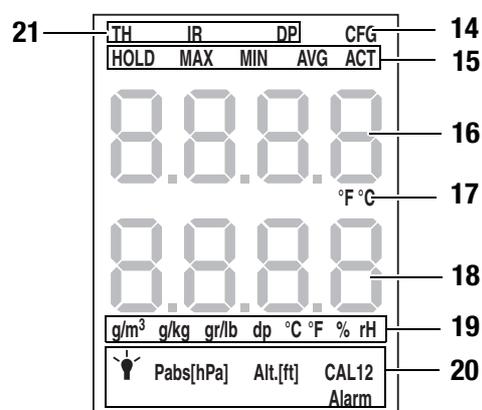
No.	Operating element
1	Display
2	Cross control
3	Battery compartment with battery cover
4	On/Off key
5	USB interface
6	Infrared sensor with protective cap
7	Laser pointer
8	Measuring sensor

Cross control



No.	Operating element
9	Up key
10	Right/back key
11	Down key
12	OK button
13	Left/menu key

Display



No.	Display element
14	Configuration mode display
15	Measuring mode
16	Temperature display
17	Temperature unit
18	Humidity display or dew point display
19	Unit for humidity or dew point
20	Configuration mode options
21	Operation mode display

Technical data

Parameter	Value
Air temperature	NTC
Measuring range	-20 to +50 °C
Tolerance	±0.2 °C (0 to 40 °C) otherwise ±0.4 °C
Resolution	0.1 °C
Object temperature	Pyrosensor
Measuring range	-70 to 380 °C
Tolerance	±0.5 °C (0 to +50 °C) otherwise ±4 °C
Resolution	0.1 °C
Optical resolution	12:1
Typical accuracy	±1.0 °C (object temperature -40 to 0 °C, ambient temperature > -20 °C)
	±0.5 °C (object temperature 0 to 60 °C, ambient temperature > 0 °C)
	±1.0 °C (object temperature 60 to 120 °C, ambient temperature > 0 °C)
	±1.0 °C (object temperature 120 to 180 °C, ambient temperature > 0 °C)
	±3.0 °C (object temperature 180 to 240 °C, ambient temperature > 0 °C)
	±4.0 °C (object temperature 240 to 380 °C, ambient temperature > 0 °C)
Humidity sensor	Capacitive
Measuring range	0 to 100 % RH
Tolerance	+/- 2 % RH
Resolution	0.1 % RH
Measuring frequency	2x per second
Operating temperature	-20 °C to 50 °C
Storage temperature	-20 °C to 60 °C
Battery type	4x AA 1.5 VDC
Dimensions (LxWxH)	202 mm x 63 mm x 35 mm

Scope of delivery

Scope of delivery includes:

- 1 x Infrared thermohygrometer XC250
- 1 x USB cable
- 4 x Alkaline LR6 AA, 1.5 V batteries
- 1 x Getting started guide
- 1 x Factory test certificate

Safety

Carefully read the operating manual before using the device and keep it within reach!

- Do not use the device in atmospheres containing oil, sulphur, chlorine or salt.
- Never use the device for measurements at live parts.
- Protect the infrared sensor from dirt.
- Ensure that all connection cables are protected from damages (e.g. from kinks or crushing).
- Protect the device from permanent direct sunlight.
- Observe the storage and operating conditions (see chapter Technical data).

Intended use

Only use the infrared thermohygrometer XC250 for indoor measurements of temperature and humidity. Here, read and observe the technical data.

To use the device for its intended use, only connect and use accessories and spare parts which have been approved by Lufft®.

Improper use

Do not use the device in potentially explosive atmospheres, or for measurements in liquids. Never point the device at people or animals. Lufft® accepts no liability for damages resulting from improper use. In such a case, entitlements to a warranty are forfeited. Any unauthorised modifications, alterations or structural changes to the device are forbidden.

Personnel qualifications

People who use this device must:

- have read and understood the operating manual, especially the Safety chapter.

For maintenance or repair work which requires the housing to be opened, contact Lufft® customer service. Devices which have been opened unlawfully are void of any warranty and warranty claims.

Residual risks



Risk from laser radiation!

Class 2 laser radiation.

Lasers of class 2 only radiate in the visible range and during continuous wave operation (lasting beam) no more than 1 milliwatt (mW) of output will be emitted. Looking directly into the laser beam for a longer period of time (more than 0.25 seconds) can cause damage to the retina.

Avoid looking directly into the laser beam. Never look into the laser beam using optical aides. Do not suppress the winking reflex when looking into the laser beam unintentionally. Never point the laser beam at people or animals.



Danger!

Do not leave the packaging lying around. Children may use it as a dangerous toy.



Danger!

The device is not a toy and does not belong in the hands of children.



Danger!

Dangers can occur at the device when it is used by untrained people in an unprofessional or improper way. Observe the personnel qualifications.

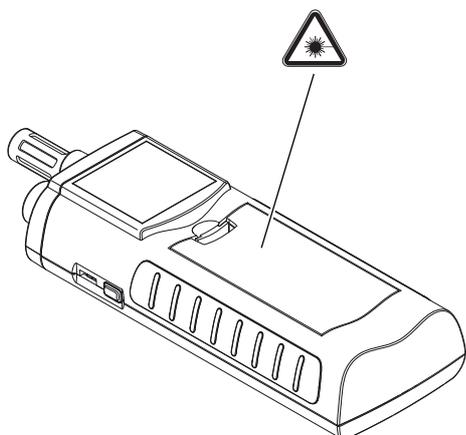


Caution!

To prevent damages to the device, do not expose it to extreme temperatures, extreme humidity or moisture.

Warnings on the device

Keep the warnings on the device in clearly legible at all times.



The following warnings and mandatory signs are to be found on your device:



Risk from laser radiation!

Class 2 laser radiation.

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Avoid looking directly into the laser beam. Never look into the laser beam using optical aides. Do not suppress the winking reflex when looking into the laser beam unintentionally. Never point the laser beam at people or animals.

Transport and storage

Transport

Use a suitable bag to transport the device safely.

Storage

When the device is not being used, observe the following storage conditions:

- dry,
- protected from dust and direct sunlight,
- with a plastic cover to protect it from invasive dust, if necessary.
- The storage temperature is the same as the range given in the chapter Technical data.
- When storing the device for a long time, remove the batteries.

Accessories

Optionally, the following accessories are available for transport and storage:

- Lufft® case
- Sinter protection cap

For further information please contact your Lufft® customer service.

Operation

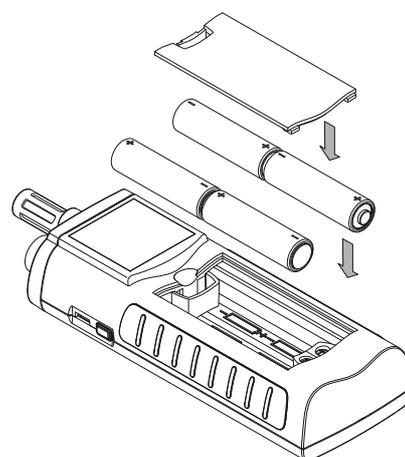
Inserting the batteries

- Insert the supplied batteries before first use.



Caution!

Make certain that the surface of the device is dry and the device is switched off.



1. Open the cover of the battery compartment (3).
2. Insert the batteries in the compartment as indicated in the figure.
3. Close the cover of the battery compartment (3).
 - The device can now be switched on.

Switch-on and measurements



Risk from laser radiation!

Class 2 laser radiation.

Lasers of class 2 only radiate in the visible range and during continuous wave operation (lasting beam) no more than 1 milliwatt (mW) of output will be emitted. Looking directly into the laser beam for a longer period of time (more than 0.25 seconds) can cause damage to the retina.

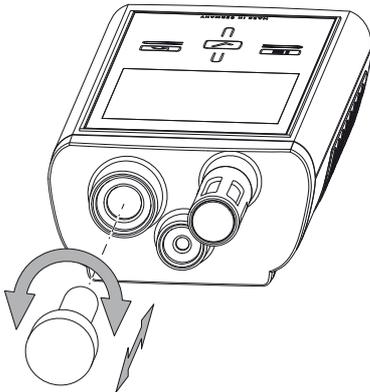
Avoid looking directly into the laser beam. Never look into the laser beam using optical aides. Do not suppress the winking reflex when looking into the laser beam unintentionally. Never point the laser beam at people or animals.

Note:

The cross control is very sensitive. Therefore, avoid dirt on the control panel, because it could be misinterpreted by the device as keystroke.

Before use make sure that the touchscreen control panel is dirt-free.

If required clean the touchscreen control panel according to chapter Cleaning the device on page 13.



1. Remove the protective cap from the infrared sensor (6), if you want to carry out an infrared measurement. Otherwise leave the protective cap on the infrared sensor.
2. Press the On/Off key (4) until a beep is emitted.
3. The device performs a short self-test.
 - The device name and firmware version is shown on the display.
 - The battery charge is indicated on the display.
 - The device is ready for operation.
 - The displayed units are based on the settings of the last utilization.
4. Select the desired measuring mode.
5. Point the device at the area to be measured.
 - The measured values will be displayed.

Note:

Note that moving from a cold area to a warm area can lead to condensation forming on the device's circuit board. This physical and unavoidable effect can falsify the measurement. In this case, the display shows either no measured values or they are incorrect. Wait a few minutes until the device has become adjusted to the changed conditions before carrying out a measurement.

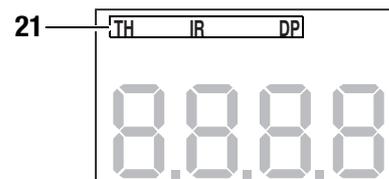
Key lock

1. Briefly press the On/Off key (4) during operation.
 - The device emits a short beep.
 - The following message appears on the display: LoC on.
 - Key lock is activated.
2. Press the On/Off key (4) again.
 - The device emits a short beep.
 - The following message appears on the display: LoC off.

Key lock is no longer activated.

Operating mode

The device comes with three different operating modes.



1. Press the Up key (9) to switch between the operating modes.
 - The operating mode is indicated on the Operation mode display (21).

TH mode

- The device now has the functionality of a thermohygrometer.
- The upper measured value display (16) indicates the temperature.
 - To set the unit see Temperature display configuration on page 9.
- The lower measured value display (18) indicates either the humidity or the dew point.
 - To set the unit see Humidity display configuration on page 10.

IR mode



Risk from laser radiation!

Class 2 laser radiation.

Lasers of class 2 only radiate in the visible range and during continuous wave operation (lasting beam) no more than 1 milliwatt (mW) of output will be emitted. Looking directly into the laser beam for a longer period of time (more than 0.25 seconds) can cause damage to the retina.

Avoid looking directly into the laser beam. Never look into the laser beam using optical aides. Do not suppress the winking reflex when looking into the laser beam unintentionally. Never point the laser beam at people or animals.

- As soon as IR mode is selected the laser pointer switches on. The laser pointer serves to mark the centre of the measuring spot.
- The device now has the functionality of a pyrometer. It measures the surface temperature of objects.
- The degree of emission for surfaces can be adjusted whilst in configuration mode (page 8).
- The upper measured value display (16) indicates the surface temperature.
To set the unit see Temperature display configuration on page 9.
- The lower measured value display (18) indicates either the humidity or the dew point.
To set the unit see Humidity display configuration on page 10.

IR DP mode



Risk from laser radiation!

Class 2 laser radiation.

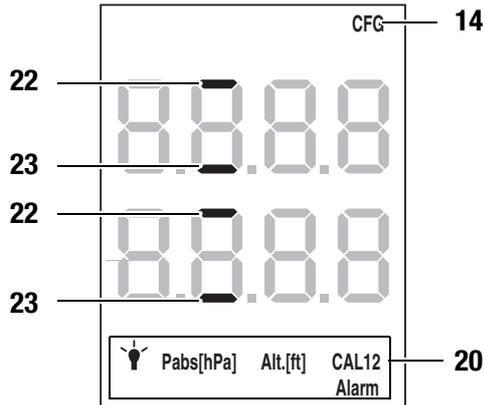
Lasers of class 2 only radiate in the visible range and during continuous wave operation (lasting beam) no more than 1 milliwatt (mW) of output will be emitted. Looking directly into the laser beam for a longer period of time (more than 0.25 seconds) can cause damage to the retina.

Avoid looking directly into the laser beam. Never look into the laser beam using optical aides. Do not suppress the winking reflex when looking into the laser beam unintentionally. Never point the laser beam at people or animals.

- As soon as IR DP mode is selected the laser pointer switches on. The laser pointer serves to mark the centre of the measuring spot.
- The device measures surfaces and dew point temperature in real time.
- When falling below the dew point temperature (see Alarm function on page 9) a visual (flashing laser, flashing ALARM display (20)) and an acoustic signal depending on the selected setting will be emitted.
- The upper measured value display (16) indicates the surface temperature.
- The lower measured value display (18) indicates the dew point temperature.

Configuration mode

- Press the Left/menu key (13) for approx. 2 seconds.
 - The device emits a short beep.
 - The CFG symbol (14) is displayed in the upper right corner.
- Use the Right/back or Left/menu key to choose from the available settings.
 - Please note that some of the settings can only be selected with a certain measuring mode.



Configuration mode	Description
Lamp	Setting brightness. Available are values between 20 and 100 %. Switch-off after 30 min unless with setting AL.on.
Pabs[hPa]	Only available when the unit g/kg is active. Specifying the absolute pressure (value range: 600 and 1200 hPa). 1. Enter the value using the cross control (2). 2. Confirm with the OK button (12).
Alt.[ft.]	Only available when the unit gr/lb is active. Specifying the local altitude in feet (value range: -999 to 9999 ft). 1. Enter the value using the cross control (2). 2. Confirm with the OK button (12).
CAL1 (TH mode)	Specifying the temperature offset. (value range: -10 to +10 °C or -18 to +18 °F) Enter the value using the cross control (2). 2. Confirm with the OK button (12).
CAL1 (IR mode)	Specifying the temperature offset. (value range: -10 to +10 °C or -18 to +18 °F) Set the degree of emission. (value range: 0.1 to 1.0) 1. Enter the temperature offset value using the cross control (2). 2. Press the OK button (12) for 2 s. 3. Enter the emissivity value using the cross control (2). 4. Press the OK button (12) for 2 s.
CAL2	Only available, when % rH is active. Specifying the offset for relative humidity (value range: +/- 30 % RH). A negative offset allows no measured values of less than 0.00. 1. Enter the value using the cross control (2). 2. Confirm with the OK button (12).
ALARM	Only available when IR DP is active. Stipulating the upper (Hi) and lower (Lo) threshold value for the dew point temperature. value range: up to 9.9 °C or 9.9 °F 1. Enter the value for Hi using the cross control (2). 2. Press the OK button (12) for 2 s. 3. Enter the value for Lo using the cross control (2). 4. Press the OK button (12) for 2 s. 5. Switch the acoustic and visual signal on or off by use of the Up (9) and Down (11) keys. <ul style="list-style-type: none"> If the bars (22) in the upper and lower measured value display are flashing, the acoustic and visual signal is activated. If the bars (23) in the upper and lower measured value display are flashing, the acoustic and visual signal is deactivated.

Alarm function

In IR DP mode the alarm function is activated automatically. Alarm triggering and intensity are defined by the upper and lower alarm threshold.

These two limit values can be calculated from the measured dew point temperature (TdP) and the threshold values individually determined in configuration mode: upper threshold (Hi) and lower threshold (Lo).

The sum of dew point temperature and upper threshold value (Hi) constitutes the upper alarm limit value (TdP + Hi).

The difference of dew point temperature (TdP) and lower threshold value (Lo) constitutes the lower alarm limit value (TdP - Lo).

If the surface temperature falls below the upper alarm limit (TdP + Hi) an acoustic and visual alarm (flashing laser and flashing ALARM display) is triggered which intensifies in proportion to the increased approximation to lower alarm limit.

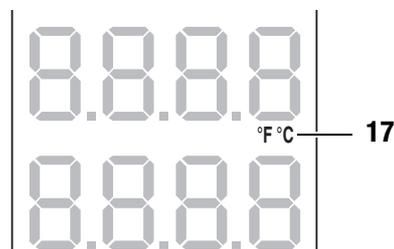
The more the surface temperature drops, the faster increases the repetition frequency of the acoustic and visual signals. Maximum repetition frequency is triggered when reaching the lower alarm limit (TdP - Lo).

Example: The current dew point temperature (TdP) is +10 °C. You define the upper threshold (Hi) as 5 °C and lower threshold (Lo) as 5 °C. Then the alarm starts at +15 °C (TdP + Hi) and reaches maximum intensity at 5 °C (TdP - Lo).

Temperature display configuration

The temperature can be displayed in either Celsius (°C) or Fahrenheit (°F).

The temperature can be displayed as air temperature or surface temperature.

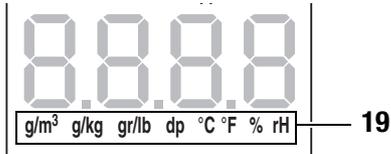


- Press the Up key (9) to switch between °C and °F in the respective operating modes.
 - The temperature will be displayed in the selected unit in the upper measured value display (16).
 - The unit (17) will be indicated on the display (1).

Operating mode	Temperature unit	Description
TH	°C	Air temperature in °C
	°F	Air temperature in °F
IR	°C	Surface temperature in °C
	°F	Surface temperature in °F
IR DP	°C	Surface temperature in °C
	°F	Surface temperature in °F

Humidity display configuration

The humidity can be displayed in % RH, g/m³, g/kg and gr/lb, and the dew point temperature in dp °C and dp °F.

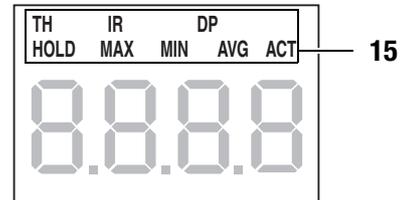


- Press the down key (11) until the desired unit is displayed.
 - The humidity or dew point temperature will be displayed in the selected unit in the lower measured value display (18).
 - The unit (19) will be indicated on the display (1).

Operating mode	Unit	Description
TH	g/m ³	Absolute humidity in g/m ³
	g/kg	Mixing ratio in g/kg
	gr/lb	Mixing ratio in gr/lb
	dp °C	Dew point temperature in °C
	dp °F	Dew point temperature in °F
	% RH	Relative humidity in per cent
IR	g/m ³	Absolute humidity in g/m ³
	g/kg	Mixing ratio in g/kg
	gr/lb	Mixing ratio in gr/lb
	dp °C	Dew point temperature in °C
	dp °F	Dew point temperature in °F
	% RH	Relative humidity in per cent
IR DP	dp °C	Dew point temperature in °C
	dp °F	Dew point temperature in °F

Measuring mode

- Press the keys Right/back (10) or Left/menu (13) until the desired measuring mode is displayed.
 - The selected measuring mode (15) will be indicated on the display (1).



The device comes with the following measuring modes:

Measuring mode	Description
TH	The device shows the air temperature and humidity (like a thermohygrometer).
IR	The device shows the surface temperature (like a pyrometer).
IR DP	The device shows both dew point and surface temperature (combination of thermohygrometer and pyrometer).
ACT	Measured value in real time
AVG	Average value of measurements since switch-on
MIN	Minimum measured value
MAX	Maximum measured value
HOLD	Measured value will be held

Holding the measured value

- Set the measuring mode to HOLD.
 - The current measured value will be held and displayed.
 - The device will hold this value until the measured values are set back or the device is switched off.

Resetting the measured values

- Press the OK button (12) for approx. 2 seconds.
 - All previously stored measured values of the measuring modes AVG, MIN, MAX and HOLD will be set back.
 - All measured values are then determined anew based on the measurement proceeding in the background.

Measured value storage

Please note that measured values cannot be saved on the device itself. In order to save measured values, the device has to be connected to a PC via a USB cable using the SmartGraph software.

- Briefly press the OK button (12).
 - The displayed measured value will be saved in the software.

Further information can be gathered from the help text of the SmartGraph3 software.

Laser pointer



Risk from laser radiation!

Class 2 laser radiation.

Lasers of class 2 only radiate in the visible range and during continuous wave operation (lasting beam) no more than 1 milliwatt (mW) of output will be emitted. Looking directly into the laser beam for a longer period of time (more than 0.25 seconds) can cause damage to the retina.

Avoid looking directly into the laser beam. Never look into the laser beam using optical aides. Do not suppress the winking reflex when looking into the laser beam unintentionally. Never point the laser beam at people or animals.

- As soon as operating mode IR or IR DP is selected, the laser pointer switches on. The laser pointer is on for a maximum of 2 minutes and can then be reactivated for another 2 minutes by briefly pressing the OK button (12).

USB interface

The device can be connected to a PC via the USB interface (5). See chapter PC software on page 12.

Switching off

1. Press and hold the On/Off key (4) for approx. 3 seconds until a beep is emitted.
 - The device will be switched off.
2. If applicable, put the protective cap back on the infrared sensor.

Measuring principle

The device comes with a measuring sensor for air temperature and humidity.

It is further equipped with an infrared sensor for the measurement of surface temperatures.

The degree of emission and the ratio of the distance to and the size of the measuring spot play an important role when using the infrared sensor for measurements.

Degree of emission

The degree of emission is used to describe the energy radiation characteristics of a material.

The higher this value, the higher is the ability of the material to radiate. Many organic materials and surfaces have a degree of emission of approx. 0.95.

Metal surfaces or shiny materials have a lower degree of emission and therefore only yield inaccurate measured values.

Please observe this when using the device.

In order to compensate this, the surface of shiny parts can be covered with adhesive tape or matt black colour.

The device is unable to measure through transparent surfaces such as glass. Instead it measures the surface temperature of the glass.

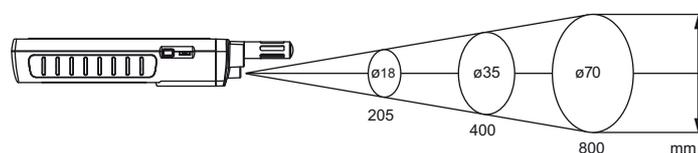
A material's degree of emission depends on various factors such as the material composition, its surface condition and temperature. (In theory,) It can be between 0.1 and 1. As a rule of thumb we can assume: When a material is rather dark and its surface texture matt, it probably has a high degree of emission. The brighter and smoother the surface of a material, the lower will be its degree of emission, presumably. The higher the degree of emission of the surface to be measured, the better it is suited for non-contact temperature measurement by use of a pyrometer or thermal imaging camera, since falsifying temperature reflections become negligible. Nevertheless, entering a degree of emission as appropriate as possible is indispensable for a precise measurement.

Measuring distance and measuring spot size (Distance to Spot ratio, D:S)

In order to achieve precise measurement results the measuring object must be larger than the device's measuring spot. The determined temperature is the average temperature of the measured area. The smaller the measuring object, the shorter the distance to the device.

You can gather the precise diameter of the measuring spot from the figure below.

For accurate measurements the measuring object should be at least twice as large as the measuring spot.



$$D:S = 12:1$$

PC software

Use the SmartGraph3 PC software to carry out a detailed analysis and visualisation of your measured results. Only by employing this PC software can all options of the measuring device for visualization and functioning be utilized (e.g. data export into an Excel/PDF file or data output in form of a printout).

Installation conditions

Ensure that the following minimum requirements for installing the SmartGraph3 PC software are fulfilled:

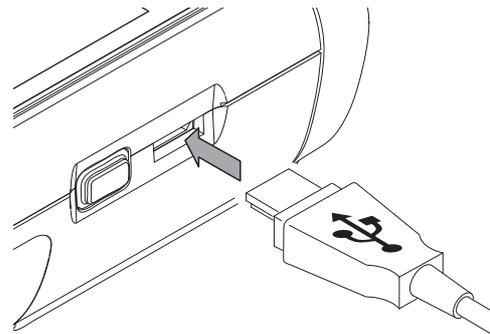
- Supported operating systems (32 or 64 bit version):
 - Windows XP from service pack 3
 - Windows Vista
 - Windows 7
 - Windows 8
- Software requirements:
 - Microsoft .NET Framework (is automatically installed during the software installation, where applicable)
- Hardware requirements:
 - Processor speed: min. 1.6 GHz
 - USB connection
 - 2 GB RAM, minimum
 - 1 GB hard disk space, minimum

Installing the PC software

1. Download the current PC software from the Internet. To do so, visit the website www.smartgraph3.de/download.
2. Double-click the downloaded file.
3. Follow the instructions of the installation wizard.

Starting the PC software

1. Start the SmartGraph3 software.
2. Switch on the device (see chapter Switch-on and measurements) if necessary.
3. Connect the device to your PC via the USB connection cable provided in the scope of delivery. After a few seconds (up to one minute) the device is automatically detected and added to the device list in the SmartGraph3 software.



Information about using the PC software is provided in the online help.

Errors and faults

The accurate functionality of the device was tested during production a number of times. However, if functionality faults do occur, then check the device according to the following list.

The device does not switch on:

- Check the loading status of the batteries. Change the batteries when the message *Batt lo* is displayed upon switch-on.
- Check that the batteries are properly positioned. Check the polarity is correct.
- Never carry out an electrical check yourself; instead, contact your Lufft® customer service.

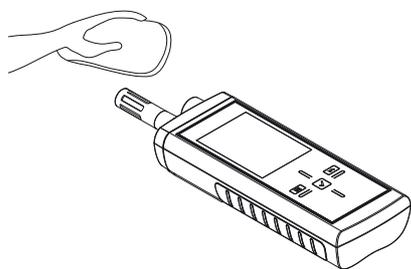
Maintenance



For maintenance or repair work which requires the housing to be opened, contact Lufft® customer service. Devices which have been opened unlawfully are void of any warranty and warranty claims.

Cleaning the device

1. Use a soft, lint-free cloth for cleaning.
2. Dampen the cloth with clean water. Do not use sprays, solvents, alcohol-based or abrasive cleaners to dampen the cloth.
3. Clear dirt from the housing, the connections and the colour display.



Cleaning the infrared sensor

- If the infrared sensor is dirty, you can carefully blow it off.

Battery change

Change the batteries when the message *Batt lo* is displayed upon switch-on or the device can no longer be switched on. See Inserting the batteries on page 5.

Disposal



In the European Union, electronic equipment must not be treated as domestic waste, but must be disposed of professionally in accordance with Directive 2002/96/EC of the European Parliament and Council of 27th January 2003 concerning old electrical and electronic equipment. After the end of its use, please dispose of this device in a manner appropriate to the relevant legal requirements.

In the European Union, batteries must not be treated as domestic waste, but must be disposed of professionally in accordance with Directive 2006/66/EC of the European Parliament and Council of 6th September 2006 concerning batteries and accumulators. Please dispose of batteries in a manner appropriate to the relevant legal requirements.

Declaration of conformity

in accordance with the EC Low Voltage Directive 2006/95/EC and the EC Directive 2004/108/EC about electromagnetic compatibility.

We hereby declare that the Infrared thermohygrometer XC250 was designed, developed and produced in compliance with the named EC Directive.

Applied harmonised standards:

The CE marking is found on the rear of the device.

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