



Fig. 1

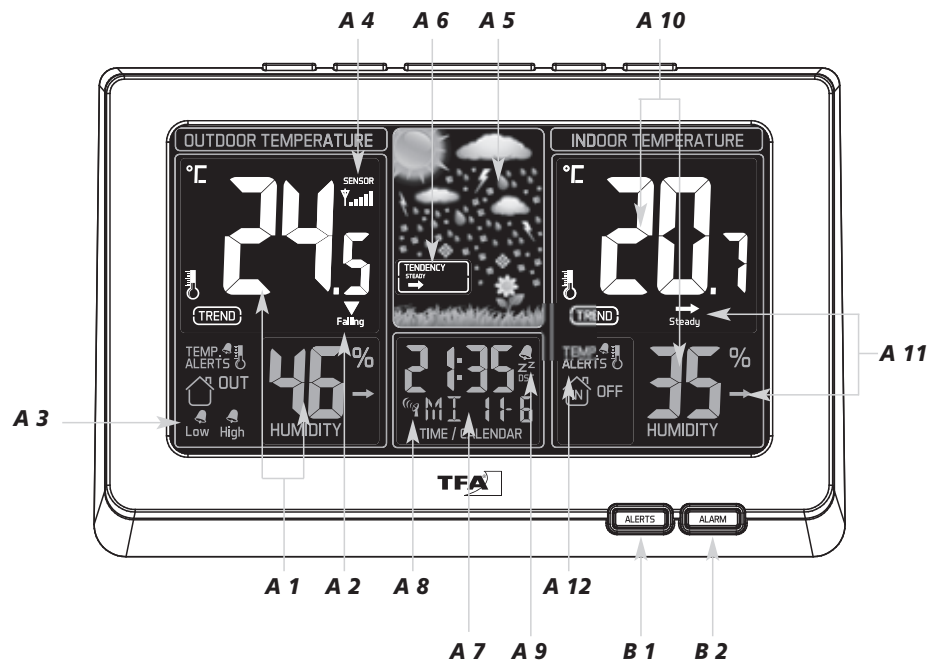


Fig. 2

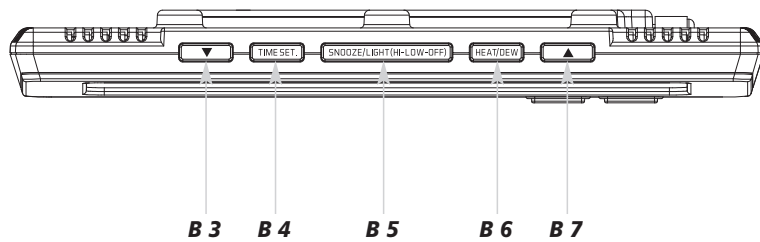


Fig. 3

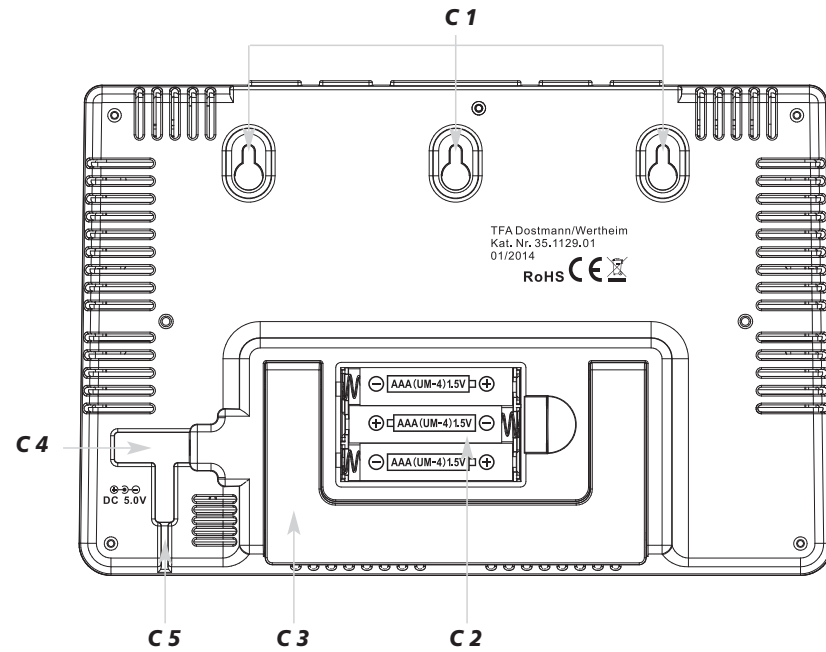
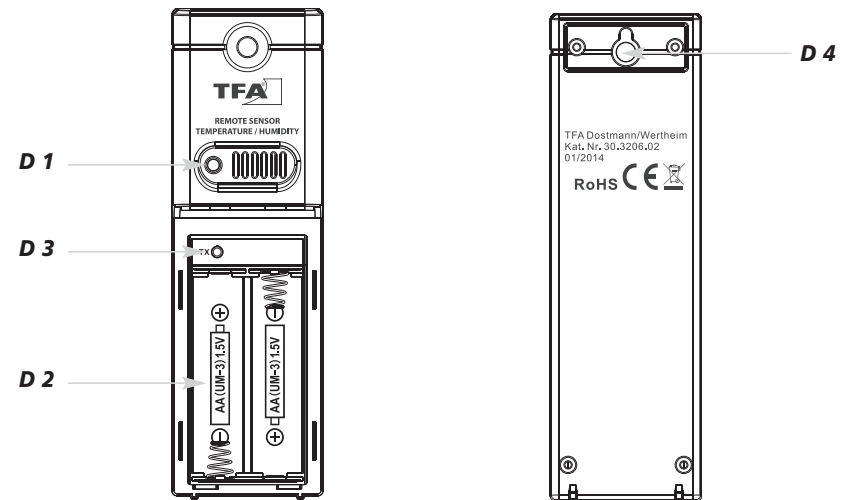


Fig. 4



## **SPRING – Wireless weather station**

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Thank you for choosing this instrument from TFA.

### **1. Before you start using it**

- **Please make sure to read the instruction manual carefully.** This information will help you to familiarise yourself with your new device, to learn all of its functions and parts, to find out important details about its first use and how to operate it, and to get advice in the event of faults.
- **Following and respecting the instructions in your manual will prevent damage to your instrument and loss of your statutory rights arising from defects due to incorrect use.**
- **We shall not be liable for any damage occurring as a result of non-following of these instructions. Likewise, we take no responsibility for any incorrect readings and for any consequences which may result from them.**
- **Please take particular note of the safety advice!**
- **Please keep this instruction manual for future reference.**

### **2. Delivery contents**

- Wireless weather station (basic station)
- AC/DC power adaptor
- Outdoor transmitter (Cat.-No.: 30.3206.02)
- Instruction manual

### **3. Field of operation and all the benefits of your new instrument at a glance**

- Outdoor temperature and humidity over wireless outdoor transmitter (433 MHz), range of up to 60 m (free field)
- Indoor temperature and humidity
- Tendency indicators, maximum and minimum values, temperature alarm
- Animated weather forecast with symbols and tendency of atmospheric pressure
- Dew point
- Radio-controlled clock with date and weekday ( 7 languages)
- Alarm with snooze function
- Colour display with two brightness levels ( continuous operation by power adapter only)

### **4. For your safety**

- This product is exclusively intended for the field of application described above. It should only be used as described within these instructions.
- Unauthorized repairs, modifications or changes to the product are prohibited.



#### **Caution! Risk of electrocution!**

- Plug the basic unit only into a socket installed in regulation manner and with a mains voltage of 230V! The mains socket must be installed near the equipment and it must be easily accessible.
- The basic unit and the mains adapter must not come into contact with water or moisture. Only suitable for operation in dry interiors.
- Do not use the unit if the housing or the mains adapter are damaged.
- Keep the unit out of reach of persons (including children) who cannot fully appreciate the potential risks of handling electrical equipment.
- Pull the plug out of the socket immediately if any fault occurs or if the unit is not used for a long period of time.
- Only use the supplied mains adapter.
- First connect the lead to the instrument and then insert the mains plug into the socket.
- Do not pull the plug out of the socket by its lead.
- Route the mains lead so that it does not come into contact with sharp-edged or hot objects.



**Caution!**  
**Risk of injury:**

- Keep these instruments and the batteries out of the reach of children.
- Batteries must not be thrown into a fire, short-circuited, taken apart or recharged. Risk of explosion!
- Batteries contain harmful acids. 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.



**Important information on product safety!**

- Do not place your product near extreme temperatures, vibrations or shocks.
- Protect it from moisture.
- The outdoor transmitter is protected against splash water, but is not watertight. Choose a shady and dry position for the transmitter.

**5. Elements**

**Wireless weather station (basic station)**

**A: Display (Fig. 1):**

**Left display**

- A 1:** Outdoor temperature and humidity
- A 2:** Tendency indicators
- A 3:** Symbol for temperature alarm
- A 4:** Symbol for the outdoor transmitter

**Middle display**

- A 5:** Weather symbols
- A 6:** Tendency indicator
- A 7:** Time, weekday and date
- A 8:** DCF-reception symbol
- A 9:** Alarm / snooze / DST symbol

**Right display**

- A 10:** Indoor temperature and humidity
- A 11:** Tendency indicators
- A 12:** Symbol for temperature alarm

**B: Buttons (Fig. 1+2):**

**Front**

- B 1:** **ALERTS** button
- B 2:** **ALARM** button

**Top**

- B 3:** ▼ button
- B 4:** **TIME SET** button
- B 5:** **SNOOZE/LIGHT (HI – LOW - OFF)** button
- B 6:** **HEAT/DEW** button
- B 7:** ▲ button

**C: Housing (Fig. 3):**

- C 1:** Wall mount holes
- C 2:** Battery compartment
- C 3:** Stand (fold out)
- C 4:** Connection mains adapter
- C 5:** Cable slot

**D: Outdoor transmitter (Fig. 4):**

**Housing**

**Front:**

- D 1:** LED control lamp
- D 2:** Battery compartment
- D 3:** **TX** button inside of the battery compartment

**Backside:**

- D 4:** Wall mount hole

**6. Getting started**


- Place the basic station and the transmitter on a desk with a distance of approximately 1.5 meter. Avoid getting close to possible interference sources (electronic devices and radio installations).
- Remove the protective foil from the display of the basic station.
- Connect the basic station to the attached power adapter. Insert the adapter into the jack at the basic station and connect the power adapter to a wall socket. **Important!** Make sure that your household voltage is 230V! Otherwise your clock may be damaged.
- The device will alert you with a beep and all LCD segments will be displayed for a short moment.


**6.1 Inserting of the batteries in the outdoor transmitter / Reception of the outdoor values**

- Slide down the battery compartment lid of the outdoor transmitter.
- Insert two new batteries 1,5 V AA. Make sure the polarities are correct.
- After the batteries are inserted, the outdoor values will be transmitted to the basic station.
- As soon as the basic station receives the outdoor values, the values are permanently shown.
- If the reception of the outdoor values fails, “- -” appears on the display. Check the batteries and try it again. Check if there is any source of interference.
- You can also start the outdoor transmitter search manually later on (for example when the outdoor transmitter is lost or the batteries are changed).
- Hold the **HEAT/DEW** button on the basic station for three seconds.
- “- -” appears on the display.
- Press the **TX** button in the battery compartment of the outdoor transmitter.
- The device will alert you with a beep and the basic station receives the values from the outdoor transmitter.
- After successful installation close the battery compartment of the outdoor transmitter carefully.

**6.2 Reception of the DCF reception signal**

- After the reception of outdoor values, the clock is now trying to receive the reception signal and the DCF reception symbol will be flashing.
- When the time code is received successfully after 3-10 minutes, the radio-controlled time and the DCF symbol are displayed steadily in the LCD.
- The DCF reception always takes place at 1:00, 2:00 and 2:00 o'clock in the morning. If the reception is not successfully received at 3:00 clock, it shall be held further attempts until 5:00 clock.
- You can also activate the DCF reception manually.
- Press the **TIME SET** button.
- The DCF reception symbol will be flashing.
- There are three different reception symbols:

 flashing – reception is active

 stays – reception is good

No symbol – no reception

- By default, the DCF reception is activated and after successful reception of the DCF signal no manual adjustment is necessary.

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- In case the clock cannot detect the DCF-signal (for example due to disturbances, transmitting distance, etc.), the time can be set manually.
- The clock will then work as a normal quartz clock. (see: Manual settings).

### 6.3 Radio-controlled time reception

The time base for the radio-controlled time is a caesium atomic clock operated by the Physikalisch Technische Bundesanstalt Braunschweig. It has a time deviation of less than one second in one million years. The time is coded and transmitted from Mainflingen near Frankfurt via frequency signal DCF-77 (77.5 kHz) and has a transmitting range of approximately 1,500 km. Changeover from summer time or winter time is automatic. In Daylight Saving Time DST is shown on the LCD. The quality of the reception depends mainly on the geographic location. Normally there should be no reception problems within a 1,500 km radius around Frankfurt.

#### Please take note of the following:

- The recommended distance to any interfering sources like computer monitors or TV sets is at least 1.5 - 2 meters.
- Inside ferro-concrete rooms (basements, superstructures), the received signal is naturally weakened. In extreme cases, please place the unit close to a window to improve the reception.
- During nighttime, the atmospheric interference is usually less severe and reception is possible in most cases. A single daily reception is adequate to keep the accuracy deviation under 1 second.

### 6.4 Inserting of the batteries into the basic station

- The batteries will operate as a backup power source in case of power failure.
- For a permanent backlight and to conserve battery power, use the included supplied power adapter.
- Open the battery compartment at the back of the basic station.
- Insert two new batteries 1,5 V AAA. Make sure the polarities are correct.
- Close the battery compartment again.

### 6.5 Backlight

- **Attention:** Backlight in continuous operation only works with the power adapter.
- Default for the backlight is HI.
- Press the **SNOOZE/LIGHT (HI – LOW - OFF)** button once (LOW) to dim the backlight.
- Press the **SNOOZE/LIGHT (HI – LOW - OFF)** button once more (OFF) to turn off the backlight.
- The backlight is deactivated.
- To temporarily activate the backlight temporarily, press any button.

## 7. Operation

- During the operation, all successful settings will be confirmed by a brief beep tone.
- The instrument will automatically quit the setting mode if no button is pressed for a long period of time.
- Press and hold ▲ or ▼ button in the setting mode for fast running.

### 7.1 Manual settings

- Press and hold **TIME SET** button in normal mode for three seconds, to enter the setting mode.
- The time zone (0 = default) will be flashing on the display.
- Press the ▲ or ▼ button to adjust the time zone (+12/-12).
- The time zone correction is needed for countries where the DCF signal can be received but the time zone is different from the DCF time (e.g. +1=one hour later).
- Press the **TIME SET** button again and make the settings in the following sequence: day-of-the-week language, the 24- or 12 hour time system, the hours, the minutes, the year, the month, the day and the display for the temperature unit (°C or °F). Press the ▲ or ▼ button to adjust it.
- Confirm the setting with the **TIME SET** button.
- By a successful reception of the DCF signal the manually set time will be overwritten.

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### 7.1.1 Setting of the day-of-week language

- In the setting mode choose the day-of-the-week language.
- Press the ▲ or ▼ button.
- In the display appears: German - GE (default), French - FR, Italian - IT, Dutch - NE, Spanish - SP, Danish - DA and English - EN.
- Confirm the setting with the **TIME SET** button.

### 7.1.2 Setting of the 24- or 12 hour system

- In the setting mode you can change 24 - or 12 hour system.
- Press the ▲ or ▼ button.
- In 12 HR system AM (before noon) or PM (after noon) appears on the display.
- Confirm the setting with the **TIME SET** button.

### 7.1.3 Setting of the temperature unit

- In the setting mode you can change between °C (Celsius) or °F (Fahrenheit) as temperature unit.
- Press the ▲ or ▼ button.
- Confirm the setting with the **TIME SET** button.

## 7.2 Alarm function

- Press the **ALARM** button.
- AL and 0:00 (default) or the last adjusted alarm time appear on the display.
- Press and hold **ALARM** button for 3 seconds.
- The alarm symbol appears and the hour digit will be flashing.
- Press the ▲ or ▼ button to adjust the hours.
- Press the **ALARM** button again and you can adjust the minutes with the ▲ or ▼ button.
- Press the **ALARM** button to return to normal mode.
- The alarm function is activated.
- The alarm symbol appears on the display besides the current time.
- Press the **ALARM** button in normal mode, to activate or deactivate the alarm function.
- The adjusted alarm time and AL appear on the display.
- Press the **ALARM** button again. The alarm symbol appears or disappears on the display.
- When the adjusted alarm time is reached, the alarm will ring.
- The alarm symbol will be flashing on the display.
- Press any button and the alarm will stop.
- If the alarm is not stopped manually, the increasing alarm will automatically turn off after two minutes and will be reactivated at the same time.
- The alarm symbol stays in the display.
- When the alarm rings, press the **SNOOZE/LIGHT (HI – LOW - OFF)** button and the snooze function will be activated.
- Once the snooze function is activated, Zz will be flashing on the display.
- The alarm will be interrupted for 10 minutes.
- To deactivate the snooze function, press the **ALARM** button.
- The symbol Zz disappears.

## 7.3 Temperature and humidity

### 7.3.1 Maximum and minimum values

- Press the ▲ button in normal mode.
- MAX appears on the display.
- The highest temperature and humidity for indoor and outdoor are displayed since the last reset.
- Press the ▼ button in normal mode.
- MIN appears on the display.
- The lowest temperature and humidity for indoor and outdoor are displayed since the last reset.
- To return to the current value display, press the ▲ or ▼ button once more.
- The instrument will automatically quit the MAX/MIN mode if no button is pressed.
- Press and hold the ▲ button for 3 seconds while the maximum values are displayed to clear the recorded maximum readings and the actual values appear.
- Press and hold the ▼ button for three seconds while the minimum values are displayed to clear the recorded minimum readings and the actual values appear.
- The MAX-MIN values are automatically reset at midnight.

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### 7.3.2 Trend pointers

- The trend arrows indicate whether the values for temperature and humidity are currently increasing, steady or decreasing.

### 7.4 Weather forecast symbols

- There are 6 different weather symbols (sunny, slightly cloudy, cloudy, rainy, stormy and snow-fall).
- The weather forecast relates to a range of 12 hours and indicates only a general weather trend. For example, if the current weather is cloudy and the rain symbol is displayed, it does not mean the product is faulty because it is not raining. It simply means that the air pressure has dropped and the weather is expected to get worse but not necessarily rainy.
- The sun symbol also appears at night if there is a starry night.

#### Important note!

- Please note that the forecast symbol will become more defined in the course of operation. The forecast symbol is active right from the start, however, the reliability of the forecasts increases with the amount of data collected. To begin with, the sensor must adapt initially to the reference level at the site. The forecast symbol will become at its most reliable after about 30 days.

### 7.5 Setting of the outdoor temperature and indoor temperature alarm

- Press the **ALERTS** button in normal mode.
- **HIGH** and 60 °C (default) or the last adjusted upper temperature limit appear on the display.
- Press and hold the **ALERTS** button.
- The temperature display will be flashing.
- Press the ▲ or ▼ button to set the desired upper limit.
- Confirm with the **ALERTS** button.
- **LOW** and -40°C (default) or the last adjusted lower temperature limit appear on the display.
- The temperature display will be flashing.
- Press the ▲ or ▼ button to set the desired lower limit.
- Confirm with the **ALERTS** button.
- Set the upper and lower limit for the indoor temperature in the same way. (Measuring range: 0°C...+50°C / +32°F...+122°F)

### 7.5.1 Activate and deactivate the outdoor and indoor temperature alarm

- To activate or deactivate the respective alarm functions, press the **ALERTS** button in normal mode.
- **HIGH** and the last adjusted upper temperature limit is indicated.
- Press the ▲ button to activate the alarm function.
- Press the ▼ button to deactivate the alarm function.
- The alarm symbol appears/disappears on the display above **HIGH**.
- Press the **ALERTS** button again to go to the next alarm function and to return to normal mode.

### 7.5.2 Case of alarm

- In the case of an alarm the corresponding symbol will be flashing and an alarm sound is activated.
- You can stop the alarm by pressing any button.

### 7.6 Display of the dew point

- Press the **HEAT/DEW** button, to show the current dewpoint temperature.
- On the display appears **DEW-POINT** and the temperature.
- The display automatically switches back to the current display of temperature and humidity.
- **This interdependency of temperature and relative humidity is expressed by means of the dew-point: If the air is cooled continuously at constant absolute humidity, then the relative humidity will steadily increase up to a maximum of 100%. If the air is cooled further, then the excess water vapour is separated out in the form of water droplets.**

## 8. Positioning and fixing of the basic station and the outdoor transmitter

- With the foldable leg at the back of the basic station, the basic station can be placed onto any flat surface.

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- With the hanging holes at the back of the basic station, the basic station can be wall mounted at the respective location. Avoid the vicinity of any interfering field like computer monitors or TV sets and solid metal objects.
- The outdoor transmitter can be placed onto any flat surface or wall mounted at the respective location by the hanging hole at the back of the unit. Choose a shady and dry position for the transmitter. (Direct sunshine falsifies the measurement and continuous humidity strains the electronic components needlessly).
- Check the transmission of the signal from the outdoor transmitter to the basic station (transmission range of up to 60 m free field). Within ferro-concrete rooms (basements, superstructures), the received signal is naturally weakened.
- If necessary choose another position for the outdoor transmitter and/or basic station.

## 9. Care and maintenance

- Clean the instruments with a soft damp cloth. Do not use solvents or scouring agents.
- Remove the batteries and pull out the plug of the socket, if you do not use the products for a long period of time.
- Keep the instruments in a dry place.

### 9.1 Battery replacement

- Change the batteries of the outdoor transmitter when the battery symbol appears on the display of the outdoor values.
- Change the batteries of the basic station when the battery symbol appears on the display of the indoor values.
- **Please note:** When the batteries are changed, the contact between outdoor transmitter and basic station must be restored – so always insert new batteries into both units or start a manual outdoor transmitter search.

## 10. Troubleshooting

Problems	Solution
No indication on the weather station	<b>Operation with mains plug:</b> <ul style="list-style-type: none"><li>→ Connect the basic station to mains adapter</li><li>→ Backlight is activated permanently</li><li>→ Control the power adapter</li></ul> <b>Operation with batteries:</b> <ul style="list-style-type: none"><li>→ Ensure that the batteries polarity are correct</li><li>→ Press any button to activate the backlight briefly</li><li>→ Change the batteries</li></ul>
No reception of the outdoor transmitter Display “---“	<ul style="list-style-type: none"><li>→ No outdoor transmitter is installed</li><li>→ Check batteries of external transmitter (do not use rechargeable batteries!)</li><li>→ Restart the outdoor transmitter and the basic station according to the manual</li><li>→ Start the outdoor transmitter search manually according to the manual</li><li>→ Choose another place for the outdoor transmitter and/or the basic station</li><li>→ Reduce the distance between the outdoor transmitter and the basic station</li><li>→ Check if there is any source of interference</li></ul>
Incorrect indication	→ Change the batteries

## 11. Waste disposal

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



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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 labelled 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 obligated 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.

## 14. Specifications

### Basic station:

Measuring range indoor	
Temperature:	0 °C...+50 °C (+32...+122 °F)
Humidity:	1...99 %
Accuracy humidity	±5% (30%...80% rH)
Power consumption:	Power adapter 230 V AC / 5.0 V DC (included) 3 x 1,5 V AAA (batteries not included)
Dimensions:	210 x 26 (60) x 140 mm
Weight:	348 g (instrument only)

### Outdoor transmitter:

Measuring range outdoor	
Temperature:	-40 °C...+60°C (-40...+140 °F)
Humidity:	1...99 %
Accuracy humidity	±5% (30%...80% rH)
Range:	max. 60 m (free field)
Transmission frequency:	433 MHz
Maximum radio-frequency power:	< 10mW
Transmission time:	50 seconds
Power consumption:	2 x 1,5 V AA (batteries not included)
Dimensions:	40 x 21 x 130 mm
Weight:	47 g (instrument only)

No part of this manual may be reproduced without written consent of TFA Dostmann. The technical data are correct at the time of going to print and may change without prior notice. The latest technical data and information about your product can be found by entering your product number on our homepage.

### EU declaration of conformity

Hereby, TFA Dostmann declares that the radio equipment type 35.1129.01 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:

[www.tfa-dostmann.de](http://www.tfa-dostmann.de)