

BP5F

EN

OPERATING MANUAL
FOOD THERMOMETER



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Notes regarding the operating manual

Symbols



Warning of electrical voltage

This symbol indicates dangers to the life and health of persons due to electrical voltage.



Warning

This signal word indicates a hazard with an average risk level which, if not avoided, can result in serious injury or death.



Caution

This signal word indicates a hazard with a low risk level which, if not avoided, can result in minor or moderate injury.

Note

This signal word indicates important information (e.g. material damage), but does not indicate hazards.



Info

Information marked with this symbol helps you to carry out your tasks quickly and safely.



Follow the manual

Information marked with this symbol indicates that the operating manual must be observed.

You can download the current version of the operating manual and the EU declaration of conformity via the following link:



BP5F



<https://hub.trotec.com/?id=41866>

Safety

Read this manual carefully before starting or using the device. Always store the manual in the immediate vicinity of the device or its site of use!



Warning

Read all safety warnings and all instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and / or serious injury.

Save all warnings and instructions for future reference.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

- Do not use the device in potentially explosive rooms.
- Do not use the device in aggressive atmosphere.
- Protect the device from permanent direct sunlight.
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Do not open the device.
- Observe the storage and operating conditions as given in the Technical data chapter.

Intended use

Only use the device for food temperature measurements by means of the infrared sensor or temperature probe within the measuring range specified in the technical data.

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

Improper use

This device is not suited for measuring the body temperature in humans or animals. The device must not be pointed at people. Do not use the device in potentially explosive atmospheres, for measurements in liquids or at live parts. Trotec accepts no liability for damages resulting from improper use. In such a case, any warranty claims will be voided. Any unauthorised modifications, alterations or structural changes to the device are forbidden.

Personnel qualifications

People who use this device must:

- be aware of the dangers that occur when handling food at high temperatures, e.g. frying or grilling.
- have read and understood the operating manual, especially the Safety chapter.

Residual risks



Warning

Handling the penetration probe involves a risk of injury. When the penetration probe is folded out, be mindful of potential hazards and make sure to fold the penetration probe back in immediately after each use.



Warning

Risk of suffocation!

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



Warning

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



Warning

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



Caution

Keep a sufficient distance from heat sources.

Note

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

Note

Do not use abrasive cleaners or solvents to clean the device.

Information about the device

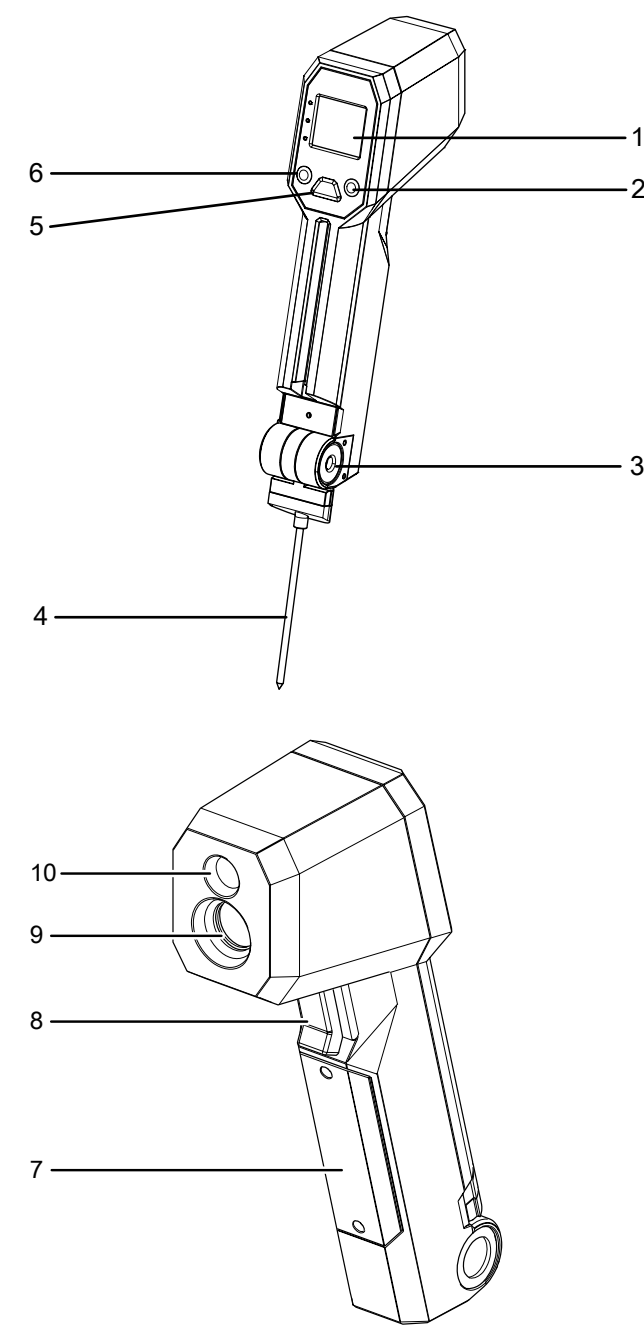
Device description

The device BP5F is a thermometer intended for temperature measurements in food, which are carried out by means of an infrared sensor or temperature probe in accordance with the HACCP standard (Hazard Analysis and Critical Control Points).

Beside the digital temperature display, three LEDs show whether the detected temperature is within the HACCP compliant temperature ranges.

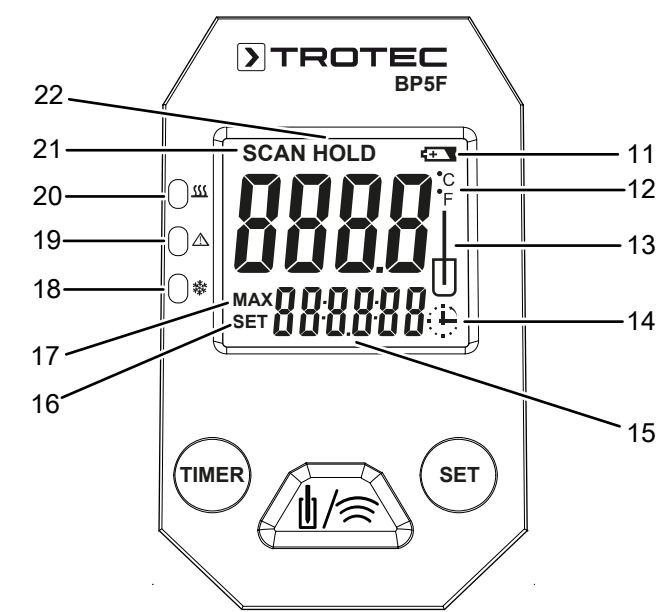
According to the HACCP directive, complying with the temperature ranges below 4 °C and above 60 °C is an important way of preventing the development and reproduction of harmful microorganisms. On the other hand, temperatures between 4 °C and 60 °C can promote the development of germs. To quickly show whether or not these temperature limits are complied with, the food thermometer BP5F shows three LEDs beside the digital temperature display which indicate the corresponding temperature range.

Device depiction



No.	Designation
1	Display
2	SET button
3	Temperature probe lock
4	Temperature probe
5	MEAS button
6	TIMER button
7	Cover of the battery compartment
8	Measurement button
9	Infrared sensor
10	LED

Display



No.	Designation
11	Battery indicator
12	Temperature unit indication
13	Measurement using the temperature probe indication
14	Timer function indication
15	Segment display for: <ul style="list-style-type: none">• maximum value of the last measurement• minimum value of the last measurement• time for the timer function
16	SET indication – Setting the time for the timer function
17	MAX indication – Display of the maximum value
18	Green LED – Temperature below 4 °C (40 °F)
19	Red LED – Temperature between 4 °C and 60 °C (40 °F and 140 °F)
20	Green LED – Temperature above 60 °C (140 °F)
21	SCAN indication – Measurement is on
22	HOLD indication – Freezing the display

Technical data

Parameter	Value
Model	BP5F
Article number	3,510,003,020
Weight	180 g
Dimensions (length x width x height)	185 mm x 50 mm x 67 mm
Temperature	
Measuring range	-40 °C to +200 °C (-40 °F to 392 °F)
Accuracy	below -5 °C (23 °F): +1 °C (1.8 °F) between -5 °C and 65 °C (23 °F and 150 °F): +1 °C (1.8 °F) above 65 °C (150 °F): +1%
Infrared	
Measuring range	-40 °C to +280 °C (-40 °F to 536 °F)
Accuracy	below -40 °C to 4 °C (-40 °F to 39.2 °F): +2 °C (3.6 °F) between 4 °C and 65 °C (39.2 °F and 150 °F): +1 °C (1.8 °F) above 65 °C (150 °F): +1.5 %
Reaction time	< 500 ms
Type of protection	IP65
Emissivity	0.95
Distance to measuring spot diameter ratio	20:1
Automatic switch-off	after approx. 20 seconds
Power supply	9 V battery

Scope of delivery

- 1 x Device BP5F
- 1 x 9 V battery
- 1 x Quick guide

Transport and storage

Note

If you store or transport the device improperly, the device may be damaged.

Note the information regarding transport and storage of the device.

Transport

The manufacturer packed the device to the best of his abilities to protect it against transport damage.

Storage

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

- dry and protected from frost and heat
- protected from dust and direct sunlight
- The storage temperature is the same as the range given in the Technical data chapter.
- Remove the batteries from the device.

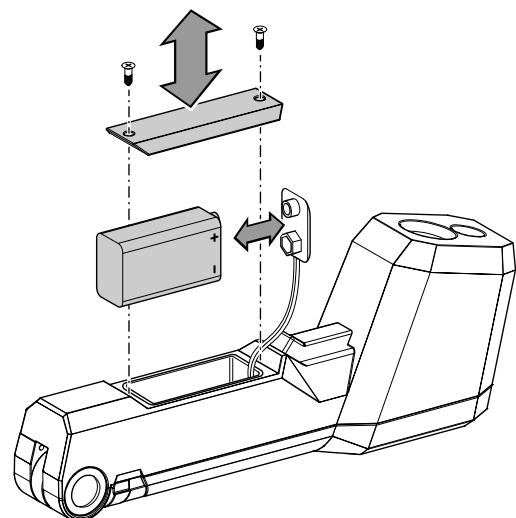
Operation

Note

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

Inserting the battery

1. Open the battery compartment by unscrewing the two screws with a suitable screwdriver.
2. Remove the battery compartment cover (7).
3. Insert the battery (1 x 9 V battery) into the battery compartment with correct polarity.
4. Fit the battery compartment cover back on the device and tighten the screws.



Switching on and selecting the measuring mode

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.

Proceed as follows to switch between measurement with infrared and measurement with temperature probe:

1. Press any button to switch on the device.
2. Press the **MEAS** button (6) to switch between measurement with infrared and measurement with temperature probe.
 - ⇒ If the symbol for measurement with temperature probe is displayed on the indication (13), the corresponding measuring mode is selected.
 - ⇒ If the symbol is not displayed, the infrared measuring mode is selected.

Measuring with infrared



Info

Vapours and smoke can influence the measurement.



Info

Ensure that the surface to be measured is free of dust, dirt, ice or similar substances.



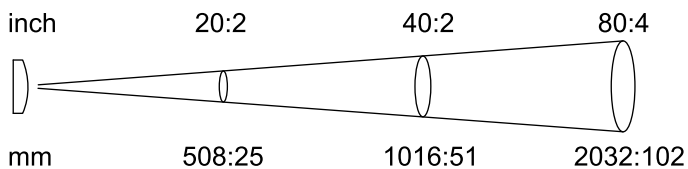
Info

To be able to gain exact measurement results on surfaces which reflect heavily, stick matt masking tape to the surface or apply matt black paint with a very high and known degree of emission.



Info

Note the 20:1 ratio of the distance to the measuring spot diameter. The larger the distance to the object, the larger the measuring spot diameter and hence, the less precise the measured result.



1. Switch the device on and select the infrared measuring mode.
2. Point the device at the object to be measured and hold down the measurement button (8).
 - ⇒ The **SCAN** indication (21) appears on the display. The device performs a measurement.
 - ⇒ The currently measured value is indicated.

3. Let go of the measurement button (8) again.
 - ⇒ The **HOLD** indication (20) appears on the display. The device stops measuring.
 - ⇒ The last value measured is shown.

Measuring with temperature probe

1. Press the temperature probe lock (3) and fold out the temperature probe (4).
2. Insert the temperature probe (4) into the object to be measured by approx. 1 cm.
3. Switch the device on and select the temperature probe measuring mode.
4. Press the **MEAS** button (5).
 - ⇒ The currently measured value is indicated.

Note

The temperature probe is not suitable as an ice pick and should never be pricked into frozen objects forcefully to prevent damages to the device.

Setting the timer

The device allows you to set a timer. After the set time has passed, a beep is emitted for 30 seconds.

Please proceed as follows to set the timer:

1. Press the **TIMER** button (6) to open the timer menu.
2. The timer period is displayed.
3. Press and hold the **TIMER** button (6) for 2 seconds to switch between seconds, minutes and hours.
 - ⇒ The currently selected time format flashes.
4. Press and hold the **SET** button (2) to set the corresponding value.
5. Press the measurement button (8) to start the timer.
 - ⇒ The timer starts and remains active in the background, even if you switch to another menu or the device turns off because of non-use.
 - ⇒ After the set time has passed, a beep is emitted for 30 seconds. Press any button to switch off the beep.

The device switches off after approx. 20 seconds of non-use.

Changing the unit °C / °F indication

The default setting for the temperature unit is °C.

Please proceed as follows to change the temperature unit at the device:

1. Press the **SET** button (2) to change the unit.
 - ⇒ The currently selected unit °C or °F will be indicated in the temperature unit indication (12) of the display (1).

Maintenance and repair

Battery change

A battery change is required when a battery indication lights up on the display (1) or the device can no longer be switched on. See chapter Operation.

Cleaning

Clean the device with a soft, damp and lint-free cloth. Make sure that no moisture enters the housing. Do not use any sprays, solvents, alcohol-based cleaning agents or abrasive cleaners, but only clean water to moisten the cloth.

Repair

Do not modify the device or install any spare parts. For repairs or device testing, contact the manufacturer.

Errors and faults

The device has been checked for proper functioning several times during production. If malfunctions occur nonetheless, check the device according to the following list.

For repairs or device testing, contact the manufacturer.

Disposal



The icon with the crossed-out waste bin on waste electrical or electronic equipment stipulates that this equipment must not be disposed of with the household waste at the end of its life. You will find collection points for free return of waste electrical and electronic equipment in your vicinity. The addresses can be obtained from your municipality or local administration. For further return options provided by us please refer to our website <https://de.trotec.com/shop/>.

The separate collection of waste electrical and electronic equipment aims to enable the re-use, recycling and other forms of recovery of waste equipment as well as to prevent negative effects for the environment and human health caused by the disposal of hazardous substances potentially contained in the equipment.



In the European Union, batteries and accumulators 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 of the Council of 6 September 2006 on batteries and accumulators. Please dispose of batteries and accumulators according to the relevant legal requirements.