

Technical measurement inspection

A verification of the measurement accuracy of the infrared thermometer is usually not necessary. For devices which are used for medical application, current medical regulations stipulate a verification and a calibration control after 2 years. The Board of Weights and Measures can carry out this verification for a fee.

The legal basis for distribution in the EU

The manufacturer has been certified by TÜV Rheinland Product Safety GmbH according to DIRECTIVE 93/42 / EEC of 14 June 1993 concerning medical devices. The thermometer complies with the requirements of EN 12470-5:2003-09 and EN 60601-1: 20013-12.

Waste disposal

This product has been manufactured using high-grade materials and components which 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 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.

Technical data

Measurable objects:	Infrared-thermometer 31.1133.01 (identical to SC 58) Forehead and objects
Measuring distance:	1 to 3 cm to the object to be measured
Measuring time:	approx. 1 second
Measurement resolution:	0,1°C (0,1°F)
Units:	°C/°F
Measuring range:	Forehead: 32,2°C - 43,3°C (90°F - 110°F) Objects: 0°C - 90°C (32°F - 194°F) Display "L"/"H" outside the measuring range
Measurement accuracy:	Forehead: +/- 0,2°C (+/-0,4°F), Objects: +/- 1°C (+/-2°F)
Operating conditions:	10°C - 40°C (50°F - 104°F). 15 - 95% rel. humidity
Storage conditions:	10°C - 40°C (50°F - 104°F). 15 - 95% rel. humidity
Energy source:	1 x CR2032
Battery life:	approx. 1.000 measurements
Dimensions:	59 x 22 x 61mm
Weight:	25g (inclusive battery)

Explanation of symbols

	Manufacturer
	CE Mark certification authority (TÜV Rheinland)
	Application part Type BF
	Recycling information
	Production period month/year
	Read Instructions
	Keep dry



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Infrared-Thermometer 31.1133.01

For non-contact measurement
of body temperature on the forehead.



User manual

Introduction

Thank you for purchasing this infrared thermometer. To use all features of this device correctly, please read these instructions carefully before first use. Keep this manual in a safe place for future reference.

Intended use

This infrared thermometer can be used to measure the body temperature on the forehead from 32.2 °C to 43.3 °C or the surface temperature of an object from 0 °C to 90 °C. The thermometer is an infrared based non-contact measurement device. The intended use is based on the contactless determination of the body temperature of children and adults. It's intended both for home as well as for medical use. In addition to body temperature, the device can measure the surface temperature of an object or the ambient air in a room.

Requirements

The device can only be used with an Android or an Apple iOS smartphone. It is necessary to either download a free app from the App Store or Google Play Store.

Special features

- The measurement results are displayed within a few seconds
- After the device is disconnected from the smartphone, it turns off automatically.
A manual off switch on the device is not necessary.
- The app offers a lot of features such as voice output, history data, graph view and much more...

Safety information

1. Read the entire manual before using the device.
2. The device is delivered in non-sterile condition. Please clean the device before the measurement.
3. Stop using the device when it indicates a malfunction or when it is operating abnormally.
4. Children should not use the device without adult support.
5. Do not place the unit on scratchy surfaces.
6. Do not place the device on open wounds.
 - Keep batteries out of the reach of children. If a battery is swallowed, contact a doctor immediately. Do not throw batteries in a fire because they may explode.
 - Store the sensor in the included storage box when you are not using it.

Note

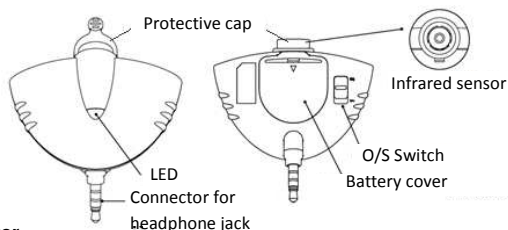
1. Never touch the sensor. The sensitivity of the device will be reduced. Avoid dropping the unit. It is not shockproof.
2. The forehead must be clean and dry, free of sweat and every kind of cosmetics such as creams, rouge, ...
3. Never open the device except for battery change
4. Wait at least 30 minutes after sporting activities, after bathing or after your meal to do a measurement.
5. If a body temperature which is lower than the room temperature is being measured, incorrect measurement values can be displayed.
6. To ensure optimal performance of the device, please read the "Technical data" section for storage and operating conditions.
7. Please pay attention to the recycling instructions for the batteries and for your device when disposing of it.
8. To ensure the correct function of the device, we recommend a measurement inspection every two years.
9. Some medications can cause an increase of the skin temperature which in turn may lead to an incorrect measurement.
10. If you take a measurement while the skin is exposed to a heat source (e.g. solar radiation, air conditioning or heating), you will get an incorrect measurement of the values.
11. Avoid extreme temperature fluctuations; keep your thermometer at least one hour at room temperature before taking a measurement.
12. To save battery time, remove your device from your smartphone after taking a measurement.

Errors

Incorrect measurements can occur:

1. When the sensor is directed to scars or to diseased skin.
2. With trauma patients or patients who are subject to drug therapy.
3. When the sensor is directed to skin that was exposed to a heat source.

Device description



The LED-Indicator

red: No contact or empty battery

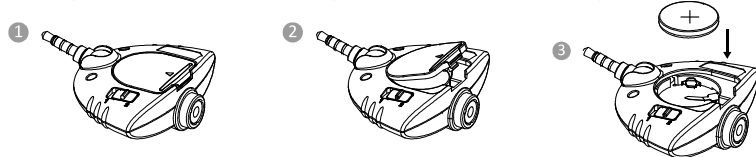
green: Function OK

The O/S-switch

Switch position 1: Android, Switch position 2: Apple iOS

Start-up / battery change

Before a first use, just pull out the protective strip from the battery compartment. The app warns you when the battery is empty. The device can not take measurements any longer. Unplug the device from your smartphone and proceed with the following steps: Open the battery compartment (avoid any use of sharp-edged tools). Carefully remove the old battery. Insert the new battery (minus-pole down) into the battery compartment. Close the battery compartment.

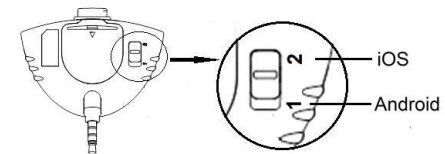


Temperature measurement on the forehead

1. Download the app Oucare (IRT Oucare) on your smartphone or open the already downloaded app. The app IRT Oucare starts up (button is still inactive).



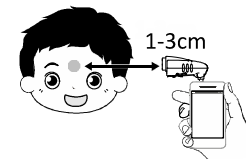
2. Bring the O/S switch to the position of the operating system of your smartphone (switch position 1: for android, 2: for Apple iOS).



iOS is a trademark of Apple Inc., registered in the U.S. and other countries. Android is a trademark of Google Inc.

3. Plug the device into the headphone jack of your smartphone (button turns to active). Turn the device into a suitable position for your measurement.

4. Remove the protective cap from the infrared sensor and direct the sensor to the forehead. Keep a distance of 1 to 3 cm from the sensor to the forehead! The measuring time is approximately 1 second. During the measurement, the distance between the sensor and the skin should not be changed.



5. Start the measurement with the button on the screen of your smartphone.

6. After measuring, disconnect the infrared thermometer from your smartphone. Only then will it turn off automatically. Otherwise the device will still consume power.

Instructions on the infrared measurement

Distance, Spot Size, and Field of View

As the distance (D) from the object increases, the spot size (S) of the area measured by the unit becomes larger a ratio D:S = 1:1 (e.g. 10 cm distance = 10 cm spot size). To get the most accurate temperature reading, aim at the target as near as possible.

Please take note of the following:

Steam, dust, smoke, etc., can prevent accurate measurement by obstructing the unit's optics. Not recommended for use in measuring shiny or polished metal surfaces (stainless steel, aluminum, etc.).

The unit cannot measure through transparent surfaces such as glass or plastic. It will measure the surface temperature of the glass instead.

Cleaning and disinfection

Each pharmacy sells alcohol wipes (alcohol pads) from different vendors. With these, you can wipe the whole device.

ATTENTION: Normal thermometers "feel" the temperature of the object to be measured through contact. This thermometer works infrared-based and "sees" the temperature. The "eye" is the infrared sensor. If the infrared sensor is dirty, the thermometer can not give correct readings. Please use the protective cap after measurement to protect the infrared sensor!