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PT<sub>200</sub> Bluetooth<sup>®</sup> Patch Thermometer

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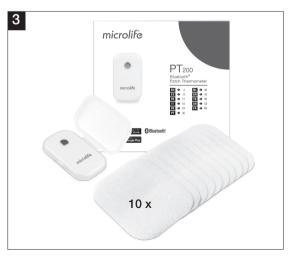




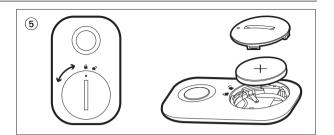


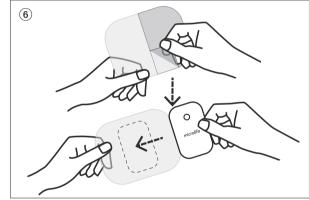














# Microlife Bluetooth® Patch Thermometer PT 200

- 1) Measuring sensor
- ② ON/OFF button
- 3 Power indicator
- (4) Battery Compartment
- (5) How to insert the battery (6) Preparing the device for use
- 7) Correct positioning of the device



Read the instructions carefully before using this device.



Type BF applied part

This Microlife thermometer is a high quality product incorporating the latest technology and tested in accordance with international standards. With its unique technology, this device can provide a stable, heat-interference-free reading with each measurement. The device performs a self-test every time it is switched on to always guarantee the specified accuracy of any measurement. This Microlife thermometer is intended for the periodic measurement and monitoring of human body temperature.

This thermometer has been clinically tested and proven to be safe and accurate when used in accordance to the operating instruction manual.

Please read through these instructions carefully in order for you to understand all functions and safety information.

#### Intended use:

This Microlife thermometer is intended for the periodic measurement and monitoring of human body temperature in children no vounger than 6 months old.

#### Table of Contents

# 1. The Advantages of this Thermometer

- Accurate and reliable
- · Safe, hygienic and biocompatible
- Fever alarm
- Bluetooth® Function

# 2. Important Safety Instructions

- 3. Using the Device for the First Time
- Downloading the «Microlife Thermo 24» App
- Connecting the «Microlife Thermo 24» App
- App Tutorial
- 4. Measuring the body temperature
- 5. Monitoring the body temperature
- 6. Cleaning and Disinfecting
- 7. Battery Replacement
- 8. Guarantee
- 9. Technical Specifications
- 10. www.microlife.com Guarantee Card (see Back Cover)

# I. The Advantages of this Thermometer

# Accurate and reliable

The unique assembly construction incorporates an advanced sensor, ensuring an accurate and reliable measurement. A measurement is taken every 5 seconds and transferred to the App.

## Safe, hygienic and biocompatible

- No risk of broken glass or mercury ingestion.
- Completely safe for use on children.
- The adhesive patches included are 100% biocompatible and do not harm the skin cells.
- Cleaning of the device can be done with an alcohol-moistened cotton tissue, making this thermometer completely hygienic for use by the whole family.

## Fever alarm

Continuous beeps (until the user acknowledges the alert) on the «Microlife Thermo 24» App, alert that the body temperature is equal to or higher than 37.5 °C. The default fever alarm setting is 37.5 °C. Users can also set alarm points for high and low temperatures indiName of Purchaser

Serial Number

Guarantee Card

Date of Purchase

Specialist Dealer



PT 200

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vidually. So when the temperature exceeds these limits, the colour of the displayed circle will turn red (high temperature) or blue (low temperature) and an alarm beep will be triggered. Please consult with your doctor if you do not know the appropriate body temperature.

## Bluetooth® Function

This device connects to the «Microlife Thermo 24» App by using Bluetooth<sup>®</sup> 4.0 and enables easy monitoring of temperature.

The Bluetooth® technology applied in this device, by its own configuration, can effectively prevent user data from being invaded, attacked, tempered or exploited by others without designated authorization.

## 2. Important Safety Instructions

- Follow instructions for use. This document provides important product operation and safety information regarding this device.
   Please read this document thoroughly before using the device and keep for future reference.
- This device may only be used for the purposes described in these instructions. The manufacturer cannot be held liable for damage caused by incorrect application.
- This device only works in conjunction with a smartphone or tablet as described in these instructions.
- This device comprises sensitive components and must be treated with caution. Observe the storage and operating conditions described in the «Technical Specifications» section.
- Do not scratch or press the measuring sensor.
- Do not use this device if you think it is damaged or notice anything unusual.
- Never open this device.
- Never immerse this device in water or other liquids. For cleaning please follow the instructions in the «Cleaning and Disinfecting» section.
- Keep the skin surface of contact place dry and clean before sticking the device on the body.
- The adhesive patches are for single use only do not use them repeatedly. Only use them in smooth and undamaged condition.
- If the measurement result is not consistent with the patient's finding or unusually low, double check the result by another core body temperature measurement.
- Patients with Cr or Ni allergy should not use the device.

- If skin allergy or irritation occurs during measurement, remove the device immediately.
- Do not leave the device in the same place on the skin for longer than 24 hours
- Do regular checks for a good sensor contact and make sure that the child does not manipulate or remove the device during measurement.
- Ensure the patch is firmly attached to the skin and avoid falling off during measurement due to human factors.
- When fixing the device to the skin, take care not to stretch the adhesive patch. The resulting continuous pull may cause blisters on sensitive skin.
- Ensure that children do not use this device unsupervised; some parts are small enough to be swallowed.
- Do not use this device close to strong electromagnetic fields.
  Keep a minimum distance of 3.3 m when using this device.
- · Protect it from:
  - extreme temperatures
  - impact and dropping
  - contamination and dust
  - direct sunlight
  - heat and cold
- If the device is not going to be used for a prolonged period the battery should be removed.
- Read the additional safety information provided within the individual sections of this instruction manual.



WARNING: The measurement results given by this device is not a diagnosis. It is not replacing the need for the consultation of a physician, especially if not matching the patient's symptoms. Do not rely on the measurement result only, always consider other potentially occurring symptoms and the patient's feedback. Calling a doctor or an ambulance is advised if needed.

# 3. Using the Device for the First Time

Insert the battery as described in chapter «Battery Replacement».

## Downloading the «Microlife Thermo 24» App

Download «Microlife Thermo 24» App for free from Google Play™ (Android) or App Store (iOS) and install it on your smartphone.

## Connecting the «Microlife Thermo 24» App

1. Activate Bluetooth® on your smartphone.

PT 200 2 **EN** 

- 2. Press and hold the ON/OFF button (2) for at least 3 seconds until the power indicator (3) flashes green 3 times to activate the Bluetooth® on the device
- 3. Start the «Microlife Thermo 24» App on the smartphone and create a profile, to establish a connection between the device and the smartphone. A temperature display will appear on the smartphone, when a successful connection has been established.
- Create different profiles for various patients, so they can be tracked separately.
- We recommend to activate the flight mode on the smartphone, while Bluetooth® is activated, to avoid disturbances of the connection by phone calls.

#### App Tutorial

To access the tutorial, select «Help & About» in the menu of the «Microlife Thermo 24» App (located in the upper left corner on the screen) and press «Tutorial».

## 4. Measuring the body temperature

- 1. The device and the patient must remain in a stable environment for at least 5 minutes before measuring the temperature.
- 2. Clean the armpit and the surrounding area.
- 3. Take one adhesive patch, remove the protective film and place the device right in the middle of the patch (6). The battery compartment (4) side should be stuck on the patch. The measuring sensor (1) needs to be in contact with the skin and as close as possible to the armpit.
- 4. Place the device with the adhesive patch directly on the skin below the armpit (7).
- 5. Lower the arm and wait around 15 minutes until the temperature rises to the body temperature level.
- 6. The temperature display will appear on the smartphone.
- 7. Press and hold the ON/OFF button (2) for 3 seconds to turn off the device; otherwise the device will automatically switch off after approx. 15 minutes, when removed from the body.
- To keep a good connection, avoid distances above 5 m between the device and the smartphone.
- Obstacles (e.g. walls) may weaken the connection.
- NOTE: · Regularly check for sufficient skin contact of the device, in order
- to avoid measurement errors
- Sudden movements or low battery power may lead to inaccurate measurement results

- The adhesive patches are for single use only do not use them repeatedly. Only use them in smooth and undamaged condition.
- Don't use the thermometer in high humidity environments.
- Doctors recommend rectal measurement for newborn infants. within the first 6 months, as all other measuring methods might lead to ambiguous results.
- . Readings from different measuring sites should not be compared as the normal body temperature varies by measuring site and time of day, being highest in the evening and lowest about one hour before waking up. Normal body temperature ranges:
  - Axillar: 34 7 37 3 °C / 94 5 99 1 °F

  - Oral: 35.5 37.5 °C / 95.9 99.5 °F Rectal: 36 6 - 38 0 °C / 97 9 - 100 4 °F
  - Microlife PT 200: 34 7 37 3 °C / 94 5 99 1 °F

# 5. Monitoring the body temperature

Monitor the body temperature, once the device is connected to the App. A measurement is taken every 5 seconds and transferred to the App. You can also track the temperature trend of the past hours and the data of previous measurements.

If the device is disconnected from the App, the device will save one measurement every minute and send the stored results to the App, once Bluetooth® is connected again.

## 6. Cleaning and Disinfecting

Use an alcohol swab or cotton tissue moistened with alcohol (70% Isopropyl) to clean the thermometer casing and the measuring sensor. Ensure that no liquid enters the interior of the device. Never use abrasive cleaning agents, thinners or benzene for cleaning and never immerse the device in water or other cleaning liquids. Take care not to scratch the measuring sensor.

# 7. Battery Replacement

This device is supplied with one lithium battery type CR2032. The battery needs replacing, when the power indicator (3) is blinking red and a notification on the smartphone App is shown. Remove the battery cover (4) by using a coin and rotate clockwise to open. Insert the new battery with the + at the top (5). Then position the battery cover and rotate it counterclockwise to close.

NOTE:

3 microlife



If the power indicator is flashing red after battery replacement, please switch on the device to reinitialise the device. Batteries and electronic devices must be disposed of in accordance with the locally applicable regulations, not with domestic waste

#### 8. Guarantee

This device is covered by a 5 year quarantee from the date of purchase. The guarantee is valid only on presentation of the guarantee card completed by the dealer (see back) confirming date of purchase or the receipt.

- The guarantee covers the device. The battery and packaging are not included
- Opening or altering the device invalidates the guarantee.
- The guarantee does not cover damage caused by improper handling, a discharged battery, accidents or non-compliance with the operating instructions.

Please contact Microlife-service

# 9. Technical Specifications

Type: Patch Thermometer PT 200 Measurement range: 32.0 - 43.0 °C / 89.6 - 109.4 °F

0.01 °C / °F Resolution: Measurement Laboratory: accuracy:  $\pm 0.1 \,^{\circ}\text{C} / \pm 0.2 \,^{\circ}\text{F}$ 

Memory: 4320 readings if not linked to the smartphone

10 - 40 °C / 50 - 104 °F Operating

conditions: 15 - 95 % relative maximum humidity

Storage conditions: -25 - +60 °C / -13 - +140 °F

15 - 95 % relative maximum humidity Automatic switch off after 15 minutes. when

**Automatic** Switch-off: removed from the body.

Communication: Bluetooth® 4.0

> 5 m valid transmission distance in free space: real achieved transmission range in households depend on environment condi-

tions and phone specifications

Compatibility: iOS: iOS 8.0 or newer

Android: Android 5.0 or newer

Battery: 1 x CR2032 battery 3V Battery lifetime: approx. 9 days when used 8 hours per day

(using a new battery)

Dimensions: 53 x 31.5 x 8 mm

Weight: 11 g (with battery), 8 g (w/o battery)

IP Class: IP22

Reference to EN12470-3, ASTM E1112; IEC 60601-1; standards: IEC 60601-1-2 (EMC); IEC 60601-1-11

Expected

service life: 5 years

This device complies with the requirements of the Medical Device Directive 93/42/EEC.

Electromagnetic compatibility: This device fulfills the stipulations of

the standard IEC 60601-1-2 (EMC). Technical alterations reserved.

According to the Medical Product User Act a biennial technical inspection is recommended for professional users. Please observe the applicable disposal regulations.

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#### 10. www.microlife.com

Detailed user information about our thermometers and blood pressure monitors as well as services can be found at www.microlife.com.

PT 200