

Omron Healthcare MC-687

Omron Electronic Thermometer MC-687 User Manual

1. INTRODUCTION AND OVERVIEW

This manual provides instructions for the safe and effective use of your Omron MC-687 Electronic Thermometer. This device is designed for accurate body temperature measurement, offering both quick predictive readings and precise actual measurements. Key features include a 15-second predictive measurement, a buzzer to indicate completion, memory for the last reading, and an automatic power-off function.



Image: The Omron MC-687 Electronic Thermometer, a sleek white device with a clear digital display for temperature readings.

2. SAFETY INFORMATION

- Read all instructions thoroughly before using the thermometer.
- Keep the thermometer out of reach of children and individuals who cannot operate it properly.
- Do not bite, bend, or attempt to disassemble the thermometer.
- Avoid exposing the thermometer to direct sunlight, high temperatures, or moisture.
- If you have concerns about your temperature or health, consult a medical professional.
- This device is for personal use and should not be used for professional medical diagnosis without proper training.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- Omron MC-687 Electronic Thermometer unit

- Protective Storage Case
- CR1220 Alkaline Button Battery (test battery included)
- Instruction Manual (this document)



Image: The Omron MC-687 Electronic Thermometer displayed in its retail packaging, highlighting its quick measurement feature.

4. SETUP

The Omron MC-687 thermometer comes with a test battery pre-installed, making it ready for immediate use. No initial setup is typically required beyond removing it from its packaging.

4.1 Initial Check

1. Remove the thermometer from its storage case.
2. Press the power button. The display should light up, showing the last measured temperature or a default reading.
3. If the display does not light up, refer to the Troubleshooting section for battery replacement instructions.

5. OPERATING INSTRUCTIONS

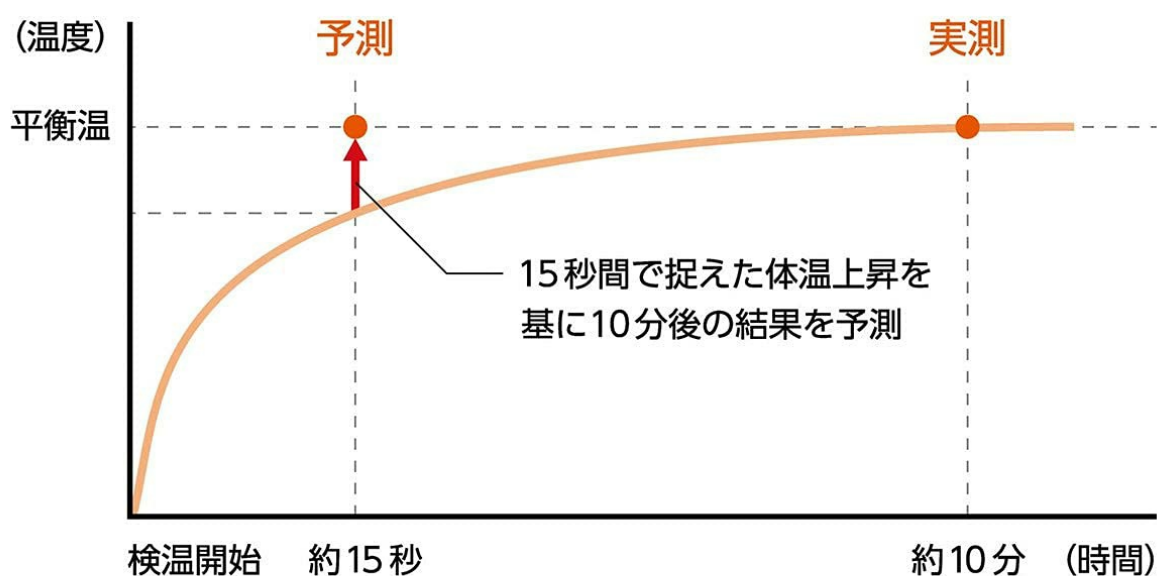
5.1 Taking a Measurement

1. Press the power button to turn on the thermometer.
2. Place the sensing tip of the thermometer firmly in the armpit (axillary measurement). Ensure good skin contact.
3. Hold the thermometer in place. The device will begin a predictive measurement.
4. After approximately 15 seconds, a buzzer will sound, and the predictive temperature will be

displayed. This is a quick estimate of your body temperature.

5. To obtain a more precise, actual measurement, continue holding the thermometer in place after the predictive reading. The thermometer will automatically switch to actual measurement mode.
6. The actual measurement for axillary use typically takes about 10 minutes. A longer buzzer sound will indicate the completion of the actual measurement.
7. Remove the thermometer and read the final temperature displayed.
8. Press the power button to turn off the thermometer, or it will automatically power off after a period of inactivity.

測定時間について（実測と予測の違い）



オムロンの予測式体温計は測定時間が終了しても、
そのまま測定をつづけると実測測定ができます。

わき(腋窩温)

平衡温まで
10分以上必要

口中(舌下温)

平衡温まで
5分以上必要

耳(鼓膜温)

平衡温まで約1秒
(オムロン耳式は最短1秒、
最長10秒間)

Image: A graph illustrating the difference between predictive (approx. 15 seconds) and actual (approx. 10 minutes) measurement times for the Omron thermometer, showing temperature rise over time to reach equilibrium.

5.2 Understanding Predictive vs. Actual Measurement

The Omron MC-687 offers two measurement modes:

- **Predictive Measurement:** This mode quickly estimates your body temperature in about 15 seconds by analyzing the initial temperature rise. It uses Omron's proprietary algorithm to predict the temperature you would reach after a longer period.
- **Actual Measurement:** This mode continues to measure until your body temperature stabilizes (reaches equilibrium). This provides the most accurate reading. For axillary measurement, this

typically takes about 10 minutes.

実測式と予測式の違い

『予測式』とは？



平衡温（測定部が体の内部と同じぐらいになった温度）を
短時間で分析・演算した値を表示する方法。

（オムロン独自で収集した体温上昇データをもとにして計算）
測定開始からの温度と温度変化を、体温計に伝わっていく温度
の上がり方の情報をもとにして、計算し測定結果を表示する。

口中用、わき下用とそれぞれ専用の計算式を使っています。

予測測定終了後もそのまま測定を続けると、実測式に切り替わります。

Image: Visual explanation of Predictive Measurement, showing how the thermometer analyzes initial temperature rise to quickly estimate the final temperature.

実測式と予測式の違い

『実測式』とは？



測定部位の**その時の温度を測定し、表示する方式。**
一般的に実測式体温計の場合正しく測るには、
わきで約10分（口中で約5分）の時間が必要です。
ブザーがある機種は、温度上昇がほとんどなくなったという
タイミングを捉えると10分（口中5分）よりも
早く検温終了ブザーがなります。

Image: Visual explanation of Actual Measurement, detailing how it measures the current temperature of the body part, requiring longer times for accuracy.

5.3 Memory Function

The thermometer automatically stores the last measured temperature. To recall the last reading, simply press the power button when the device is off. The stored temperature will be displayed briefly before the thermometer enters measurement mode.

6. MAINTENANCE

6.1 Cleaning

After each use, clean the thermometer probe with a soft cloth dampened with alcohol or mild soap and water. Do not immerse the entire thermometer in water or use harsh chemical cleaners.

6.2 Storage

Store the thermometer in its protective case in a cool, dry place, away from direct sunlight and extreme temperatures. Keep it out of reach of children.



Image: The Omron MC-687 Electronic Thermometer shown with its dedicated protective storage case, emphasizing proper storage.

6.3 Battery Replacement

When the battery indicator appears on the display, it is time to replace the battery. The thermometer uses one CR1220 alkaline button battery.

1. Locate the battery cover on the back of the thermometer.
2. Use a small coin or screwdriver to open the battery cover.
3. Remove the old battery and insert a new CR1220 battery with the positive (+) side facing up.
4. Replace the battery cover and secure it tightly.

7. TROUBLESHOOTING

- **No display when powered on:** Check if the battery is correctly inserted or needs replacement.
- **"Lo" displayed:** This indicates a temperature below the measurable range (32.0°C). Ensure proper contact with the body.
- **"Err" displayed:** This indicates a measurement error. Ensure the thermometer is used correctly and within its operating temperature range. Try taking the measurement again.
- **Inaccurate readings:** Ensure the thermometer probe is clean and positioned correctly. Avoid taking measurements immediately after strenuous activity, bathing, or eating.

If problems persist, contact Omron Healthcare customer support.

8. SPECIFICATIONS

Model	MC-687
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Dimensions (W x L x D)	20.7 mm x 136.8 mm x 12.8 mm
Weight	Approx. 14g (including battery)
Measurement Method	Axillary (underarm)
Measurement Time	Predictive: Approx. 15 seconds Actual: Approx. 10 minutes
Measurement Range	32.0°C to 42.0°C
Measurement Accuracy	±0.1°C (between 35.0°C and 39.0°C)
Power Source	CR1220 Alkaline Button Battery x 1
Functions	Buzzer, Last Reading Memory, Auto Power Off
Materials	Sensing part: Stainless steel, Probe: ABS
Medical Device Number	229AGBZX00037000
Country of Origin	China
Included Accessories	Protective Storage Case, Test Battery

9. WARRANTY AND SUPPORT

For warranty information, please refer to the warranty card included with your product or visit the official Omron Healthcare website. If you require technical support, have questions about the product, or need assistance with troubleshooting, please contact Omron Healthcare customer service through their official channels.

Official Omron Healthcare Website: www.omron-healthcare.com