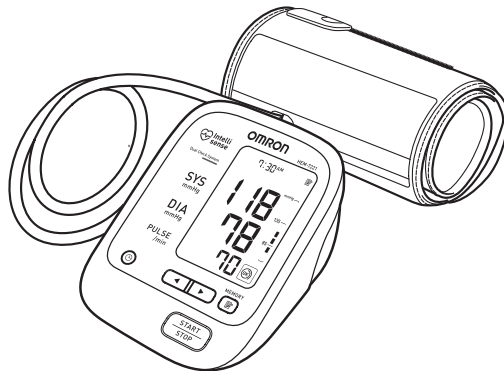


OMRON



**Automatic Blood Pressure Monitor
Model HEM-7221
Instruction Manual**



All for Healthcare

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Introduction

Thank you for purchasing the OMRON HEM-7221 Automatic Blood Pressure Monitor.

The OMRON HEM-7221 is a compact, fully automatic blood pressure monitor, operating on the oscillometric principle. It measures your blood pressure and pulse rate simply and quickly. Equipped with Dual Check System and Cuff Wrapping Guide, HEM-7221 provides accurate and anxiety-free blood pressure measurement everyday. For comfortable controlled inflation without the need of pressure pre-setting or re-inflation the device uses its advanced "IntelliSense" technology.

Intended Use

This product is designed to measure the blood pressure and pulse rate of people within the range of the designated arm cuff, following the instructions in this instruction manual.

It is mainly designed for general household use. Please read the Important Safety Information in this instruction manual before using the unit.

Please read this instruction manual thoroughly before using the unit.



Please keep for future reference.

For specific information about your own blood pressure, CONSULT YOUR DOCTOR.

Important Safety Information

Consult your doctor prior to using in pregnancy or if diagnosed with arrhythmia or arteriosclerosis.

Please read this section carefully before using the unit.

Warning:

- Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

(General Usage)

- Always consult your doctor. Self-diagnosis of measurement results and self-treatment are dangerous.
- People with severe blood flow problems, or blood disorders, should consult a doctor before using the unit, as cuff inflation can cause internal bleeding.

(Optional AC Adapter Usage)

- Never plug in or unplug the power cord from the electric outlet with wet hands.

(Battery Usage)

- If battery fluid should get in your eyes, immediately rinse with plenty of clean water. Consult a doctor immediately.

Caution:

- Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury to the user or patient or damage to the equipment or other property.

Important Safety Information

(General Usage)

- Do not leave the unit unattended with infants or persons who cannot express their consent.
- Do not use the unit for any purpose other than measuring blood pressure.
- Use only the approved arm cuff for this unit. Use of other arm cuffs may result in incorrect measurement results.
- Make sure that the air tube is not wrapped around other parts of your body when taking measurements. This could result in injury when the air pressure in the air tube is increased.
- Do not leave the cuff wrapped on the arm if taking measurements during the night. This could result in injury.
- Do not inflate the arm cuff over 299 mmHg.
- Do not use a mobile phone or other devices that emit electromagnetic fields, near the unit. This may result in incorrect operation of the unit.
- Do not operate the unit in a moving vehicle (car, airplane).
- To inflate the cuff manually, refer to Section 3.3. If the cuff is over inflated, it can cause internal bleeding.

(Optional AC Adapter Usage)

- Use only the original AC adapter designed for this unit. Use of unsupported adapters may damage and/or may be hazardous to the unit.
- Plug the AC adapter into the appropriate voltage outlet. Do not use a multiple-tap.
- Do not use the AC adapter if the unit or the power cord is damaged. Turn off the power and unplug the power cord immediately.

Important Safety Information

(Battery Usage)

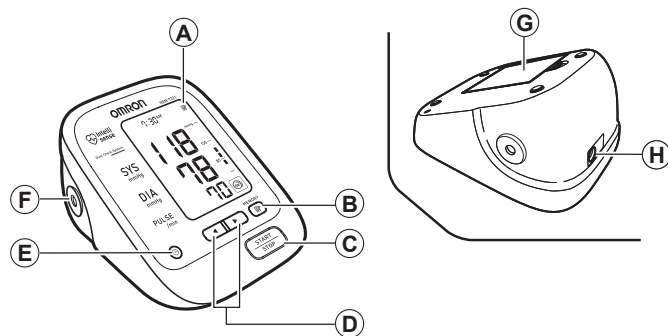
- If battery fluid should get on your skin or clothing, immediately rinse with plenty of clean water.
- Use only four "AA" alkaline or manganese batteries with this unit. Do not use other types of batteries.
- Do not insert the batteries with their polarities incorrectly aligned.
- Replace old batteries with new ones immediately. Replace all four batteries at the same time.
- Remove the batteries if the unit will not be used for three months or more.
- Do not use new and used batteries together.

General Precautions

- Do not apply strong shocks and vibrations to or drop the unit and arm cuff.
- Do not take measurements after bathing, drinking alcohol or caffeine, smoking, exercising or eating.
- Do not forcibly bend the arm cuff or bend the air tube excessively.
- When removing the air tube, pull on the air plug at the connection with the main unit not the tube itself.
- Do not inflate the arm cuff when it is not wrapped around your arm.
- Read and follow the "Important information regarding Electro Magnetic Compatibility (EMC)" in the Technical Data Section.
- Read and follow the "Correct Disposal of This Product" in the Technical Data Section when disposing of the device and any used accessories or optional parts.

1. Overview

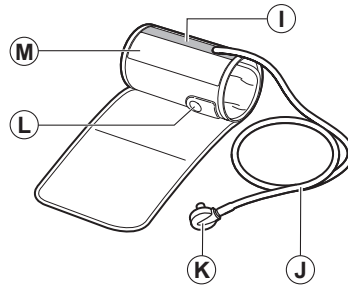
Main Unit:



- A. Display
- B. Memory button
- C. START/STOP button
- D. Up/Down (◀/▶) buttons
- E. Date/Time setting (⌚) button
- F. Air Jack
- G. Battery compartment
- H. AC adapter jack (for optional AC adapter)

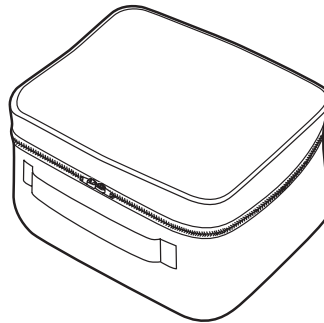
1. Overview

Arm Cuff:

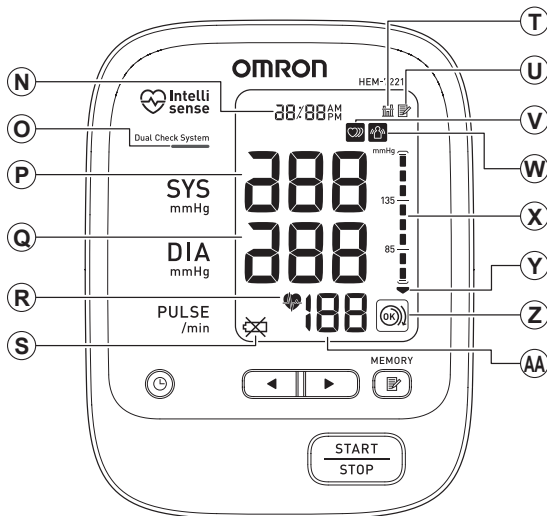


- I. Blue Strip
- J. Air tube
- K. Air plug
- L. Grip
- M. Arm cuff
(Arm circumference 17-32 cm)

Storage case:



Display:

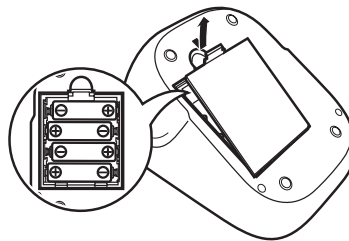


- | | |
|---|--|
| N. Date/Time display | T. Average value symbol |
| O. Dual Check System | U. Memory symbol |
| P. Systolic blood pressure | V. Irregular heartbeat symbol |
| Q. Diastolic blood pressure | W. Movement error symbol |
| R. Heartbeat symbol
(Flashes during measurement) | X. Blood pressure level indicator |
| S. Battery low symbol | Y. Deflation symbol |
| | Z. Cuff wrapping guide |
| | AA. Pulse display and Memory
number |

2. Preparation

2.1 Installing/Replacing the Batteries

1. Remove the battery cover.
2. Insert four "AA" batteries as indicated in the battery compartment and then replace the battery cover.




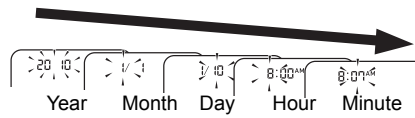
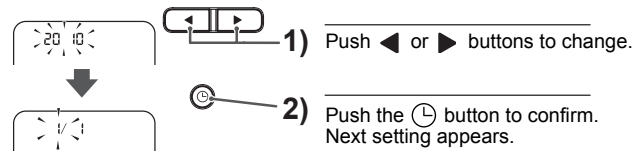
Notes:

- If the battery low symbol (⊗) appears on the display, turn the unit off then replace all batteries at the same time.
- The measurement values continue to be stored in memory even after the batteries are replaced.

Disposal of used batteries should be carried out in accordance with the national regulations for the disposal of batteries.

2.2 Setting the Date and Time

1. Press the  button.
2. Set the monitor to the correct date and time before taking a measurement for the first time.



3. Press the START/STOP button to store the setting.

Notes:

- If the batteries have been removed for 30 seconds or more, the date and time setting will need to be reset.
- If the date and time are not set, “-:-” appears during or after measurement.

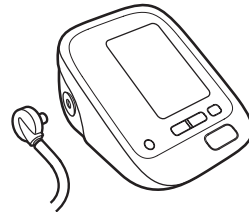
3. Using the Unit

3.1 Applying the Arm Cuff

Remove tight-fitting clothing or tight rolled up sleeve from your upper arm.

Do not place the cuff over thick clothes.

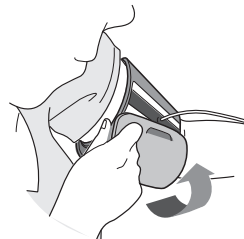
1. Insert the air plug into the air jack.



2. Hold the grip on the cuff securely with your hand.



3. Apply the cuff to your upper arm.

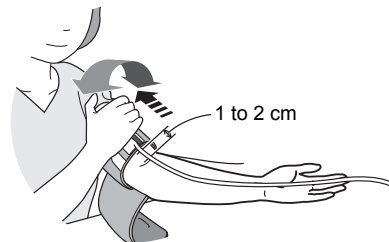


3. Using the Unit

The bottom edge of the cuff should be 1 to 2 cm above the elbow.

Blue strip is centred on the middle of your inner arm.

Close the fabric fastener FIRMLY.



Notes:

- When you take a measurement on the right arm, air tube will be at the side of your elbow. Be careful not to rest your arm on the air tube.
- The blood pressure can differ between the right arm and the left arm, and therefore also the measured blood pressure values can be different. OMRON recommends to always use the same arm for measurement. If the values between the two arms differ substantially, please check with your doctor which arm to use for your measurement.

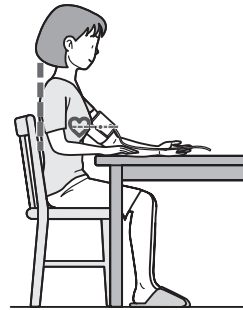


3. Using the Unit

3.2 How to Sit Correctly

To take a measurement, you need to be relaxed and comfortably seated, under comfortable room temperature. No bathing, drinking alcohol or caffeine, smoking, exercising or eating 30 minutes before taking a measurement.

- Sit on a chair with your feet flat on the floor.
- Sit upright with your back straight.
- The cuff should be at the same level as your heart.

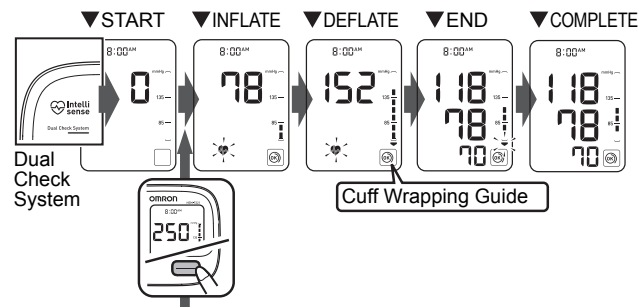


3.3 Taking a Reading

Notes:

- To cancel a measurement, press the START/STOP button to turn the unit off and to release the air in the arm cuff.
- Remain still while taking a measurement.

1. Press the START/STOP button.
The cuff will start to inflate automatically.



If your systolic pressure is more than 220 mmHg

After the cuff starts to inflate, press and hold the START/STOP button until the monitor inflates 30 to 40 mmHg higher than your expected systolic pressure.

Notes:


- The monitor will not inflate above 299 mmHg.
- Do not apply more pressure than necessary.

Dual Check System


Press the START/STOP button, then the Dual Check System lamp lights and the unit starts detecting a device error. If the unit is accurate and functioning correctly, the Dual Check System lamp remains lit during the measurement. If an error is detected, the Dual Check System lamp flashes and "Er" will appear on the display.

3. Using the Unit

Cuff Wrapping Guide

The Cuff Wrapping Guide is a unique feature that indicates if the cuff is not wrapped tightly enough around the arm. Even when the  is displayed, a blood pressure reading will be taken.

Note: This reading is NOT reliable due to the incorrect wrapping of the cuff. Please wrap the cuff again, taking care to wrap it correctly and take the measurement again.

When the  is displayed, the cuff is correctly wrapped tightly enough on the arm and the reading is accurate and reliable.

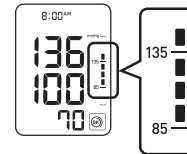
2. Remove the arm cuff.
3. Press the START/STOP button to turn the monitor off.

The monitor automatically stores the measurement in its memory.

It will automatically turn off after 2 minutes.

Important:





- Recent research suggests that the following values can be used as a guide to high blood pressure for measurements taken at home.



Systolic Blood Pressure	Above 135 mmHg
Diastolic Blood Pressure	Above 85 mmHg

This criteria is for home blood pressure measurement.

3. Using the Unit

- Your blood pressure monitor includes an irregular heartbeat feature. Irregular heartbeats can influence the results of the measurement. The irregular heartbeat algorithm automatically determines if the measurement is usable or needs to be repeated. If the measurement results are affected by irregular heartbeats but the result is valid, the result is shown together with the irregular heartbeat symbol (). If the irregular heartbeats cause the measurement to be invalid, no result is shown. If the irregular heartbeat symbol () is shown after you have taken a measurement, repeat the measurement. If the irregular heartbeat symbol () is shown frequently, please make your doctor aware of it.
- If you move during measurement, the movement error symbol () will appear on the display. Keep still and repeat the measurement.



Note: Wait 2-3 minutes before taking another blood pressure measurement. Waiting between readings allows the arteries to return to the condition prior to taking the blood pressure measurement.

⚠ Warning:

Self-diagnosis of measured results and treatment are dangerous.

Please follow the instructions of your doctor.

3. Using the Unit

3.4 Using the Memory Function

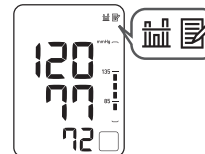
The monitor automatically stores the result up to 90 sets. It can also calculate an average reading based on the measurements from the last three readings taken within 10 minutes. If there are only two readings in memory for that period, the average will be based on two readings. If there is one reading in memory for that period, the average will be based on one reading.

Notes:

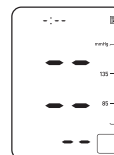
- If the memory is full, the monitor will delete the oldest readings.
- When viewing the reading taken without setting the date and time, “-:--” is displayed instead of the date and time.

To View the Average Value

1. Press the Memory button.



Note: If there are no measurements results stored in the memory, the screen to the right is displayed.

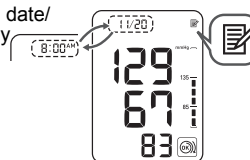


To View the Readings Stored in Memory

1. Press the ◀ button, while the average value is displayed.

The Memory number appears for a second before the pulse rate is displayed. The newest set is numbered "1".

Alternating date/
time display



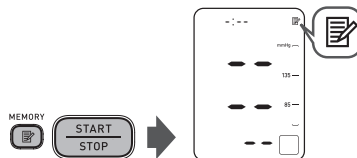
2. Press the ◀ or ▶ button to view the readings stored in memory.

◀: To the older readings

▶: To the more recent readings

To delete all the values stored in memory






When the memory symbol (📄) appears, first press the Memory button. Then while holding it down, press the START/STOP button simultaneously for about 2-3 seconds.



Note: You cannot partially delete the values stored in the memory.


4. Troubleshooting and Maintenance

4.1 The Icons and Error Messages

Error Display	Cause	Remedy
	Irregular heartbeats are detected.	Remove the arm cuff. Wait 2-3 minutes and then take another measurement. Repeat the steps in section 3.3. If this error continues to appear, contact your doctor.
	Movement during measurement.	Carefully read and repeat the steps in section 3.3.
	Cuff is not applied correctly.	Apply the arm cuff correctly. Refer to section 3.1.
 Blink	The batteries are low.	You should replace them with new ones ahead of time. Refer to section 2.1.
 Lit	The batteries are exhausted.	You should replace them with new ones at once. Refer to section 2.1.

4. Troubleshooting and Maintenance

Error Display	Cause	Remedy
E1	Air plug disconnected.	Insert the plug securely. Refer to section 3.1.
	Arm cuff not applied correctly.	Apply the arm cuff correctly. Refer to section 3.1.
	Air is leaking from the arm cuff.	Replace the cuff with the new one. Refer to Chapter 5.
E2	Cuff over inflated.	Repeat measurement. Remain still and do not talk during measurement. Refer to section 3.3.
		If "E2" appears repeatedly, inflate the cuff manually until it is 30 to 40 mmHg above your previous measurement result. Refer to section 3.3.
E3	The arm cuff was inflated above 299 mmHg when inflating the cuff manually.	Do not inflate the cuff above 299 mmHg. Refer to section 3.3.
E4	Movement during measurement.	Repeat measurement. Remain still and do not talk during measurement. Refer to section 3.3.
E5	Clothing is interfering with the arm cuff.	Remove any clothing interfering with the arm cuff. Refer to section 3.1.
Er	Device error.	Contact your OMRON retail outlet or distributor.

Note: The irregular heartbeat symbol () may also be displayed with error messages.

4. Troubleshooting and Maintenance

4.2 Troubleshooting

Problem	Cause	Remedy
The reading is extremely low (or high).	Arm cuff not applied correctly.	Apply the arm cuff correctly. Refer to section 3.1.
	Movement or talking during measurement.	Remain still and do not talk during measurement. Refer to section 3.3.
	Clothing is interfering with the arm cuff.	Remove any clothing interfering with the arm cuff. Refer to section 3.1.
Arm cuff pressure does not rise.	The air tube is not securely connected into the main unit.	Make sure that the air tube is connected securely. Refer to section 3.1.
	Air is leaking from the arm cuff.	Replace the arm cuff with a new one. Refer to Chapter 5.
Arm cuff deflates too soon.	The arm cuff is loose.	Apply the cuff correctly so that it is firmly wrapped around the arm. Refer to section 3.1.
Cannot measure or readings are too low or too high.	The arm cuff has not been inflated sufficiently.	Inflate the cuff so that it is 30 to 40 mmHg above your previous measurement result. Refer to section 3.3.
Nothing happens when you press the buttons.	The batteries are empty.	Replace the batteries with new ones. Refer to section 2.1.
	The batteries have been inserted incorrectly.	Insert the batteries with the correct (+/-) polarity. Refer to section 2.1.

4. Troubleshooting and Maintenance

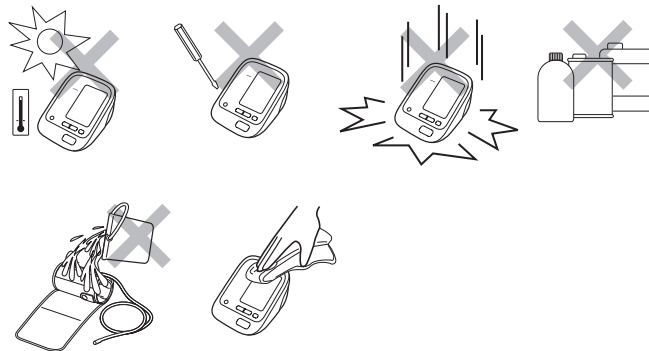
Problem	Cause	Remedy
Other problems.	<ul style="list-style-type: none">• Press the START/STOP button and repeat measurement.• If the problem continues, try replacing the batteries with new ones.	If this still does not solve the problem, contact your local authorised OMRON distributor or dealer.

4. Troubleshooting and Maintenance

4.3 Maintenance

To protect your unit from damage, please observe the following:

- Do not subject the main unit and the cuff to extreme temperatures, humidity, moisture or direct sunlight.
- Do not fold the cuff or tubing tightly.
- Do not disassemble the unit.
- Do not subject the unit to strong shocks or vibrations (for example, dropping the unit on the floor).
- Do not use volatile liquids to clean the main unit.
- Do not wash the arm cuff or immerse it in water.
- Do not use petrol, thinners or similar solvents to clean the arm cuff.
- Do not carry out repairs of any kind yourself. If a defect occurs, consult your local authorised OMRON distributor or dealer.



- The unit should be cleaned with a soft, dry cloth.
- Use a soft, moistened cloth and soap to clean the arm cuff.

Calibration and Service

- The accuracy of this blood pressure monitor has been carefully tested and is designed for a long service life.
- It is generally recommended to have the unit inspected every two years to ensure correct functioning and accuracy. Please consult your local authorised OMRON distributor or dealer.

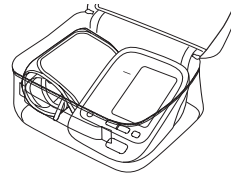
4.4 Storage

Keep the unit in its storage case when not in use.

1. Unplug the air plug from the air jack.
2. Gently fold the air tube into the arm cuff.

Note: Do not bend the air tube excessively.

3. Place the arm cuff and main unit in the storage case.



Do not store the unit in the following situations:

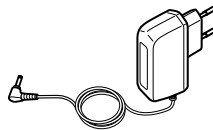
- If the unit is wet.
- Locations exposed to extreme temperatures, humidity, direct sunlight, dust or corrosive vapours.
- Locations exposed to vibrations, shocks or where it will be at an angle.

5. Optional Parts

Arm Cuff
Arm circumference
17-32 cm

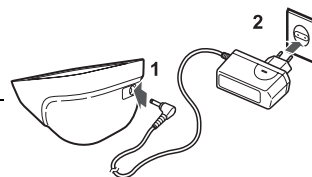


AC Adapter S





Using the Optional AC Adapter

1. Insert the AC adapter plug into the AC adapter jack on the rear side of the main unit.
2. Plug the AC adapter into an electrical outlet.



To disconnect the AC adapter, unplug the AC adapter from the electrical outlet first and then remove the AC adapter plug from the main unit.

6. Technical Data

Product Description	Automatic Blood Pressure Monitor
Model	HEM-7221 (HEM-7221-C1 (VG))
Display	LCD Digital Display
Measurement Method	Oscillometric method
Measurement Range	Pressure: 0 to 299 mmHg Pulse: 40 to 180/min.
Accuracy	Pressure: ± 3 mmHg Pulse: $\pm 5\%$ of display reading
Inflation	Fuzzy-logic controlled by electric pump
Deflation	Automatic pressure release valve
Memory	90 Measurements with date and time
Rating	DC6V \pm : 4W
Power Source	4 "AA" batteries 1.5V or AC adapter (Adapter S-9515336-9 (optional), INPUT AC100-240V 50/60Hz 0.12A)
Battery Life	Capacity of new alkaline batteries is approx. 1000 measurements
Applied Part	 = Type B
Protection Against Electric Shock	Internally powered ME equipment (When using only the batteries)  = Class II ME equipment (Optional AC adapter)
Operating temperature/ Humidity	+10°C to +40°C / Maximum: 30 to 85% RH
Storage temperature/ Humidity/ Air pressure	-20°C to +60°C / Maximum: 10 to 95% RH / 700-1060 hPa
Console Weight	Approximately 380g without batteries
Cuff Weight	Approximately 240g
Outer Dimensions	Approximately 123 (w) mm \times 85 (h) mm \times 158 (l) mm
Cuff Dimensions	Approximately 152 mm \times 600 mm (Cuff: arm circumference 17 to 32 cm)
Cuff Material	Nylon and polyester
Package Content	Main unit, cuff, instruction manual, storage case, battery set

Note: Subject to technical modification without prior notice.

6. Technical Data

CE0197

- This device fulfils the provisions of EC directive 93/42/EEC (Medical Device Directive).
- This blood pressure monitor is designed according to the European Standard EN1060, Noninvasive sphygmomanometers Part 1: General Requirements and Part 3: Supplementary requirements for electromechanical blood pressure measuring systems.
- This OMRON product is produced under the strict quality system of OMRON HEALTHCARE Co. Ltd., Japan. The Core component for OMRON blood pressure monitors, which is the Pressure Sensor, is produced in Japan.

Important information regarding Electro Magnetic Compatibility (EMC)

With the increased number of electronic devices such as PC's and mobile (cellular) telephones, medical devices in use may be susceptible to electromagnetic interference from other devices. Electromagnetic interference may result in incorrect operation of the medical device and create a potentially unsafe situation.

Medical devices should also not interfere with other devices.

In order to regulate the requirements for EMC (Electro Magnetic Compatibility) with the aim to prevent unsafe product situations, the EN60601-1-2:2007 standard has been implemented. This standard defines the levels of immunity to electromagnetic interferences as well as maximum levels of electromagnetic emissions for medical devices.

This medical device manufactured by OMRON HEALTHCARE conforms to this EN60601-1-2:2007 standard for both immunity and emissions.

Nevertheless, special precautions need to be observed:

- Do not use mobile (cellular) telephones and other devices, which generate strong electrical or electromagnetic fields, near the medical device. This may result in incorrect operation of the unit and create a potentially unsafe situation. Recommendation is to keep a minimum distance of 7 m. Verify correct operation of the device in case the distance is shorter.

Further documentation in accordance with EN60601-1-2:2007 is available at OMRON HEALTHCARE EUROPE at the address mentioned in this instruction manual.

Documentation is also available at www.omron-healthcare.com.

**Correct Disposal of This Product
(Waste Electrical & Electronic Equipment)**

This marking shown on the product or its literature, indicates that it should not be disposed of, with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this product from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can return this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.



OMRON



自动血压计
型号 HEM-7221
使用说明书



All for Healthcare

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保养和维修

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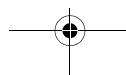
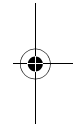
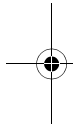
简介

感谢您购买 OMRON HEM-7221 自动血压计。

OMRON HEM-7221 是一款全自动血压计，根据示波法原理操作。本产品可方便快捷地测量血压与脉搏速率。HEM-7221 配备有双检测系统 (Dual Check System) 和臂带缠绕指示 (Cuff Wrapping Guide)，可让您每天都能测得准确血压，绝对放心。本设备利用先进的 IntelliSense 高智能技术，既可舒适控制充气，又可免于预设压力或重新充气。



使用本机前请先仔细阅读本说明书。
请妥善保管本说明书以备将来参考。
有关用户自身血压的具体详情，请咨询医生。





重要安全注意事项

孕妇或经诊断为心律不齐或动脉硬化的患者，请在使用本产品前咨询医生。

使用本产品之前请先细读本节内容。

⚠ 警告：

- 表示潜在的危险情形，如未避免此类情形，可能导致死亡或严重受伤。

(一般用途)

- 始终咨询医生。依测量值自我诊断及自我治疗非常危险。
- 由于臂带充气后会导致内出血，因此血液流动存在严重问题或血液异常的患者在使用本机前应咨询医生。

(使用交流适配器选件)

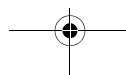
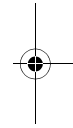
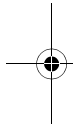
- 请勿用湿手从插座插拔电源线。

(电池使用)

- 若电池溶液进入眼睛，请立刻用大量清水冲洗，并马上就诊。

⚠ 注意：

- 表示潜在的危险情形，如未避免此类情形，可能导致用户或患者轻微或中等程度的身体损伤，或损坏设备或其它财产。





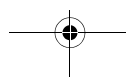
重要安全注意事項

(一般用途)

- 本机不能用于婴儿或无法正确表达自己意愿的人士。
- 请勿用于测量血压以外的任何目的。
- 请仅使用本装置认可的臂带。使用其它臂带可能导致测量结果不准确。
- 请确保气管没有缠绕在您身体的其他部位。如若气管内气压升高，可能会导致受伤。
- 夜晚测量时，请勿让臂带一直缠绕在手臂上。这可能导致受伤。
- 请勿对臂带充气超过 299 mmHg。
- 请勿在血压计附近使用手机或其他发射电磁场的装置。这可能导致血压计操作出错。
- 请勿在行动的交通工具（汽车、飞机）上使用血压计。
- 要对臂带手动充气，请参阅第 3.3 节。如果臂带充气过度，可导致内出血。

(使用交流适配器选件)

- 请仅使用专为本装置所设计的原装交流适配器。使用不受支持的适配器可能对本装置造成损坏或危险。
- 将交流适配器插入适宜的电压插座。请勿使用多分接头插座。
- 如果本装置或电源线损坏，请勿使用交流适配器。立即关闭电源并拔下电源线。





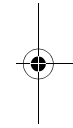
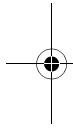
重要安全注意事項

(電池使用)

- 若電池溶液滴在皮膚或衣服上，請立刻用大量清水沖洗。
- 本机只使用四節“AA”鹼性電池或錳電池。切勿使用其它類型的電池。
- 切勿將電池電極裝反。
- 及時用新的電池更換舊電池。同時將四個新電池全部裝入。
- 如果三個月或更長時間內不使用血壓計，請取出電池。
- 新舊電池不要混合使用。

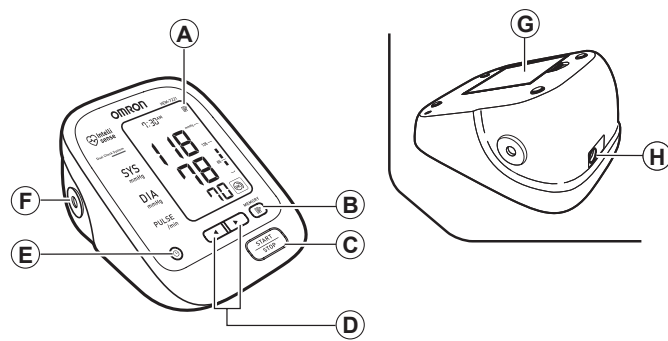
一般注意事項

- 請勿使血壓計受到猛烈震動或晃動；不要摔扔血壓計及臂帶。
- 請勿在沐浴、飲用含酒精或咖啡因飲品、吸煙、運動或進食後測量。
- 請勿用力彎曲臂帶或過度拉伸氣管。
- 卸除氣管時，拔下與主機相連的氣塞而不是氣管本身。
- 臂帶尚未纏繞於手臂上時，請勿給臂帶充氣。



1. 概要

主机：

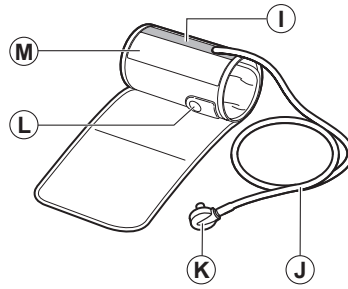


- A. 显示屏
- B. “记忆”按钮
- C. START/STOP “加压 / 停止”按钮
- D. 上 / 下 (◀/▶) 按钮
- E. 日期 / 时间设定 (⊖) 按钮
- F. 充气孔

- G. 电池仓
- H. 交流适配器插孔
(用于交流适配器选件)

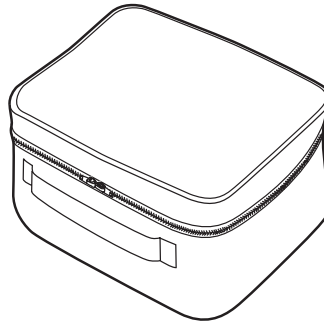
1. 概要

臂带：

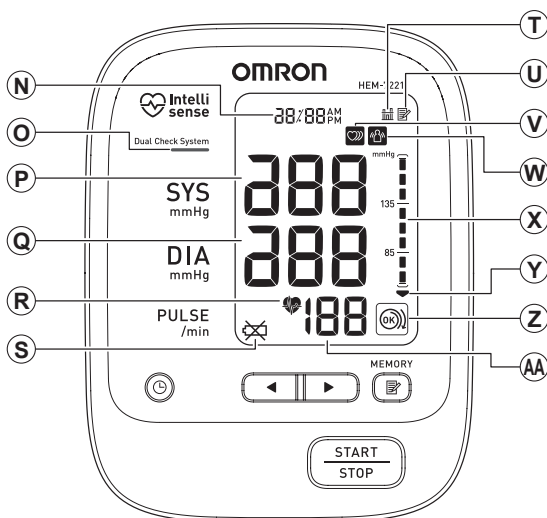


- I. 蓝色衬带
- J. 气管
- K. 气塞
- L. 手握指南
- M. 臂带
(臂带：手臂周长 17-32 厘米)

储存盒：



显示屏：

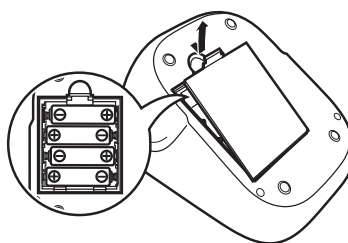


- | | |
|------------------------------|---------------------------------|
| N. 日期 / 时间显示 | T. 平均数值符号 |
| O. 双检测系统 (Dual Check System) | U. 记忆符号 |
| P. 收缩压 | V. 非正规心律符号 |
| Q. 舒张压 | W. 移动错误符号 |
| R. 心律符号
(测量时闪烁) | X. 血压水平指示器 |
| S. 电池电量不足符号 | Y. 排气符号 |
| | Z. 臂带缠绕指示 (Cuff Wrapping Guide) |
| | AA. 脉搏显示与记忆数位 |

2. 准备

2.1 安装 / 更换电池

1. 取下电池盖。
2. 按电池仓上标示的方向放入四节“AA”电池，然后装回电池盖。




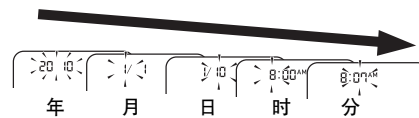
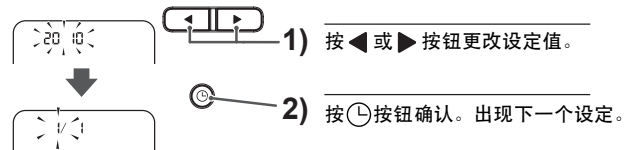
注意：

- 如果显示屏出现电池电量不足符号 (⚡)，请关闭本装置并同时更换所有电池。
- 更换电池后，测量值仍会储存在记忆中。

旧电池的弃置应遵循国内对废旧电池的弃置规定。

2.2 设定日期和时间

1. 按  按钮。
2. 第一次测量前，请将血压计设定到正确的日期及时间。



3. 按 START/STOP “加压 / 停止” 按钮储存设定。

注意：

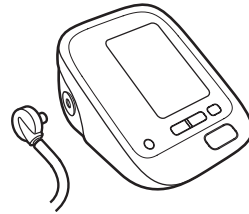
- 如果取出电池时间超过 30 秒，则需重新设定日期和时间。
- 如果未设定日期和时间，“-:--”将在测量中和测量后显示在显示屏上。

3. 使用血压计

3.1 缠绕臂带

将紧身衣物从手臂脱下，或卷起衣袖。
请勿穿着厚衣服进行测量。

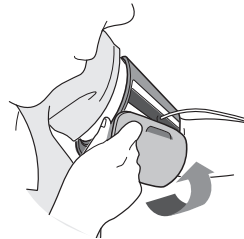
1. 将气塞插入充气孔中。



2. 用手牢固握紧臂带上的拇指按位。

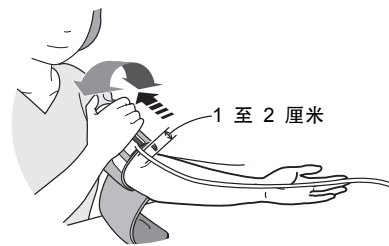


3. 将臂带缠绕在上臂上。



3. 使用血压计

臂带下边缘应高出肘部 1-2 厘米。
标记（气管下的箭头）应处于内臂的中央位置。
紧紧地合上黏扣带。



注意：

- 用右臂进行测量时，气管应位于肘部一侧。小心不要将手臂压在气管上。
- 右臂和左臂上的血压可能各不相同，因此测得的血压值可能也有所差异。OMRON 建议在测量时始终测量同一手臂。如果两臂的测量值存在明显的差异，请咨询医生应使用哪个手臂进行测量。



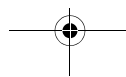
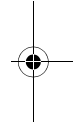
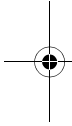
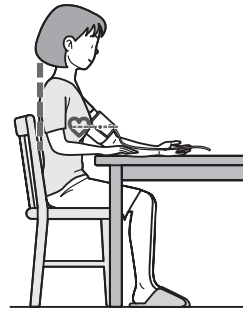


3. 使用血压计

3.2 如何保持坐姿正确

测量时，您应在舒适的室温环境下放松、端坐。测量前 30 分钟内，不要沐浴、饮用含酒精或咖啡因饮品、吸烟、锻炼或进食。

- 坐在椅子上，双脚平放于地面。
- 正襟危坐，背部笔直。
- 保持臂带与心脏同一水平。

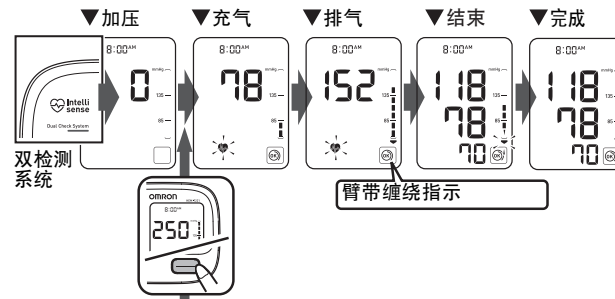


3.3 测量

注意：

- 要取消测量，按 START/STOP “加压 / 停止” 按钮关闭装置，释放掉臂带中的空气。
- 测量时保持静坐。

1. 按 START/STOP “加压 / 停止” 按钮。
臂带开始自动充气。



如果您的收缩压高于 220 mmHg

臂带开始充气后，按住 START/STOP “加压 / 停止” 按钮，直到血压计充气比预期收缩压高出 30 到 40 mmHg。

注意：


- 血压计不会充气超过 299 mmHg。
- 施压应适可而止，不要过多。


双检测系统

按 START/STOP “加压 / 停止” 按钮，双检测系统指示灯亮起，装置开始检测设备错误。如果装置准确且运作正常，双检测系统灯将在测量期间持续亮起。如果检测到系统出错，双检测系统灯将闪烁，显示屏上出现 “Er”。

3. 使用血压计

臂带缠绕指示

臂带缠绕指示这一特征表明臂带是否紧紧缠绕在手臂上。即使显示 , 血压计仍会进行血压测量。

注意: 由于臂带缠绕有误, 此时的测量读数不可靠。请重新缠绕臂带, 务必要正确缠绕臂带, 然后再次进行血压测量。
显示  时, 臂带紧贴于手臂且缠绕正确, 此时的测量读数准确可靠。

2. 取下臂带。
3. 按 **START/STOP** “加压 / 停止” 按钮关闭血压计。

血压计会自动将测量结果储存在记忆中。

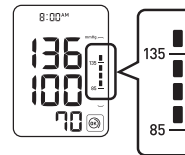
2 分钟后, 血压计会自动关闭。

重要事项:

- 最新研究表明以下数值可作为家庭测量时衡量高血压的指标。

收缩压	135 mmHg 以上
舒张压	85 mmHg 以上

此标准适用于家庭血压测量。



3. 使用血压计

- 您的血压计可侦测非正规心律。非正规心律可能影响测量结果。非正规心律算法可自动确定测量是否有效或需要重复测量。如果测量结果受非正规心律影响但仍然有效，则显示屏上将显示测数以及一个非正规心律符号 (⊡)。如果非正规心律导致测量无效则不会显示结果。如果在进行测量后显示非正规心律符号 (⊡)，请重复测量过程。如果非正规心律符号 (⊡) 频繁显示，请告知医生。
- 如果在测量过程中移动手臂，则可能显示移动错误符号 (⊡)。保持静坐，重新测量。



注意：再次开始血压测量之前请等待 2 - 3 分钟。两次测量之间的等待可以让动脉恢复到执行血压测量之前的条件。

⚠ 警告：

依测量结果自我诊断及治疗非常危险。
请遵从医师指导。

3. 使用血压计

3.4 使用记忆读取功能

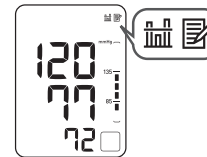
血压计最多可自动储存 90 组读数。本血压计也可依据最后三次测量读数（10 分钟内）计算平均读数。如果该时段的记忆中有两个读数，则平均值将以这两个读数为基准。如果该时段的记忆中有一个读数，则平均值将以这个读数为基准。

注意：

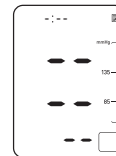
- 如果记忆已满，血压计会删除最早的读数。
- 查看在未设置日期和时间情况下测量的读数，会显示“-:--”，而不是日期和时间。

查看平均值

1. 按“记忆”按钮。



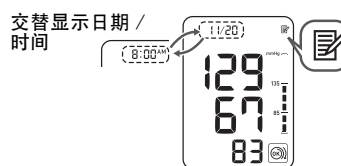
注意：如果记忆中没有储存的测量结果，则显示右侧显示屏。



查看储存在记忆中的读数

1. 显示平均值时，按按钮◀。

记忆数位显示一秒钟，然后显示脉搏速率。最新一组读数的编号为“1”。



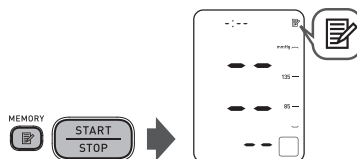
2. 按◀或▶按钮检视记忆中储存的读数。

◀: 至较早的读数

▶: 至较近的读数

要删除所有读数




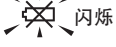

出现记忆符号 (M) 时，首先按“记忆”按钮。按住“记忆”按钮时，请按下 START/STOP “加压 / 停止”按钮约 2-3 秒钟。



注意：您不能只删除部分读数。

4. 疑难排解和维修

4.1 标志与错误指示符

错误符号	原因	更正
	检测到非正规心律。	取下臂带。等待 2 - 3 分钟后进行下一次测量。 重复第 3.3 节中的步骤。如果错误持续出现，请咨询您的医生。
	测量过程中移动身体。	请仔细阅读并重复第 3.3 章节中的步骤。
	臂带缠绕不正确	正确缠绕臂带。请参阅第 3.1 节。
 闪烁	电池电量低。	您应该提早更换电池。 请参阅第 2.1 节。
 亮着	电池耗尽。	您应立即更换电池。 请参阅第 2.1 节。

错误符号	原因	更正
E1	气塞已断开。	牢固地插入气塞。 请参阅第 3.1 节。
	臂带缠绕不正确。	正确缠绕臂带。 请参阅第 3.1 节。
	臂带漏气。	请更换新的臂带。 参阅第 5 章。
E2	臂带充气过度。	重复测量。测量期间，保持静坐并且不要说话。 请参阅第 3.3 节。
		如果重复出现“E2”，请手动为臂带充气，使之比先前测量结果高出 30 到 40 mmHg。 请参阅第 3.3 节。
E3	手动充气时，臂带充气超过 299 mmHg。	请勿对臂带充气超过 299 mmHg。 请参阅第 3.3 节。
E4	测量过程中移动身体。	重复测量。测量期间，保持静坐并且不要说话。 请参阅第 3.3 节。
E5	衣物妨碍臂带。	脱下任何妨碍臂带的衣物。 请参阅第 3.1 节。
Er	设备错误。	联络当地 OMRON 零售店或分销商。

注意： 非正规心律符号 (☞) 可能连同错误消息一并显示。

4. 疑难排解和维修

4.2 疑难排解

问题	原因	更正
读数过低 (或过高)。	臂带缠绕不正确。	正确缠绕臂带。 请参阅第 3.1 节。
	测量过程中移动或谈话。	测量期间, 保持静坐并且不要说话。 请参阅第 3.3 节。
	衣物妨碍臂带。	脱下任何妨碍臂带的衣物。 请参阅第 3.1 节。
臂带压力没有上升。	气管没有正确连接到主机。	确保气管连接牢固。 请参阅第 3.1 节。
	臂带漏气。	更换新的臂带。 参阅第 5 章。
臂带排气太快。	臂带松弛。	正确缠绕臂带, 使其牢固地缠绕于手臂。 请参阅第 3.1 节。
无法测量或读数太低 (太高)。	臂带充气不够。	对臂带充气, 使之比先前测量结果高出 30 到 40 mmHg。 请参阅第 3.3 节。
按下按钮时无任何反映。	电池耗尽。	用新的电池更换旧电池。 请参阅第 2.1 节。
	电池安装不正确。	依正确的 (+/-) 极性安装电池。 请参阅第 2.1 节。

4. 疑难排解和维修

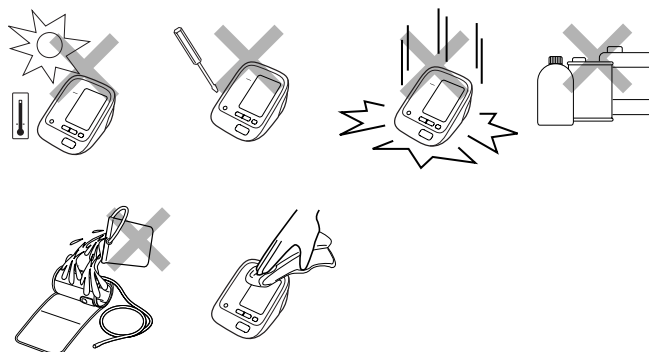
问题	原因	更正
其它问题。	<ul style="list-style-type: none">• 按下 START/STOP “加压 / 停止” 按钮，重复测量。• 如果问题继续存在，尝试用新电池更换旧电池。 如果这依旧不能解决问题，请联络您当地的 OMRON 授权分销商或零售商。	

4. 疑难排解和维修

4.3 维修

要保护血压计免遭损坏，请遵守以下内容：

- 请勿将主机和臂带置于高温、高湿、湿润或者阳光直射的环境中。
- 请勿用力折叠臂带或气管。
- 请勿拆卸主机。
- 避免血压计遭受撞击（例如，将血压计跌落至地面）。
- 请勿使用挥发性液体清洁主机。
- 请勿清洗臂带或将其浸入水中。
- 请勿使用汽油、稀释剂或类似的溶剂清洁臂带。
- 请勿自行维修。如果出现故障，请联络您当地的 OMRON 授权分销商或零售商。



- 清洁血压计应使用柔软干燥的抹布。
- 使用柔软的湿布和肥皂清洁臂带。

校准与服务

- 本血压计的精度经过精心检测，且使用寿命长。
- 通常建议每隔两年对血压计进行检查，以确保其功能正常、准确无误。请联络您当地的 OMRON 授权分销商或零售商。

4.4 储存

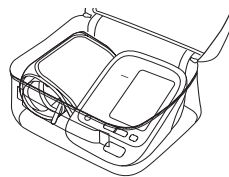
血压计不使用时要放入储存盒中。

1. 从充气孔拔下气塞。

2. 轻轻将气管折叠进臂带。

注意：请勿过度弯曲气管。

3. 将臂带和主机放入储存盒中。



请勿在以下情况储存血压计：

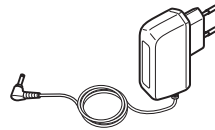
- 如果血压计潮湿。
- 高温、潮湿、阳光直射、存在灰尘或腐蚀性气体的场所。
- 易晃动、震动或形成角度的位置。

5. 选件

臂带
手臂周长
17-32 厘米

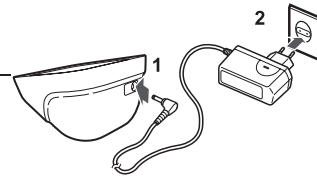


交流适配器 S





使用交流适配器选件

1. 将交流适配器插头插入主机背面的交流适配器插孔。
2. 将交流适配器插入电源插座。



要断开交流适配器，请首先从电源插座上拔出交流适配器，然后将交流适配器从主机取下。

6. 技术资料

产品名称	自动血压计
型号	HEM-7221 (HEM-7221-C1(VG))
显示	LCD 数位显示屏
测量方式	动脉搏动描记法
测量范围	血压：0 至 299 mmHg 脉搏：40 至 180/分钟
准确度	血压：±3 mmHg 显示读数的 ±5%
充气	电动气泵模糊逻辑控制
排气	自动减压阀
记忆	90 组测量值及其日期和时间
额定	DC6V 4W
电源	4 节“AA”电池 1.5V 或交流适配器（交流适配器 S-9515336-9（选件），电流 AC100-240V 50/60Hz 0.12A）
电池寿命	全新碱性电池大约可测量 1000 次
应用的部件：	 = B 型
电击保护	内部供电的 ME 设备（仅使用电池时）  = II 级 ME 设备（可选交流适配器）
操作温度 / 湿度	+10°C 至 +40°C / 最高：相对湿度 30% 至 85%
存放温度 / 湿度 / 气压	-20°C 至 +60°C / 最高：10% 至 95% RH/ 700-1060 hPa
主机重量	约 380 克（不含电池）
臂带重量	约 240 克
外形尺寸	约 123 毫米（宽）x 85 毫米（高）x 158 毫米（长）
臂带尺寸	约 120 毫米 x 600 毫米（中型臂带：手臂周长 17 - 32 厘米）
臂带材料	尼龙和聚酯
附件	主机、臂带、使用说明书、储存盒、电池

注意：

- 技术资料如有更改，恕不提前通知。
- 本产品和废旧电池的处理应遵循国内对电子产品的处理规定。

这 OMRON 产品是在 OMRON HEALTHCARE Co., Ltd, 日本, 严格的质量体系下生产的。OMRON 血压计的核心电子原部件, 所谓的压力传感器, 是在日本生产组装。

	OMRON HEALTHCARE Co., Ltd. 53, Kunotsubo, Terado-cho, Muko, Kyoto, 617-0002 JAPAN		
<table border="1"><tr><td>EC</td><td>REP</td></tr></table>	EC	REP	OMRON HEALTHCARE EUROPE B.V. Scorpius 33, 2132 LR Hoofddorp THE NETHERLANDS
EC	REP		
Asia Pacific HQ	OMRON HEALTHCARE SINGAPORE PTE LTD. 438A Alexandra Road, #05-05/08 Alexandra Technopark, Singapore 119967 www.omron-healthcare.com.sg		
Production Facility	OMRON HEALTHCARE MANUFACTURING VIETNAM Co.,Ltd. Binh Duong Province, VIETNAM		

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