

# **Instruction Manual**

**Infrared Thermometer** 

Model:AOJ-20Y

Released date:2023-04

Version of manual:A0

### Notice

• Dear user, thank you for purchasing our Infrared Thermometer. For proper use of this product, please read the Instruction Manual carefully before use and operate the thermometer according to the instructions.

 $\cdot$  Before using this product, please be sure to read and follow the "Safety Precautions".

 $\cdot$  Please keep the Instruction Manual in a safe place for future reference.

The Company will make available on request circuit diagrams, component part lists, descriptions, calibration instructions, or other information necessary to assist the User's qualified technicians in repairing parts of the equipment specified by the manufacturer as repairable.

## Foreword

The infrared thermometer can be used to read the body temperature by measuring the ear and forehead temperature, which is suitable for adult and children (ear test mode only for the child above 3 months).

The device can be used in homecare environment, and the dan intended operator, and all the functions can be safely used.

This thermometer complies with the requirements of ISO 81060 -2-56.

## Contents

Unpacking and Inspection Packing List Safety Precautions Symbols and Descriptions Common Knowledge of Human Body Temperature Product Introduction Product Features Main Structure Display Description Sound and Indicator Description Display and Operation Description Measuring Ear Temperature Measuring Forehead Temperature Replacing the Batteries Cleaning and Disinfection Maintenance Troubleshooting Technical Specifications Security Type Storage and Transportation Condition Warranty and After-Sales Service EMC Information Appendix

## **Unpacking and Inspection**

Before initial use, please carefully open the package and check whether all parts are intact based on the packing list and whether the parts are damaged during transportation, and strictly follow the instruction manual for installation and operation. If there is any damage or operation-related problem, please directly contact us and provide us with your order number, device model, serial number and email address, we'll try our best to help you until you're satisfied.

## **Packing List**

No.	Name	Quantity
1	Infrared Thermometer	1
2	Pouch	1
3	Operating Manual	1
4	Quick Start Guide	1
5	AAA Battery (Optional)	2

## **Safety Precautions**

Before using this thermometer, please carefully read the  $% \left( {{{\left[ {{{L_{\rm{s}}}} \right]}_{\rm{s}}}} \right)$ 

following precautions:

#### Caution

• Do not place this equipment out of the reach of children, who may inadvertently damage it.

•	The lens of the probe is a fragile part of the infrared thermometer.
	Please protect it carefully.
•	Do not throw away used batteries at will, because waste batteries pose
	an environment hazard. It's recommended to send the waste batteries
	to a designated collection point for disposal, so as to prevent
	environmental pollution.
•	If the thermometer is not going to be used for more than 2months, remove
	the batteries and keep the thermometer
•	properly.
•	Do not immerse the thermometer into water or put it under sunlight for
	direct exposure.
•	The thermometer should be avoided from strong impact or vibration,
	otherwise it may be damaged.
•	A normal body temperature varies from person to person. Keeping track
	of a person's body temperature changes will
•	help determine whether a person has a fever.
•	Do not take a measurement if you just exercise or are emotionally
	excited. You should rest for about 20 minutes
•	before taking a measurement.
•	The probe should be cleaned after each use.
•	Do not use the thermometer on newborns or for continuous temperature
	monitoring purposes.
•	Do not use the thermometer for other than its intended purposes. Please
	follow the measuring instructions in the
•	manual and be careful when measuring a child's temperature.
•	Do not immerse the thermometer into water or any other liquid. For

cleaning and disinfecting methods, please follow instructions in " Cleaning and Disinfection".

- Do not directly touch the top of the probe, because there is a precise temperature sensor on the top.
- Keep the probe clean to ensure accurate measurement results.
- If the ear canal is dirty, first clean the ear canal with a cotton swab before taking a measurement.
- The temperature of the measuring environment should not be too cold or too hot. If you enter the measuring environment from storage environment, you should stay in the measuring environment for over 30 minutes before taking a measurement.
- Do not take a measurement in an environment with temperature higher than  $40^\circ\!C$  (104F) or lower than  $10^\circ\!C$
- (50.0%), because the normal operating temperature of the thermometer is exceeded under such environment.
- When the thermometer reaches the expiration of its service life, throwing it away at will poses an environment hazard.
- It's recommended to send it to your local collection point or handling or send it back to the manufacturer for
- Recycling Replaceable accessories of the thermometer include two 1.5V AAA batteries. Do not use batteries of different voltage or specification. There are no other replaceable parts and materials.
- )No maintenance or servicing the device when using.
- Please consult your doctor if you see symptoms such as unexplained irritability, vomiting, diarrhea, dehydration, changes in appetite or activity, seizure, muscle pain, shivering, stiff neck, pain when

urinating, etc., even in the absence of fever.

- Do not use the thermometer if there are signs of damage on the measuring sensor or on the instrument itself. If damaged, do not attempt to repair the instrument! Please contact the dealer.
- It is dangerous to make a self-diagnosis or self-treatment based on the obtained measurement results. For such purposes, please consult a doctor.
- When the performance changes (such as: inaccurate measurement or abnormal display), please stop using it immediately and contact the sales service personnel in time.
- When the ambient temperature is less than  $10^{\circ}$ C, please take the device to the place where the ambient temperature is between  $10^{\circ}$ C<sup>4</sup>0<sup>o</sup>C at least 1 hour; When the ambient temperature is higher than  $40^{\circ}$ C, please take the device to the place where the ambient temperature is between  $10^{\circ}$ C<sup>4</sup>0<sup>o</sup>C at least 2 hours. Extreme temperature, humidity and altitude may lead to inaccurate measurements.
- Storage environment (atmospheric pressure range 70kPa ~ 106kPa, temperature -20℃ ~ +55℃, relative humidity 0% ~ 95%RH) and use environment (atmospheric pressure range 70kPa ~ 106kPa, temperature +10℃ ~ +40℃, relative humidity 15% ~ 95%RH) beyond the specified range of use, The system may not achieve the claimed performance, and measurements may be inaccurate.

#### Warning

Do not forcibly insert the probe into the ear canal, otherwise the ear

	canal may get injured.
•	Keep the thermometer out of reach of children.
•	If the thermometer is still in use when it has reached the specified
	service life, it will cause inaccurate measurement results.
•	This thermometer is not intended for diagnosis or treatment of any
	illness. The measured temperature results are for reference only.
•	It is dangerous to make a self-diagnosis or self-treatment based on the
	obtained measurement results. Please take a
•	doctor's diagnosis as a standard.
0	Do not charge ordinary alkaline batteries or throw them into a fire,
	otherwise the batteries may explode.
0	Do not modify this equipment without authorization of the manufacturer.
0	Do not leave the small parts where children can reach them. Children
	may swallow them. If a child accidentally swallows them, please contact
	a doctor immediately.
0	Portable and mobile RF communication devices may affect the performance
	of the infrared thermometer.
0	When measuring, please do not use mobile phone or other devices with
	strong electromagnetic interference around.
0	This device is prohibited to be used in an environment with the presence
	of a flammable anesthetic mixture with air or with oxygen or nitrous
	oxide.

## Symbols and Descriptions

Symbol

Description

<b>†</b>	Type BF applied part.
~~~	Information about a manufacturer
<b>8</b>	Refer to instruction manual
X	Comply with local regulations about disposal
~~	Date of manufacture
53	Use-by date
LOT	Batch code
SN	Serial number
$\triangle$	Caution
IP22	2 Protected against solid foreign objects of 12,5 mm Ø and greater;
	2 If keep the thermometer in 15 degree angle, it still
	can prevent the water drop.
MD	Medical device
	Importer

C € 0123	CE marking
EC REP	Authorized Representative In The European Community
UDI	Unique Device Identifier
Ť	Keep dry
	Fragile, handle with care
RoHS	RoHS mark
(((•)))	Non-ionizing electromagnetic radiation

## **Common Knowledge of Human**

#### 1)Body Temperature

Generally, human body temperature is measured via the following main sites: forehead, cochlea, armpit, oral cavity and anus, etc., because temperature readings obtained from the above sites are the closest to human body temperature. However, there exist certain differences for actual temperature readings measured from different sites. The specific differences are as follows:

Measuring site	Normal temperature range
Forehead temperature	36.1°C–37.5°C / 97.0°F–99.5°F
Ear temperature	35.8°C–38.0°C / 96.44°F–100.40°F
Oral temperature	35.5°C–37.5°C / 95.9°F–99.5°F

Axillary temperature	34.7°C–37.3°C / 94.46°F–99.14°F	
Rectal temperature	36.6°C–38.0°C / 97.88°F–100.40°F	

People of different ages and genders have little difference in terms of normal body temperature. In general, the temperature of a newborn baby or child is higher than that of an adult, the temperature of an adult is higher than that of an elder, and the temperature of a female is about  $0.3^{\circ}$ C higher than that of a male.

Body Temperature Day-Night Variation Graph



Human body temperature fluctuates over time during a day and is affected by external factors. The same person has the lowest temperature during 02<sup>0</sup>4 a.m. and has the highest temperature during 14<sup>2</sup>0 p.m. Under normal circumstances,

the day-night temperature difference is not greater than  $1^{\circ}$ C.

#### **Product Introduction**

#### 1) Overview

Infrared thermometer is a measuring instrument which utilizes infrared receiver principle to measure human body temperature. During use, you only need to aim the probe at the human forehead or eardrum, then press measure button, and you' 11 get quick and accurate measured temperature readings.

#### 2) Product Structure

The thermometer consists of an outer casing, LED screen, a buzzer, an infrared temperature sensor and a microprocessor, etc.

#### 3) Measuring Principle

The infrared temperature sensor collects the infrared energy emitted from the eardrum or forehead skin surface, the collected energy passes through the optical filter and is then absorbed by the thermopiles to generate heat to raise their own temperature, and the temperature difference on both sides of the thermopiles produces voltage output, which is then converted to temperature value via the measurement circuits.



#### 4) Intended Uses

The infrared thermometer takes human body temperature via the eardrum or forehead. It applies to all age groups except for babies under three months. Both devices apply to both professional use and home use.

Intend users

can read and understand the user manual.

#### 5) Contraindications

Do not use the thermometer if the ear is infected with otitis or suppuration.

#### 6) Physiological Effects

The product will not produce toxic substances, no harm to human body or cause any sensitization, etc.

#### **Product Features**

#### 1) Safe to Use

· Passive infrared receiver technology.

#### 2) Easy to Operate

- · Handheld design, easy to operate.
- $\cdot$  One button operation, automatic measurement.

#### 3) Quick Measurement

· 1 second fast measurement.

#### 4) High Accuracy

 $\cdot$  Adopts advanced infrared temperature-sensing element with high sensitivity.

• Features temperature calibration program and accurate algorithm, and the measured result can truly reflect human body temperature.

#### **5) Practical Functions**

- · 40 sets of memories for easy recall;
- · Fever warning;
- Front light;
- Mute/Unmute;
- ·  $^{\circ}\!\!C/^{\circ}\!\!F$  unit switching;
- $\cdot$  Auto shut-down, low power consumption.

### 6) Wide Applications

 $\cdot$  The forehead temperature mode applies to people of all ages and the ear temperature mode applies to people above three months old.

#### Main Structure



① LED display screen

2 Mute-unmute button/Unit toggle button (indicated by " button on the lower left corner of the screen)

3 Measure button/Front light on/off button/Power on/off button
4 Mode button (human body/adjusted temperature)/Memory button (indicated by " M" button on the lower right corner of the screen)
5 LED indicator light

6 Probe cover (put the cover on when measuring forehead temperature)
7 Probe (take the cover off when measuring ear temperature)
8 Front light (it lights up in ear temperature mode)
9 Battery compartment
10 Battery compartment button



Adult forehead temperature mode (above 12 years old)
 Child forehead temperature mode

3.Ear temperature mode

4. Adjusted mode

5.Fahrenheit degree F

6.Celsius degree °C

7. Temperature value

8. Front light indicator

9. Low battery indicator

10.Mute/Unmute indicator

#### Sound and Indicator Description

Temperature range	Sound	Indicatorstatus	
Forehead temperature			
32. 0°C−37. 589. 6°F−99. 5°F°C/	One long beep	Green	
99. 6°F−100. 4°F37. 6°C−38. 0°C/	6 short beeps (2	Orange	
	short beeps each		
	time)		
100. 5°F−109. 2°F38. 1°C−42. 9°C/	6 short beeps (2	Red	
	short beeps each		
	time)		
Ear temperature			
32. 0°C−37. 5°C/89. 6°F−99. 5°F	One long beep	Green	
37. 6°C−38. 0°C/99. 6°F−100. 4°F	6 short beeps (2	Orange	
	short beeps		
	each time)		
38. 1°C−42. 9°C/100. 5°F−109. 2°F	6 short beeps (2	Red	
9	short beeps		
-	each time)		
Adjusted			
32. 0°F-199. 0°F0°C-100°C/	One long beep		

**Note:** When the measured forehead temperature or ear temperature falls in the range of 32.0°C-37.5°C (89.6°F-99.5°F), the buzzer of the thermometer will issue a long beep and the indicator will light up in green, indicating the temperature is

#### normal.

When the measured forehead temperature or ear temperature falls in the range of  $37.6^{\circ}C-42.9^{\circ}C$  (99.6F-109.2F), the buzzer of the thermometer will issue 6 short beeps (2 short beeps each time) and the indicator will light up in orange or red, indicating the temperature is rather high and you may have a fever. If you' re uncertain, please consult your doctor.

#### **Display and Operation Description**

Screen display	<b>Operating instruction</b>	Sound and
	/display status	indicator status
Measuring ear temperature		
	Take off the probe	See " Sound and
	cover,	Indicator
9	press the measure	Description"
	button	section.
°C	to turn on the	
	thermometer,	
\	and the thermometer	
	will automatically	
	enter ear temperature	
	mode and the icon	
	will display on the	

	screen. Or you can also press mode button (M button) to switch to ear temperature mode if necessary.	
® ۲ <b>۲ ۲</b> ۰ ۲ <b>۲ ۲</b> ۰ ۰	Properly insert the probe into the ear canal, press the measure button, and the ear temperature will display on the screen.	See" Sound and Indicator Description" section.
Ear temperature Measuring forehead temper	rature	

	Put on the prohe seven	See " Sound and
	Fut on the probe cover,	See Sound and
ن °c	press the measure	Indicator
	button to turn on the	Description"
	thermometer, then	section
	press the mode button	
	(M button) to switch to	
	human body temperature	
	mode, and the	
	thermometer will enter	
<u> </u>	forehead temperature	
G	mode and the icon	
	or will display on	
00.0°	the screen.	
	Aim the probe at the	
Child forehead	center of the forehead	
temperature	(between the	
	eyebrows) until	
	touching the forehead	
	skin or with a distance	
	of 0-3cm (0-1.18	
	inches), press the	
	measure button and	
	the forehead	
	tomponetune will	
	lemperature will	
	display on the screen.	
Out of measurement range		

	Ear temperature mode:	One long beep, the
6 C) 9 A	when the measured ear	indicator
	temperature is	lights up in red.
- ℃	higher than 42.9°C	
	(109.2°F).	
*	Forehead temperature	
	mode: when the measured	
	forehead temperature is	
	higher than 42.9°C	
	(109.2°F).	
	Ear temperature mode:	One long beep,
G © 9 A	when the measured ear	the indicator lights up
	temperature is lower	in red.
° <b>–</b> °	than 32.0°C89.6°F).	
	Forehead temperature	
	mode: when the measured	
	forehead temperature is	
	lower than	
	32.0°C(89.6°F).	
Checking 40 sets of memory d	ata	



In power-on status or No sound. power-off status, press and hold the memory button (M button) for about 5s to enter memory mode. The screen display "01then displays the 1st group of recorded temperature value. Press the memory button again to check the next recorded value, and the screen displays "02" , then displays the recorded value. You can check a total of 40 temperature readings. When the maximum number of records is exceeded the earliest recorded data will be overwritten. Note: 01 indicates the last recorded

6-[	Internal storage data error or temperature calibration is not completed, and the thermometer will automatically turn off after 3s.	One long beep, the indicator lights up in red.	
	When the thermometer is powered on and activated and the battery voltage is between 2.4V and 2.7V, then low battery icon will flash. However, this will not affect your normal use.	No sound	eep ound າ.
	When the thermometer is powered on and activated and the battery voltage is lower than 2.4±0.1V, then only the low battery icon will be displayed, and the thermometer will automatically turn off after 3s.	No sound	
 Manual power-off	In non-ear temperature mode, press and hold the measure button for 5s, and the thermome- ter will turn off.	The screen turns off.	mode
	mode and human body temperature mode.		

® ° ال ال °	Human body temperature mode includes forehead temperature (To or C) mode and ear temperature (?) mode.	No sound.
Switching between °C/F	1	
	In power-on status, press and hold the unit toggle button (◀× button) for about 5s to switch between ℃ and ℉.	No sound.
Error message/low batter	Where the orthicut	One lang have the
[	<pre>when the amolent temperature is higher than 40.0°C (104.0°F) or lower than 10.0°C (50.0°F)</pre>	indicator lights up in red.

still can use the thermometer. But it may cause inaccurate readings.

#### Measuring Ear Temperature

For initial use of the thermometer, please first install the batteries.
 Take off the probe cover before measuring the ear temperature.

3. Press the measure button to turn on the thermometer, and the thermometer will automatically enter ear temperature mode and the icon will display on the screen. Or you can also press mode button (M button) to switch to ear temperature mode if necessary.

4. Carefully insert the probe into the ear canal, press the measure button again, and the ear temperature reading will display on the screen immediately. Do not forcibly insert the probe into the ear canal, otherwise the ear canal may get injured.

#### Note:

For children under a year old, pull the ear straight backwards. For children above a year old, pull the ear up and straight backwards.



Do not forcibly insert the probe into the ear canal, otherwise the ear canal may get injured. Be careful when measuring the ear temperature of a child, as a child' s earhole is small

Note: The battery icon will flicker, it means the battery is low, but you

#### **Measuring Forehead Temperature After a Measurement**

 For initial use of the thermometer, please first install the batteries.
 Keep the probe cover on when measuring the forehead temperature.
 Press the measure button to turn on the thermometer.
 Press the mode button (M button), and the thermometer will enter forehead temperature mode and the icon or will display on the screen.

5. Point the probe at the center of the forehead (between the eyebrows) until touching the forehead skin or with a distance of 0-3cm (0-1.18 inches)





6. Press the measure button again, and the forehead temperature reading will display on the screen immediately.

7. The thermometer will automatically turn off if there is no operation within 30s. Or you can also press and hold the measure button for 5s to manually turn off the thermometer (with probe cover attached).

#### After a Measurement

 After each measurement, you can enter memory mode to query the recorded temperature readings. For more details, please see " Checking 40 sets of memory data" .
 After the measurement, clean the thermometer with a dry, soft cloth and then place it in a dry and well-ventilated place.
 You should wait at least 10 seconds between each measurement.

It is dangerous to make a self-diagnosis or self-treatment based on the obtained measurement results. For such purposes, please consult a doctor.

#### Note:

 The thermometer is intended for indoor use. Ensure there is no strong air convection (for example, winds blowing from an electric fan, an air conditioner or a heater) when using this device to measure the temperature of a target.
 Ensure the ear canal is clean before measuring the ear temperature. If there is earwax, it's recommended to clean it with a cotton swab, otherwise it may cause inaccurate measurement results or make the probe dirty.

3. Do not hold the thermometer for a long time, because it is sensitive to the ambient temperature.

4. Ensure the probe is clean and without obstruction before use.5. Ensure there is no sweat or obstruction (such as hairs, etc.)before measuring the forehead temperature, otherwise it may cause inaccurate measurement results.

6. If there is sweat on your forehead or you apply a cold compress or take other cooling measures, it will result in lower temperature readings. Therefore, measurement under such circumstances shall be avoided.

#### **Replacing the Batteries**

Press the battery compartment button to eject the battery compartment.
 Install 2xAAA batteries according to correct polarities and then close the battery compartment properly.



Please make sure the polarities of the batteries are not reversed when installing the batteries, otherwise damage may be caused to the thermometer.

If you' re unable to take a measurement with the low battery icon displaying on the screen, you need to replace with new batteries.

## A

Please choose batteries of the same model or speci- fication. Waste batteries should be disposed of according to your local environmental protection requirements.

Remove the batteries if the thermometer will not be used for more than two months.

#### **Cleaning and Disinfection**

Recommended cleaning agents: •Medical cleaning agent •Household neutral cleaning agent Steps for cleaning: 1. Remove the batteries before cleaning. 2. Wipe the body of the thermometer with a clean, soft cloth and clean the lens with a dry cotton swab. 3. You can also wipe the body of the thermometer with a clean,

soft cloth dipped with little neutral cleaning agent or water.



Do not let water immerse into the lens of the probe, as this can cause damage!

Wiping the lens with a tissue may scratch the lens of the probe, resulting in inaccurate measurement results.

Corrosive cleaning agent is not allowed. Be extra careful while cleaning. Do not touch the lens of the probe with hard adjusted and do not immerse any part of the thermometer into water to avoid any liquid getting into the thermometer

• It's recommended to clean the thermometer once every week, and each cleaning should be completed within 3 minutes. You shouldn't repeatedly clean the thermometer for more than 3 times each time. After disinfection, you need to wait for at least 10 minutes before next-time use. After cleaning the thermometer with medical alcohol, you need to wait for 5 minutes before next-time use, otherwise the measurement results may be affected.

#### Disinfection:

Recommended disinfecting agents: .70% isopropyl alcohol solution .75% medical alcohol .3% sodium hypochlorite solution Steps for disinfection: 1. Wipe the body of the thermometer with a clean, soft cloth dipped with little disinfectant, then wipe it dry immediately. 2. You can also wipe the body of the thermometer with a clean, soft cloth dipped with little 75% medical alcohol for disinfection.

- Do not use high-temperature steam, ultraviolet irradiation, and etc. for disinfection, as this may cause damage to the equipment or accelerate aging!
- It's recommended to disinfect the thermometer before and after each use, and each disinfection should be completed within 1 minute. You shouldn't repeatedly disinfect the thermometer for more than 2 times each time. After disinfection, you need to wait for at least 10 minutes before next-time use.

Cleaning and disinfection should be carried out under the following conditions: Temperature: +10°C~+40°C (50F-104F), relative humidity: 15%~85%RH, non-condensing, atmospheric pressure: 86kPa~106kPa. Dispose : Dispose of the equipment and batteries when its service life is reached. For local regulations regarding the disposal of such product

#### Maintenance

Preventive inspection and maintenance cycle 1. During normal use, a weekly check should be performed to see if the thermometer poses a potential safety hazard, such as whether the lens is broken, whether the outer casing has cracks, and whether the probe is dirty, so as to ensure your usage safety. If there is a safety hazard, please stop using it immediatel The thermometer should be cleaned once a year if it is not going to be used for an extended period. 2. After each use, please clean the probe according to the methods mentioned in " Cleaning and Disinfection". 3. Please keep the thermometer in a dry, well-ventilated, dust-free and pollution-free place without direct sunlight. Ensure the storage and transportation conditions meet the requirements.

4. Regularly check whether the thermometer poses a safety hazard.

5. If the thermometer is not going to be used for an extended period (more than 2 months), please remove the batteries and keep the thermometer properly.

6. We suggest to calibrate the device once a year at least. Please contact temperatur manufacturer or agent if you need.

#### Troubleshooting

ollow	Malfunction	Possible cause	Solution
	Unable to power	The battery level is too	Replace with new batteries.
	on	low.	
		Polarities of the batteries	Check the polarities of the batteries and
		are reversed.	install the batteries correctly.
		The thermometer is	Contact the manufacturer.
		damaged. (the degrade	
у.		sensors)	
	"Er1" is displayed	The ambient	Please take a measurement with
	when powered on	temperature is higher	ambient temperature in the range of
		than 40 $^\circ\!\mathrm{C}$ (104 $^\circ\!\mathrm{F}$ )than	
		10°C (50°F). or lower	10 С 40 С (50 г -104 г ).
	The measured	The lens of the probe is	Clean the lens of the probe with a
	temperature is	dirty.	cotton swab.
	too low compared	the probe and the	Adjust the measuring distance
	to normal	measuring target The	
	temperature	distance of is too far.	and move the thermometer probe close
	range		to the measuring target.
	The measured	The thermometer is	Let the thermometer stay in the
ntact	temperature is too	moved from a cold	measuring environment for more than
	high compared to	environment to the	30 minutes, then take a measurement
	normal	measuring environment	again.
	temperature range	and has not stayed for	
		more than 30 minutes.	
		The probe is damaged.	Contact the manufacture.

#### **Technical Specifications**

Product name	Infrared thermometer
Model	AOJ-20F
Power supply mode	Battery-powered
Working voltage	3V
Battery specification	2xAAA batteries
Working mode	Continuous operation
Display mode	LED screen display
Measurement time	About 1 second
Temperature display range	Measurement: 32.0°C-42.9°C(89.6°F-109.2°F)
	Adjusted temperature:
	0.0°C-100.0°C(32.0°F-199.0°F)
	Measurement mode: $\pm$ 0.2 $^{\circ}$ C/ $\pm$ 0.4 $^{\circ}$ F
	Direct mode: $\pm$ 1.0 $^{\circ}$ C / 2.0 $^{\circ}$ F
Display resolution	0.1°C/°F
Auto shut-down	The thermometer will automatically turn off if
	there is no operation within 60s.
Anti electronic shock degree	Type BF APPLIED PARTS
Anti electronic shock type	Internal Power Supply
Dimensions (mm)	164.4mm x 40mm x 43.9mm
Weight (g)	93g (without batteries)
Normal operating condition	Temperature:10°C-40°C(50°F-104°F)
	Humidity: 15-95%RH, non-condensing
	Atmospheric pressure:70-106kPa
Storage and transportation	Ambient Temperature: -20°C-55°C(-4°F-131°F)
condition	Relative Humidity: 0-95% RH, non-condensing
	Atmospheric pressure: 50kPa to 106kPa

#### ESSENTIAL PERFORMANCE

Measurement Range: 32.0C-42.9°C (89.6F-109.2°F)

Accuracy:  $\pm 0.2^{\circ}C/\pm 0.4^{\circ}F$ 

#### Statement :

The clinical accuracy or clinical deviation of the medical infrared frontal thermometer has been clinically verified and can be obtained by contacting the manufacturer.

#### Warranty and After-Sales Service

The device is under warranty for 12 months from the date of purchase. The batteries, the packaging, and any damage caused by improper use are not covered by the warranty. Excluding the following user-caused failures: ·Failure resulting from unauthorized disassembly and modification.

·Failure resulting from an unexpected dropping during

application or transportation.

•Failure resulting from not following the instructions in the instruction manual.

#### **EMC Information**

#### Caution

The Infrared thermometer needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in the ACCOMPANYING DOCUMENTS.

#### WARNING

 $\cdot$  Don't near active HF surgical equipment and the RF shielded room of an ME system for magnetic resonance imaging, where the intensity of EM disturbances is high.

 $\cdot$  Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

• Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation."

• Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the equipment, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result

#### Notice

If users or patients have occurred any serious incident that relation to the device, please report to manufacturer and the competent authority of the Member State in which you are established.

#### Appendix

Guidance and manufacturer's declaration - electromagnetic emissions - for ALL EQUIPMENT AND SYSTEMS

> Guidance and manufacturer's statement - Electromagnetic emission The Infrared Thermometer is intended for use in the electromagnetic

 environment specified below. The customer or the user of the Infrared

 Thermometer should assure that it is used in such an environment.

 Emission test
 Compliance

 RF emissions CISPR 11
 Group 1

 RF emissions CISPR 11
 Class B

 Harmonic emissions IEC
 Not applicable

 61000-3-2
 Not applicable

 Voltage fluctuations/ flicker
 Not applicable

#### Electromagnetic Immunity

Guidance and manufacturer's declaration - Electromagnetic Immunity The Infrared Thermometer is intended for use in the electromagnetic environment specified below. The customer or the user of the Infrared Thermometer should assure that it is used in such an environment.

Immunity Test	IEC 60601-1-2 Test level	Compliance level
Electrostatic discharge (ESD)	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air

IEC 61000-4-2		
Electrical fast transient/burst IEC 61000-4-4	Not applicable	Not applicable
Surge IEC 61000-4-5	Not applicable	Not applicable
	Not applicable	Not applicable
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11		
Power frequency magnetic field IEC 61000-4-8	30 A/m 50Hz/60Hz	30 A/m 50Hz/60Hz
Conducted RF	Not applicable	Not applicable

IEC61000-4-6						
	10 V/m	10 V/m				
Radiated	80 MHz – 2,7	80 MHz – 2,7 GHz				
RF	GHz	80 % AM at 2Hz				
IEC6100	80 % AM at 2Hz					
0-4-3						
NOT EUT is the a.c. mians voltage prior to application of the test level.						

#### Electromagnetic Immunity

Guidance and manufacturer's declaration - Electromagnetic Immunity

The Infrared Thermometer is intended for use in the electromagnetic environment

specified below. The customer or the user of the Infrared Thermometer should

#### assure that it is used in such an environment.

Radiated	Test	Band	Service	Modulat	Maxim	Distan	IEC	Complian
RF	Frequ	(MHz)		ion	umPo	ce(m)	606	ce level
EC61000	ency				wer		01-1	(V/m)
-4-3	(MHz)				(W)		-2	
(Test							Test	
specificati							Lev	
ons for							el	
ENCLOS							(V/m	
URE							)	
PORT	385	380	TETRA 400	Pulse	1.8	0.3	27	27

IMMUNIT		-390		modulat				
Y to				ion				
RF				18 Hz				
wireless	450	430	GMRS 460,	FM	2	0.3	28	28
communic		-470	FRS 460	± 5 kHz				
ations				deviatio				
equipmen				n				
t)				1 kHz				
				sine				
	710	704 –	LTE Band 13,	Pulse	0.2	0.3	9	9
	745	787	17	modulat				
	780			ion				
				217 Hz				
	810	800 –	GSM 800/900,	Pulse	2	0.3	28	28
	870	960	TETRA 800,	modulat				
	930		iDEN 820,	ion				
			CDMA 850,	18 Hz				
			LTE Band 5					
	1720	1 700 –	GSM 1800;	Pulse	2	0.3	28	28
	1845	1 990	CDMA 1900;	modulat				

1970		GSM 1900;	ion				
		DECT;	217 Hz				
		LTE Band 1, 3,					
		4, 25; UMTS					
2450	2 400 –	Bluetooth,	Pulse	2	0.3	28	28
	2 570	WLAN,	modulat				
		802.11 b/g/n,	ion				
		RFID 2450,	217 Hz				
2450	2 400 –	Bluetooth,	Pulse	2	0.3	28	28
	2 570	WLAN,	modulat				
		802.11 b/g/n,	ion				
		RFID 2450,	217 Hz				
		LTE Band 7					
810		WLAN,	Pulse	0.2	0.3	9	9
810		802.11a/n	modulat				
810			ion				
			217 Hz				

Guio	Guidance and manufacturer's declaration - electromagnetic Immunity							
Radiated	Test	Modulatio	IEC	Compliance level				
RF	Frequency	n	60601-1-2	(A/m)				
IEC61000			Test Level					
-4-39			(A/m)					
(Test	30 kHz	CW	8	8				
specificati	134,2 kHz	Pulse	65	65				
ons for		modulatio						
ENCLOS		n						
URE		2.1 kHz						
PORT	40 50 1411							
IMMUNIT	13,56 MHz	Pulse	7,5	7,5				
Y to		modulatio						
proximity		n						
magnetic		50 kHz						
fields)								

# Shenzhen AOJ Medical Technology Co., Ltd.

Room 301&4F, Block A, Building A, Jingfa Intelligent Manufacturing Park, Xiaweiyuan, Gushu Community, Xixiang Street, Bao'an District, 518126 Shenzhen, PEOPLE'S REPUBLIC OF CHINA

REPUBLIC OF CHINA

Email: info@aojmedical.com

Website: www.aojmedical.com

Tel: 86-755-2778 6026

Made in China

## EC REP Share Info GmbH

Heerdter Lohweg 83, 40549 Düsseldorf, GERMANY

Tel: 0049 179 5666 508

E-mail: EU-Rep@share-info.com



Federal Communications Commission (FCC) Statement. This device complies with part 15 of the FCC Rules. Operation is subject to the

following two conditions:

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.
Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.
These limits are designed to provide Reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one ormore of the following measures:
Reorient or relocate the receiving antenna.
Increase the separation between the equipment and receiver.
Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
Consult the dealer or an experienced radio/TV technician for help.
Warning: Changes or modifications made to this device not expressly approved by Shenzhen AOJ Medical Technology Co., Ltd. may void the FCC authorization to operate this device.Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

#### **RF** exposure statement:

This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The device is installed and operated

without restriction.