

# Catalogue

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## 1. Description

This product is a professional non-contact infrared thermometer with bluetooth function (bluetooth version is 4.0), which can be used to measure human body and forehead temperature .

Measure at different part of body may result in different reading as because the more body exposed the more severe body temperature will be impacted by environment.

## 2. User safety manual

- Please read this manual carefully before use.
- The application environment temperature range for this product is from 10°C to 40°C, the best usage environment temperature is 25°C.
- Please do not use this product in the environment with temperature higher than 50°C or lower than 0°C.
- Please do not contact this product to any electrified device as to avoid electrical shock.
- Please do not use this product in environment of humidity higher than 80%.
- Please do not approach this product too close to electromagnetic emitting device such as radio or mobile phone.
- Please do not expose this product direct under sun, or too close to oven and no contact with water.
- Please do not hit or drop this product, stop using it if it is damaged.
- The sweat, hair, hat or scarf may impact the measurement accuracy.
- Please make sure the measurement distance is within 5 cm.
- In order to get stable and reliable measurement result, should keep this instrument inside the room for 15 to 20 minutes before using it if the room temperature changes too much.
- Please measure behind the earlap if the forehead can not reflect the actual body temperature because of sweating.
- Use alcohol to sweep the surface of the instrument gently for cleaning.
- Please contact the retailer for reparation instead of doing it yourself.

## Feature

- High precision non-contact body temperature measurement.
- Can choose °C or °F

Temperature mode selection, Press “MODE” when instrument in “ON” status.

- Body inner and body surface temperature measurement mode,( Body inner mode is for body inner temperature, Body surface mode is for measuring object surface temperature)

Setting : Hold the “MODE” key for 4 seconds till “F-1” appears, and then press upwards and downwards key for shifting.(BODY – body inner temperature; Surf — body surface temperature)

- Adjustable alarm temperature (the preset alarm temperature is 38 °C for this product)

Setting: Hold “MODE” for 4 seconds till “F-1” appears, press “MODE” to enter “F-2” (preset value is 38), and then press upwards and downwards key to change the preset value to what you want, and then press “MODE” three times to turn off the instrument, setting completed.

- Buzzing alarm function (Buzzer can be set to on or off)

Setting: Hold “MODE” key for 4 seconds till “F-1” appears, and then press “MODE” for another 3 times to enter “F-4” (the preset value is “ON”), and press upwards and downwards key to choose (On—Turn on, Off—turn off),and then press “MODE” to quick the setting menu.

- The LCD with backlight is suitable the usage in weak illumination.

Setting: Hold upwards or downwards key for 5 second to turn on the backlight.

- Automatic adaptable range; resolution is 0.1°C (0.1°F) .

- Can store the most recent 32 measured data (press upwards and downwards key can access to the stored data)

- Automatic data storage and shut down.

- Bluetooth version : Bluetooth 4.0

- Bluetooth transmission function : Can be connected with cell phones (iPhone 5) or computers (iPad) and other higher instruments ,so that it will be convenient for data storage and analysis .

- Bluetooth Pairing:

In the boot condition , when "Σ" sign is flashing in the lower left corner of the screen , it shows that the bluetooth thermometer has entered the matching and searching condition. If the pairing is successful, the "Σ" sign will not flash in the lower left corner of the screen, it shows that the bluetooth thermometer is paired with the instrument successfully .

## 4.Additional direction for usage

Non-contact infra-red thermal meter is a kind of professional body temperature instrument by measuring the forehead, has been widely adapted for general application, the product comply ASTM1965-1998 standards, this product can not take the place of the diagnoses from doctor.

## 5.Notice before usage

In order to get stable and reliable measurement data, the instrument should be kept in room before usage if room temperature has big change. The following necessary inspection should be finished before usage.

First step: measure body temperature with traditional body temperature meter, assume 37.5℃ (99.5°F ) is the reading.

Second step: use none-contact thermal meter to measure the same person who has been measured the body temperature mentioned in first step, hold the meter 5 cm away from the forehead (pay attention to move away any obstacle such as hair or sweat) , if the same reading 37.5℃(99.5°F) is obtained, then the meter is good for use.

If lower reading is obtained, such as 36.4℃ (97.5°F) , and 1.1℃ (2.0°F) in difference, calibration is needed. Hold “MODE” key after turning on the instrument for 4 seconds, screen appears “F-1”, then press “MODE” for two times and enter “F-3”, and then press upwards key to increase the offset and downwards key to decrease the offset, and then press “MODE” two times to turn off the instrument, calibration is completed.

Third step, follow the second step again to confirm the instrument is good to use.

## 6. structure

- ①. Infra-red detector
- ②. LCD screen
- ③. “MODE” selection key
- ④. Upwards key
- ⑤. Downwards key
- ⑥. Measurement switch
- ⑦. Battery cover
- ⑧. Handle

## 7. LCD screen description

- ①. Human body temperature mode (BODY)
- ②. Surface temperature mode (SURF)
- ③. Digital reading
- ④. Storage position
- ⑤. Temperature °C/°F
- ⑥. Storage data withdraw
- ⑦. Bluetooth Pairing sign: "Σ"

## 8. technical indexes

Resolution	0.1℃ (0.1°F)
Storage temperature	0-50℃ (32~122°F)
Operation temperature	10~40℃ (50~104°F)
Relative humidity	≤85%
Power	DC 3V(two #7 battery in series)
Dimension	158*90*37MM
Weight	Gross 267g, Net 137

## measurement range

Measurement range in human body mode	32.0-42.5℃
Measurement range in surface mode	0~100℃
Precision in human body mode	±0.3℃ (0.54°F)

Precision in surface mode	$\pm 1.0^{\circ}\text{C}$ ( $1.8^{\circ}\text{F}$ )
Measurement distance range	5~15cm (2~5.9 inch)( Best measurement distance 5 cm)
Time to automatic shut down	15 seconds

#### None-contact infra-red forehead thermal meter precision

32~35.9°C ( 89.6~96.6°F )	$\pm 0.3^{\circ}\text{C}$ (0.5°F)	According to ASTM standards E1965-1998(2003)
36~39°C ( 96.8~102.2°F )	$\pm 0.2^{\circ}\text{C}$ (0.4°F)	
39~42.5°C ( 102.2~108.5°F )	$\pm 0.3^{\circ}\text{C}$ (0.5°F)	

## 9. Operation manual

### 9-1. Battery installation (pay attention to the positive, negative polarity)

9-2. First time usage or with new battery, wait 10 minutes for warming up. If the meter has been shut down for a long time, the meter will perform environment temperature check after turning on, and ready time will be 1 to 2 seconds longer.

9-3. Point to the forehead at a distance of 5 cm, press measurement switch, temperature reading appears immediately. Make sure the forehead is not covered by hair, sweat, cosmetic or hat.

9-4. When sweating or environment temperature changes too much as to affect the forehead temperature, point the meter to the position behind the earlap, and make sure that body surface is not covered by hair, sweat, cosmetic or hat.

9-5. When press down the measurement switch, the screen appears the reading of the temperature under measurement, the measurement data can be stored automatically( press upwards and downwards can access to the most recently stored 32 data)

### 9-6. Pairing

In the boot condition , when "Σ" sign is flashing in the lower left corner of the screen , it shows that the bluetooth thermometer has entered the matching and searching condition.

9-7.If the pairing is successful, the "Σ" sign will not flash in the lower left corner of the Screen.

### 9-8. Bluetooth transmission function

Can be connected with cell phones (iPhone 5) or computers (iPad) and other higher instruments ,so that it will be convenient for data's storage and analysis .

### 9-9. Change battery

- ①. When it is out of battery, a signal will appear on the screen as a reminder to change battery, open the battery cover, and pay attention to the polarity of the battery, wrong polarity could

lead to instrument damage.

- ②. Please take out the battery for long time idles, in case the battery liquid leak out and damage the instrument.

#### 9-10. Usage life

The usage life is about 40 thousand times of measurement.

As to obtain a stable and reliable measurement data, the instrument should be kept in room for 15 to 20 minutes if the change of room temperature is big. Human body temperature could change during the day, and at the same time other element could affect the body temperature such as age, agenda and skin color.

#### Normal temperature range for different part of body

Body part	MethodNormal Temp℃	Normal TEMP °F
anus	36.6~38	97.8~100.4
nonnasality	35.5~37.5	95.9~99.5
oxter	34.7~37.3	94.4~99.1
ear	35.8~38	96.4~100.4

#### Normal temperature range for different age

age	Temp (℃)	Temp (°F)
0~2 years	36.4~38.0	97.5~100.4
3~10 years	36.1~37.8	97.0~100.0
11~65 years	35.9~37.6	96.6~99.7
>65 years	35.8~37.5	96.4~99.5

#### 10. Advices

- Protection glass of the LCD is very important and fragile, treat it carefully during usage.
- Please do not attempt to charge the battery which is not chargeable, do not throw the battery into the fire.
- Please do not expose this product directly into the sun, keep it away from the water.

#### 11. Maintenance

- A、
- The detection head is the most sophisticated part, treat it with care.
  - Clean the instrument surface with wiper and 70% density alcohol.
  - Please do not use corrosive cleaning agent.
  - Keep it away from all the liquid.
  - Please store this product in dry environment free of dust, contamination and direct sun.
- B. If the following problem appears during usage, please follow the maintenance instruction. If the problem insists, please contact the customer service.

- ①. LCD can not display value reading.

In body temperature mode, if body temperature is lower than 32℃ or higher than

42.5°C, “LO” or “HI” will be displayed instead of value.

②. “HI” message on LCD

When “HI” appears, this signal indicates that the temperature is out of the measurement up limit or the body temperature is higher than 42.5 °C for in body mode.

③. “LO” message on LCD

When “LO” appears, this signal indicates that the temperature is out of measurement range low limit or body temperature is lower than 32°C for in body mode.

The possible situation for reference when “LO” or “HI” appears

The root cause for “LO” or “HI”	suggestion
Temperature reading is impacted by hair or sweat	Make sure the measurement body part is not covered by any obstacles.
Temperature is affected by airflow	Make sure the airflow is stable during measurement
Measurement distance is too big	Please keep the measurement distance smaller than 5 cm
Move from low temperature or high temperature outside environment into the room	Wait for 10 minutes till the body temperature adapt to the new environment.

## 12. Declaration

electromagnetic compatibility declaration

This product has been tested and certified the electromagnetic compatibility according the EU standards 60601-1-2:2007, but it is not guaranteed that this product is absolutely resistant to electromagnetic interference, please avoid to use this product in the environment of high electromagnetic.

For electromagnetic compatibility, medical electrical instrument needs special attention and should be installed and used according to the electromagnetic compatibility information provided in the attached documents.