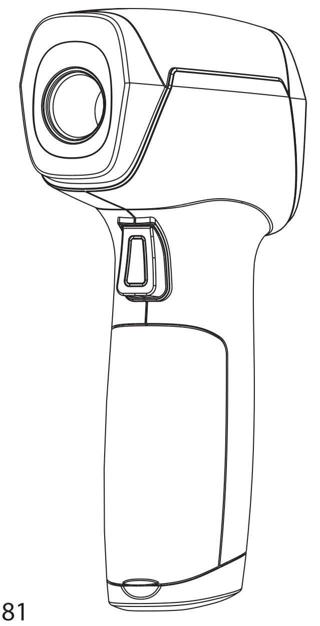
Size:400x280mm 正面

Andesfit Health

ADF-B38A
Wireless Non-Contact Infrared Body/Surface Thermometer



Model:TET-381

Contents

Statement

If replacing the original parts with parts not provided by the manufacturer may cause measurement errors. When the unit or accessories in the dnd of the service life, it should be handled in accordance with local regulations or returned to the manufacturer, and cannot be discarded at will.

Intended use

This model are an electronic clinical thermometer using an infrared sensor to detect human body temperature from the forehead in the neonatal, pediatric and adult population used in the home setting.

EC REP	Authorized Representative in the European Community
CE 0123	CE Mark: conforms to essential requirements of the Medical Device Directive 93/42/EEC.
	Date of manufacture.
🏭	Manufacturer
SN	Specifies serial number
	Type BF applied part
⎓	Direct current
⏳	The device should not be used after the end of the shown or the day
🗑	DISPOSAL: Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.
⚠	Caution
📖	Follow instructions for use
FCC ID：2ABG7TET-381	

Thank you for purchasing the non-contact electronic thermometer. Please read through this manual before using the product.

Cautions

1. Please handle the unit with care. Do not drop or shock the unit.
2. Do not expose the unit under the sunlight. Do not immerse the unit in water.
3. Keep the device out of reach of infants, children or pets, since inhalation or swallowing of small parts (e.g. carpet feet, batteries) can be dangerous or even fatal.
4. Avoid touching the lens with bare hands.
5. Do not use in areas with strong electromagnetic interference.
6. When the measurement data exceeds the normal temperature of the human body, please consult your doctor.
7. If the unit is not working properly, please contact customer service.
8. Do not disassemble the unit. Open the battery cover only when replacing batteries. Dispose of the replaced battery in accordance with local waste battery recycling requirements.
9. If the unit needs to be scrapped after the expiration date, please dispose of it properly according to local regulations.
10. Please contact manufacturer if the unit enter calibration mode.
11. Use the thermometer at room temperature, or within 10-40°C.
12. Do not store the unit long period of time under -25°C or above 70°C, or relative humidity above 90%.
13. For other precautions, please follow “Cleaning and Care” in this manual.
14. The device is not suitable for use in the presence of flammable anesthetic mixtures with air or with oxygen or nitrous oxide.
15. The operator shall not touch battery compartment and the patient simultaneously.
16. Manufacturer will provide circuit diagrams, component part lists, descriptions, calibration instructions to assist to SERVICE PERSONNEL in parts repair.

17. When the thermometer is in use, there should not be any great power appliances such as high voltage cables, X-ray machine, ultrasound equipment and electrizer nearby.
18. Magnetic and electrical fields are capable of interfering with the proper performance of the thermometer. For this reason make sure that all external devices operated in the vicinity of the thermometer comply with the relevant EMC requirements. Wireless communications equipment such as wireless home network devices, mobile phones, cordless telephones and their base stations, walkie-talkies or MRI devices are a possible source of interference as they may emit higher levels of electromagnetic radiation.
19. For nonprofessional operators, in setting up, using, maintaining the thermometer or reporting unexpected operation or events, please contact the manufacturer or manufacturer’s agency.
20. Should skin irritation occur whilst using this model, please interrupt the application and inform your doctor - to exclude an allergic reaction.

Warning:

1. Remove the batteries from the unit if it will not be used for an extended period of time. This will prevent damage the unit from battery leakage.
2. Do not use the thermometer to measure (near) fire or other heat sources.
3. When the body has a fever or the ambient temperature is low, the exposed forehead is affected by the low temperature of the environment. The human body will have a high body temperature and a low forehead temperature. If the digital thermometer tests the forehead with low value, please test the temples, ear roots or other parts of the human skin covered with clothing with higher temperature.
4. The human body is a very complex biological integrated system. Affected by the environment and human body, the electronic thermometer may sometimes display abnormal body temperature (such as when body fever butforehead temperature or ear temperature show low value). Test the armpit temperature by mercurythermometerand consult a doctor in time.

5. Do not modify this equipment without authorization of the manufacturer.
6. If this equipment is modified, appropriate inspection and testing must be conducted to ensure continued safe use of the equipment.
7. Check whether the battery is installed backwards or leaks, check whether the sensor probe is dirty.
8. 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.
9. 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.
10. 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.”
11. 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.

Correct use is the key to test accuracy, otherwise it may cause measurement error. Since infrared measurement has higher requirements on the surrounding environment, please follow the instructions as below.

1. When measuring body temperature, the instrument should be pointed to the middle of the forehead (eyebrow) and kept vertical.The measurement site should not be covered by hair. The distance between the instrument and the forehead is recommended to be less than 2cm.
2. When the person to be measured comes from a place with a large temperature difference from the measurement environment, it should stay in the test environment for at least 5 minutes, and then measure after the temperature is consistent with the environment, otherwise it will affect the measurement result.
3. Forehead cold compress, sweating, and other cooling measures will make the measurement result low. Avoid measuring in this situation.
4. When the instrument is taken from a place with a large temperature difference from being measured and used, the instrument should be placed in the used environment for 20 minutes before use.
5. The surrounding environment of the person to be tested must be stable, and it cannot be tested in places with large airflows such as fans and air outlets of air conditioners.
6. Do not use the instrument in strong sunlight.
7. When measuring, it is recommended to measure about 3 times each time, the most displayed set of data shall prevail.

Special Features

1. Measurement Range: Body: 34~42.2°C (93.2-108°F). Surface :10-60°C(50-140°F).
2. Accuracy ±0.2°C. (Outside 35~42°C measurement range, accuracy ±0.3°C).
3. 1 second measurement time.
4. Alarm function notifies user when measured temperature is higher than Threshold Temperature Value set by user.
5. LCD display
6. Non-contact measurement prevents cross infection.
7. Thermometer memory can store up to 30 readings.
8. Automatic power off when thermometer is not in use after 3 minute.
9. Unit of Measurement: °C/°F.

Measurement Principle

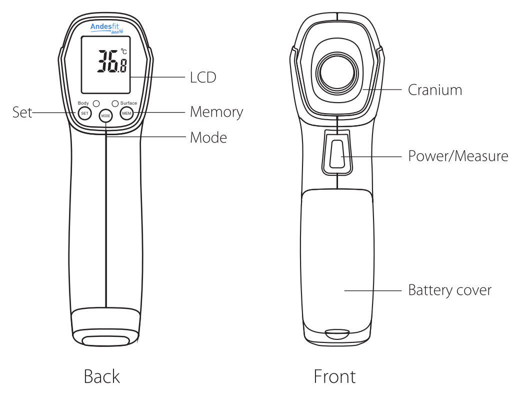
All objects, solids, liquids and gases radiate infrared energy to the surrounding environment. The energy that the human body radiates to the outside world is basically based on infrared radiation. The electronic thermometer can accurately measure the body temperature by accurately measuring the weak infrared energy released by the human body, and then through complex calculation processing and various compensation corrections. The product is composed of a built-in infrared probe head and related hardware and software, can sense, analyze and record the temperature of the measured object and the environment.

The infrared radiation sensor is activated when the user places the thermometer near certain parts of the body (e.g.forehead), and presses the Power/Measure button. The thermal energy generated by the arterial blood flow is quickly detected by the infrared sensor, so that the body temperature is accurately measured.

Product scope

Measurement body temperature from the forehead.

The component of product

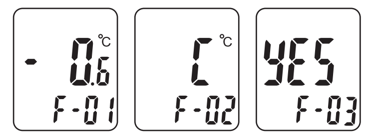


Settings

This product can be set by pressing the "SET" key to modify the default setting parameters to suit different races of people. The default settings have been made before leaving the factory. If it is not necessary, it is recommended not to modify the factory default values. If it is necessary to modify, please contact the local customer service.

1. Turn on the thermometer by pressing the “Power/Measure” button. Press and hold the "SET" key until the display show Threshold Temperature Value and "F-00". The thermometer will enter Settings Mode.
2. To modify the setting value: Press the "MODE" key to increase or "MEM" key decrease the value.
3. To switch to other Settings items: Press the "SET" key to switch to other items.

* F-00: Change Threshold Temperature Value
* During the test, when the test value does not exceed the F-00 set value, the buzzer beeps once after the test. When the test value exceeds the set value of F-00, the buzzer beeps twice after the test. This setting is in body mode, and surface mode does not have this function.
* F-01: Offset value for body mode (-2.0~+2.0)
* F-02: Change unit of temperature measurement(°C/°F)
* F-03: Delete records (Yes, No)
* If F-03 value is “YES”, will delete both body and surface mode records.



4. To save Settings changes: Press and hold "SET" key for 4 seconds to save changes and exit

°C / °F unit conversion formula

°F=1.8x°C+32

Method of Measurement

1. Press and hold the Power/Measure button to turn on thermometer display. Display will show last record. If no record, display will show “-----_°C/°F.
2. Press "MODE" key to select measurement mode (Body or Surface). Relative mode light will be on.

Body mode:

1) Point the probe head to forehead right above eyebrow centre and keep vertical. The measurement area must not be covered by hair. Suggest measurement distance 1-2cm.

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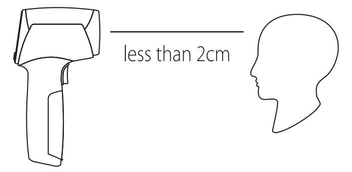
2) Press and hold Power/Measure button. Beep should will be heard.
3) Release Power/Measure button to finish measurement. Display will show the highest temperature of measured area.



3. Press the "MEM" key to view the measurement record.
4. Turn off: The thermometer will turn off automatically without use for 3 minute.

Memory Function

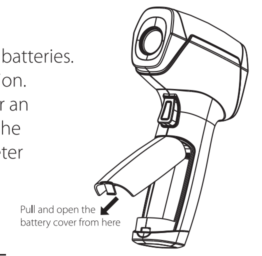
1. Press and hold the “Power/Measure” button to turn on thermometer display. Display will show last record. If no record, display will show “-----_°C/°F
2. Press the "MEM" key to switch records shown. LCD displays test records and record number.
3. Press the ”MODE” key to switch modes, the last record of the new mode is displayed. If no record, display will show “-----_°C/°F.

Replacing Batteries

The thermometer uses 2 AA batteries. When the battery symbol flashes on the screen, replace the batteries as soon as possible.

Note:

1. Open the battery cover to replace batteries. Place batteries in the correct position.
2. If the thermometer is not in use for an extended period of time, remove the batteries to protect the thermometer from battery leakage.



Cleaning and Maintenance

When using the product, please follow the prompts when you find the following conditions.

1. External dirt: Wipe the dirt with a clean soft cloth with water, or use a cotton swab with medical alcohol. Wiping with medical alcohol can also have sterilization purpose. Take care not to add too much water or alcohol to prevent damage to the inside of the instrument.
2. Internal dirt: The black glass lens of the internal probe is an important device. Do not touch or press with your fingers or other objects, otherwise it will affect the accuracy of the measurement. When the glass lens surface is dirty, please wipe the lens surface with 95% anhydrous alcohol with a cotton swab.

3.Storage: Keep in a dry, dark place out of direct sunlight.

Note:

Do not wipe the lenses with 75% sterile alcohol (residual water marks).
Do not use other chemical agents to wipe the lens (damage the lens).

Disposal

This product includes removable parts and accessories, and cannot be disposed with household waste. All users must return electrical and electronic equipment to a separate waste collection and collection center that specializes in electrical and electronic equipment for disposal in order to comply with 2002/96 / EC . Otherwise, you can recycle it for the retailer you purchased. Violations of this rule will result in severe penalties.

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact you local government for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

Display Message

Display message	Situation	Solution
Er 1	Ambient temperature is out of operating range (10-40 °C)	Allow the thermometer remain in room temperature (10-40 °C) for 30 minutes.
Er 2	Sensor error	When the sensor senses that the ambient temperature is unstable,it needs to be placed in the environment for 20 minutes measured
Er 3	Memory error	Please contact with the customer service.
Er 4	The Ambient temperature is instability	Allow the thermometer remain in room temperature(10-40 °C) for 30 minutes.
hi °C	Temperature measured is higher than normal human temperature range (Body above 42.2 °C; Surface above 60 °C)	Check the measured object and take a new measure.
Lo °C	Temperature measured is lower than normal human temperature range (Body below 34°C; Body below 10°C)	Check the measured object and take a new measure.
🪫	Low battery	Replace batteries.

Product specification

Spec	Content		
Measuring type	Infrared Forehead Thermometer		
Measuring mode	Surface/body temperature		
Measuring distance	less than 2cm		
Accuracy	Measuring	Surrounding	Accuracy
	34~42.2 °C	16~35 °C	±0.2°C
	34~42.2 °C	10~16 °C	±0.3°C
	34~42.2 °C	35~40 °C	±0.3°C
Indicator Functions	LCD display		
Low voltage tip	< 2.0V±0.1		
Display resolution	0.1 °C		
Unit	°C，°F		
Operation Environment	Ambient temperature:10°C~40°C; Relative humidity :15% to 90%; Atmospheric pressure : 70kPa ~ 106kPa		
Storage temperature	Ambient temperature:-25°C~70°C; Relative humidity : ≤90%; Atmospheric pressure : 70kPa ~ 106kPa		
Automatic shutdown	3 minute after not being used		
Memory	30 groups memory		
Battery	2 x AA		
Used Life Span of Battery	1000 times		
Service life	5 Year		
Contents of the packaging	batteries.manual		
Size	159×87.5×45.5 mm		
Weight	About 98g (Not including batteries)		

Note: Subject to modification without prior notice.

Normative references

1. This model needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in the ACCOMPANYING DOCUMENTS;
2. Portable and mobile RF communications equipment can affect this model.

Guidance and manufacturer’s declaration - electromagnetic emissions

Emissions test	Compliance
RF emissions CISPR 11	Group 1
RF emissions CISPR 11	Class B
Harmonic emissions IEC 61000-3-2	Not applicable
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Not applicable

Normative references (Continued)

Guidance and manufacturer’s declaration - electromagnetic Immunity

Immunity Test	IEC 60601-1-2 Test level	Compliance level
Electrostatic discharge (ESD) IEC 61000-4-2	±8 kV contact ±2 kV, ±4 kV,±8 kV, ±15 kV air	±8 kV contact ±2 kV, ±4 kV,±8 kV, ±15 kV air
Electrical fast transient/burst IEC 61000-4-4	Not applicable	Not applicable
Surge IEC 61000-4-5	Not applicable	Not applicable
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	Not applicable	Not applicable
Power frequency magnetic field IEC 61000-4-8	30 A/m 50Hz/60Hz	30 A/m 50Hz/60Hz
Conducted RF IEC61000-4-6	Not applicable	Not applicable
Radiated RF IEC61000-4-3	10 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz	10 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz

NOTE U_T is the a.c. mians voltage prior to application of the test level.

Normative references (Continued)

Guidance and manufacturer’s declaration - electromagnetic Immunity

	Test Frequency (MHz)	Band (MHz)	Service	Modulation	Modulation (W)	Distance (m)	IMMUNITY TEST LEVEL (V/m)
Radiated RF IEC61000-4-3 (Test specifications for ENCLOSURE PORT IMMUNITY to RF wireless communications equipment)	385	380 –390	TETRA 400	Pulse modulation 18 Hz	1,8	0.3	27
	450	430 –470	GMRS 460, FRS 460	FM ± 5 kHz deviation 1 kHz sine	2	0.3	28
	710	704 – 787	LTE Band 13, 17	Pulse modulation 217 Hz	0,2	0.3	9
	745						
	780						
	810	800 – 960	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE Band 5	Pulse modulation 18 Hz	2	0.3	28
	870						
	930						
	1720	1 700 – 1 990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4, 25; UMTS	Pulse modulation 217 Hz	2	0.3	28
	1845						
	1970						
	2450	2 400 – 2 570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse modulation 217 Hz	2	0.3	28
	5240	5 100 – 5 800	WLAN 802.11 a/n	Pulse modulation 217 Hz	0,2	0.3	9
	5500						
	5785						

1 Main safety features of infrared electronic thermometer

1.1 Type of anti-shock: Internal power supply
1.2 Type of anti-shock:: BF type application
1.3 Degree of protection against ingress: Not applicable
1.4 degree of safety when used under flammable anesthetic gas mixed with air or flammable anesthetic gas mixed with oxygen or nitrous oxide: Non AP/APG type.
1.5 operating mode: Continue to operate
1.6 Rated voltage: d.c. 3V
1.7 Input power: Not applicable
1.8 The thermometer has no application part with protection against defibrillation discharge effects
1.9 The thermometer has no signal output section or input section
1.10 The thermometer is a portable device

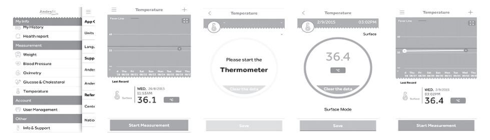
2 The Temperature sensor is treated as the applied part.

Connect device via Bluetooth

1. Installation

Prior to first use, Download and install “Andesfit Health”application on your device. (Bluetooth 4.0 capabilities, e.g. iOS 11.0 ,or Android 7.0)

2. Open “Andesfit Health” application Pressure icon on Measurement screen.



3. Press the “Thermometer” button.
4. Press the “Start Measurement” button.
5. When the measurement is complete, the temperature will display on Thermometer monitor & press “Save”.
6. All the measurement data will be saved in the app.

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. This equipment has been tested and pursuant to part 15 of the FCC rules.

These limits are designed to provide reasonable ection against harmful interference in a residential installation. This equipment gene rates uses and frequency energy and, if not installed and used in accordance with the instructions, interference to radio communications. However, there is no guarantee that a particular installation.

If this equipment does cause harmful interference to adio or television reception, which can be determined by turning the equipment off and on, the user is the interference by one or more 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 isconnected.
- Consult the dealer or an experienced radio/TV technician for help.

Andesfit Health

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