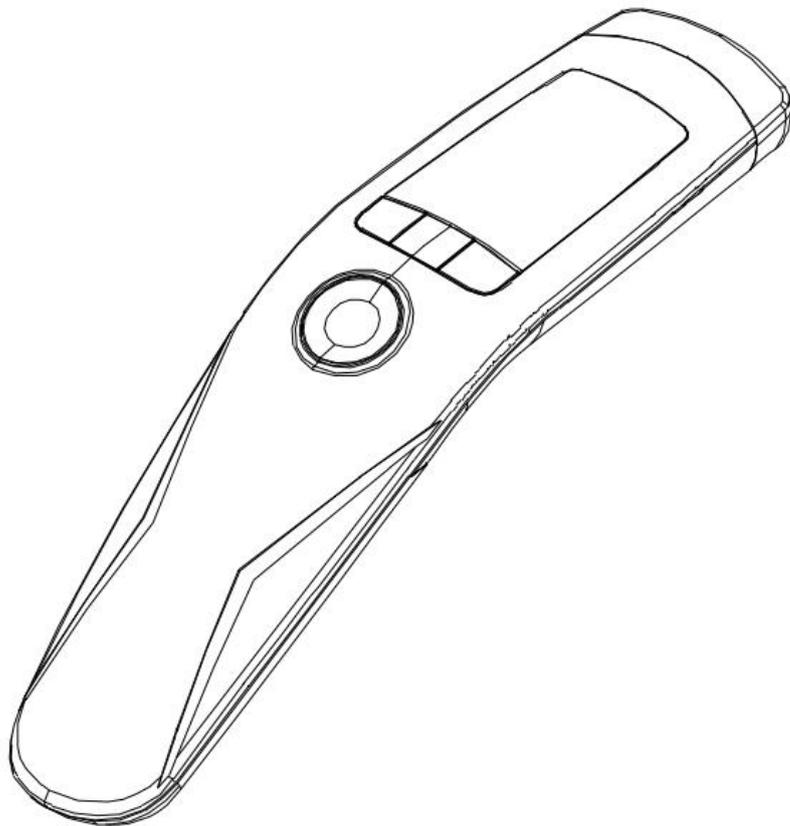


# Specification of infrared thermometer



Model: EP510

# Range of application

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Temperature is shown by measuring the thermal radiation of an object.

## Basic principle

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Anything above absolute zero radiates a certain amount of infrared energy. Different types of objects radiate different infrared energy values, according to the infrared radiation energy and wavelength can determine the value of the surface temperature of such objects. According to this principle, if the target temperature is relatively constant, it can be accurately measured.

# Parameter

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- **Display scope**

(32.0~42.9) °C

- **Maximum allowable error**

±0.2°C (35.0~42.0) °C

±0.3°C (32.0~34.9) °C

±0.3°C (42.1~42.9) °C

- **Resolution of 0.1 °C**

- **Normal working conditions**

Environment temperature (16~35) °C

Relative humidity ≤85%

Atmospheric pressure (70~106) kPa

- **Normal storage conditions**

Environment temperature -20°C~55°C

Relative humidity ≤93%

Atmospheric pressure (70~106) kPa

 **Notice: Note: if the unit is used or stored outside the specified temperature and humidity range, the system may not achieve the claimed performance.**

# Precautions before use

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In order to obtain stable and reliable measurements, infrared thermometers should be placed inside the greenhouse for 15-20 minutes before use when there is a large change.

It is normal that the temperature measured will vary according to the location of the target. The more exposed the location is, the greater the influence of the ambient temperature will be.

Do not expose the product to the sun or touch the water

# Specifications

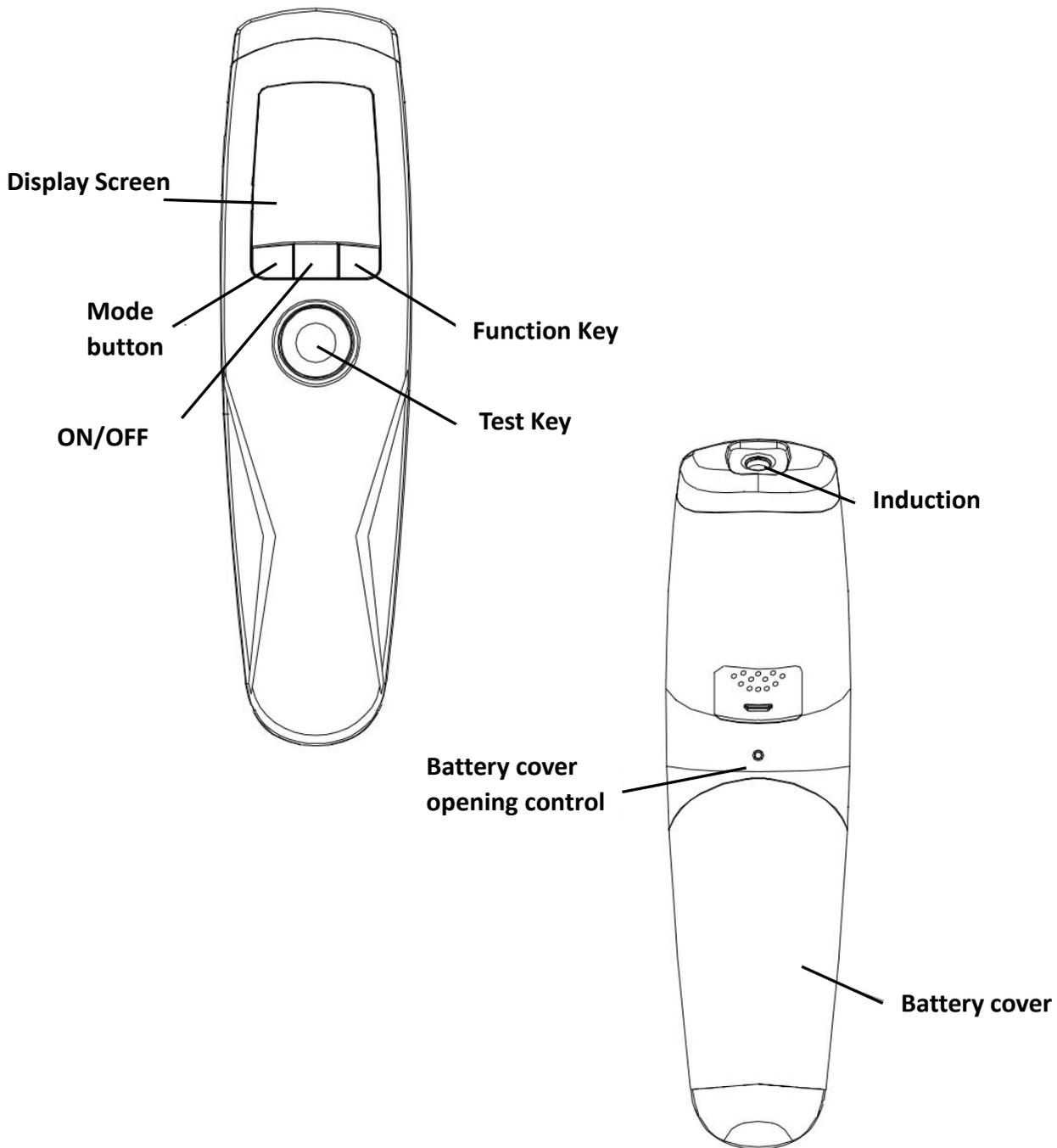
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Model	EP-510
Method of measurement	Non-contact
Measuring range	32.0°C~42.9°C
Measurement accuracy	±0.2°C (35.0~42.0) °C ±0.3°C (32.0~34.9) °C ±0.3°C (42.1~42.9) °C
Resolution	0.1°C
Operating temperature	Environment temperature 16°C~35°C; Relative humidity≤85%
Transportation and storage conditions	Environment temperature-20°C~55°C; Relative humidity≤93%
Battery	2×1.5V AAA
Working voltage	DC 2.7V~3.15V
Nominal voltage	DC 3.0V
Low voltage	2.6±0.2V
Temperature of the unit	Degree centigrade
Automatic shutdown function	Less than 60 seconds
Size	182*70*46mm
Net weight	About 80g

# Product structure and drawings

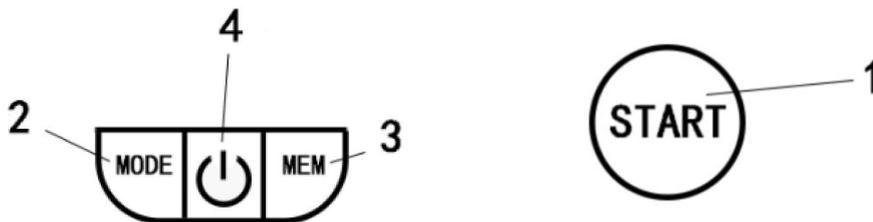
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The product consists of infrared temperature sensor, probe sleeve, display unit, circuit board, buzzer and plastic parts:



# LCD icon description, key function definition

unction definition	Icon	Description
Battery level		Low power, need to replace the battery
		Full power. Everything's fine
Temperature of the unit	°C	Degree centigrade
Temperature value		The measured temperature value
voice		Turn on



NO	Description
1	Press this key to start the measurement and display the temperature.
2	Set the key/mode switch
3	In the power-on state, long press the MEM key for 5 seconds to enter the time setting (optional).  Press to view memory
4	Power on button, press power on when power off, press power off when power on.

# Method of use

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Please preheat the battery for about ten minutes after the first use or just after putting in the new battery to make the measurement more accurate.

Make sure the machine is in thermometer mode, keeping it perpendicular to the target, then press the START key, the measurement is complete, and the result is displayed. At this point, the data can be read from the display result to determine whether the target is abnormal.

If the machine is not operated within 60 seconds after measurement, it will shut down automatically



# Replace the battery

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When the empty battery symbol is displayed on the screen, please replace the battery, otherwise the measurement result will be affected. Open the battery cover, take out the exhausted battery, put 2 AAA dry batteries, please pay attention to the battery polarity, do not put the reverse.

## **Notice**

- When not used for a long time, please take out the battery.
- Don't throw depleted batteries into a fire.
- Dispose of used batteries in accordance with local laws and regulations.

# Notice

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- Please read this manual carefully before use.
- The ambient temperature of this product is 16°C to 35°C.
- Please do not use this product in the environment higher than 40°C or lower than 10°C, it may damage the machine.
- Please keep this product away from electrified objects to avoid electric shock.
- Do not use the product in environments with relative humidity greater than 85%.
- Please do not put this product too close to the electromagnetic range (such as radio, mobile phone, etc.).
- Please do not expose the product to the sun or near the stove, and do not touch the water.
- This product belongs to precision equipment, do not disassemble, twist, bite, fall.
- The occlusion on the object will affect the accuracy of the measurement results. Please make sure the measuring distance is not greater than 5cm.
- In order to obtain the most accurate and stable and reliable measurement data, when the ambient temperature changes greatly, the equipment should be placed indoors for 30 minutes after use.
- There is a big change in the measuring environment before and after two times (such as from indoor to outdoor), please wait in the new environment for 30 minutes before measuring.
- Continuous measurement time interval of 1 minute, if a short continuous measurement must be carried out, the reading temperature value may have some errors is a normal phenomenon, at this time it is recommended to take the average.

# Notice

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- There is no absolute standard value for the temperature of the object. Please try to collect the usual temperature measurement records for reference.
- Do not throw the equipment into the fire.
- In the event of a problem with the product, contact the distributor and do not attempt to repair it yourself.
- Please keep this product out of reach of children.

# Notice

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<b>Problem description</b>	Possible causes and solutions
<b>The measurement key didn't react</b>	1. Reinstall the battery 2. Check if the machine is measuring
<b>Does not show or shows an error</b>	Reinstall battery
<b>No sound</b>	Make sure the sound switch is on
<b>Shutdown after measurement</b>	Check if the battery is adequate

# Maintenance and repair

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The maintenance of the thermometer is very easy, as long as the following is followed to ensure the normal use of the equipment:

- Do not disassemble the equipment arbitrarily. If there is any problem, please contact the dealer.
- Please carry the equipment carefully to avoid bumping, bumping or throwing to avoid damage to its internal electronic components.
- The suitable temperature for the test environment of the equipment is 16°C to 36°C.
- Please avoid placing the equipment in or near places with high or low temperature.
- Do not place equipment in excessive damp places, such as: bathroom, kitchen.
- Do not clean the equipment with water, if you want to wipe please dry with non-flannelette.
- If the machine is dirty, please wipe it with a clean soft cloth.
- If you cannot use the device for a long time, please take out the battery. If you put the battery in the battery box for a long time, the battery will leak and cause failure.
- After using the dry battery waste method, please in accordance with the city's relevant environmental protection provisions to deal with.

# Important safety instructions

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The manufacturer shall not be liable for damage caused by improper use.

- Never immerse equipment in water or other liquids.
- If the product is obviously abnormal, please send the product to repair.
- Do not disassemble the equipment without authorization.
- There is no absolute standard value for the temperature of the object. Please try to collect the usual temperature measurement records for reference.
- The equipment includes sensitive components, which should be treated with caution. Descriptions of storage and operating conditions are given in the product specifications section.
- Contains small parts, to avoid swallowing, children should be used under adult supervision.
- Stay away from the following situations: 1. Extreme temperature; 2.2. Impact and drop;3. Pollution and dust;4. Direct sunlight;5. Hot and cold environment
- If not used for a long time, please take out the battery and place it.