

Infrared ear thermometer

Country of origin | China

Health problem addressed _____

Body temperature measurement is used to assist in disease diagnosis.

Product description _____

The device has a sensor inside that detects infrared emitted from the tympan. It provides the body temperature based on the calculation of the amount of emittance. This ear thermometer does not require a protective cover for the sensor, and the sensor can be cleaned by wiping it directly with ethanol.



Developer's claims of products benefits _____

Other body temperature measurement options take a long time, and other ear thermometers usually require a protective cover to prevent the invasion of foreign matter. These covers may affect the accuracy of the measurement, cause infection when inappropriately used, and increase maintenance costs. The design of this device enables fast measurement (only one to two seconds), requires no protective cover, allows for easy cleaning of the sensor (wiping directly with ethanol), and has a low maintenance cost. The compact design allows for portability.

Suitability for low-resource settings _____

This device is suited for use in areas where the healthcare system is less developed given its ease of use and low maintenance costs. It is also designed for home use (especially for infants). This device is already registered and well accepted in China.

Operating steps _____

Switch on the power and check the display. Pull the ear backwards, insert the ear thermometer straight into the ear path, make sure the sensor reaches the tympan, and press the start button to measure. Measurement is complete when an audible beep is heard and the indicator is on. Read the result. Clean the sensor after use.

Regulatory status _____

The device has a Republic of China Measuring Device Manufacturing License and a Republic of China Medical Device Registration.

Future work and challenges _____

The price of this device is still quite high compared with normal thermometers, which limits its distribution. However, the production cost will decrease with an increase in production quantity.

Use and maintenance _____

User: Self-use/patient, physician, technician, nurse, midwife, family member

Training: None

Maintenance: Cleaning of probe at fixed intervals

Environment of use _____

Settings: Rural, urban settings, ambulatory, at home, primary (health post, health center), secondary (general hospital), tertiary (specialized hospital)

Requirements: Requires batteries of type CR2032, with an environment of use between 16 and 35 degrees Celsius and 30-85% relative humidity without condensation.

Product specifications _____

Dimensions (mm): 105 x 32 x 25

Weight (kg): 0.038

Consumables: None

List price (USD): 76

Other features: Portable, reusable

Year of commercialization: 2012

Currently sold in: China