Quick Start Guide

TDM95

Version: 1.0

Due to regular upgrades of systems and products, ZKTeco could not guarantee exact consistency between the actual product and the written information in this manual.

1 Overview

This product is a non-contact electronic module that measures the temperature of the human body. It returns the body temperature of a person by measuring the heat radiation of the palm or wrist, placed in front of the device within a specified measuring distance. The measured body temperature differs sometimes when a person arrives from the extreme ambient temperature. Thus, it is recommended to wait for a while before measuring body temperature for a precise result.

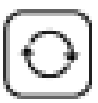
2 Instructions

1. The temperature data is corrected by the blackbody before delivery and is compensated to the temperature data of the wrist temperature range (It is the temperature displayed on the digital display, also with the measuring distance).
2. It is recommended to measure the temperature of the wrist.
3. Operating instructions:
   - When a person places his/her wrist or palm in front of the device within the specified measuring distance the temperature and distance measurement program is triggered and the output is displayed.
   - When the temperature measured is within the normal value range i.e., below 37.3°C, the green LED light glows for a second and the buzzer beeps once.

- When the measured temperature crosses 37.3°C, the red LED light glows for a longer time, and the buzzer also beeps thrice. If the next temperature measurement is triggered when the buzzer is already alarming, the current high-temperature alarm is interrupted.

Measuring Range : 32.0°C to 42.9°C
Measuring Accuracy : ±0.3°C
Measuring Distance : 1cm to 15cm.

3 Features



Data Synchronization

Accurate Measurement

LED Display

Dual Temperature Mode

Measured within a second

- **Communication:**
  RS232 / RS485 / USB Communication
- **Non-contact measurement:**
  1cm to 15cm distance measurement.
- **Outdoor use:**
  The product can be used in direct sunlight.

4 Technical Parameters

1. Basic Parameters

Accuracy	0.1°C (0.1°F)
Storage Temperature	-20°C to 55°C
Operating Ambient Temperature	15°C to 38°C
Relative Humidity	10% to 85%
Atmospheric Pressure	70kpa to 106kpa
Power	DC 5V
Dimensions	114.98×89.97×32.2 (mm)
Weight	333g

2. Measuring Range

Temperature Measurement Range	32.0°C to 42.9°C
Temperature Detection Range	1cm to 15 cm

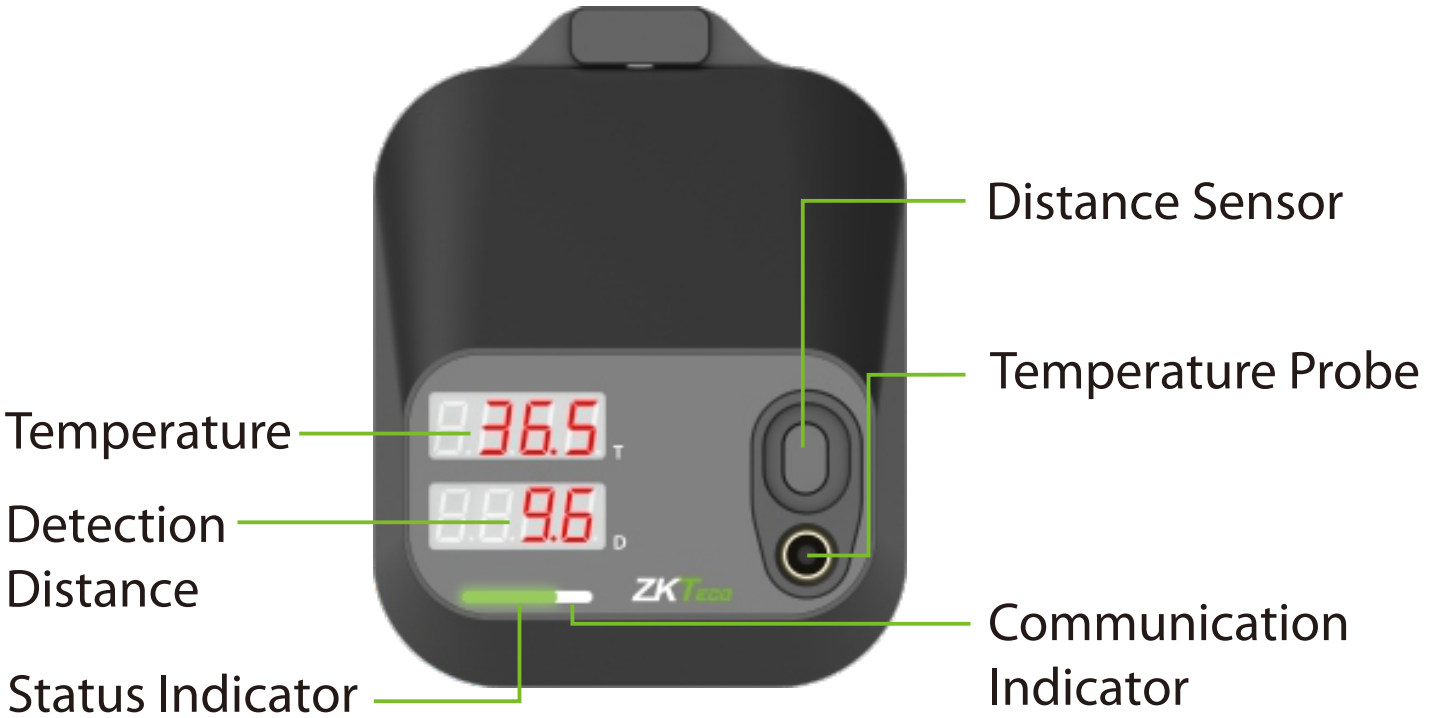
3. Service Life

The product's service life is more than 3 years.

4. Storage and Transportation Environment

1) Store in a well-ventilated room without corrosive environment.
2) Prevent drop or harsh jerk, vibration, rain and snow splash during transportation.

5 Product Appearance



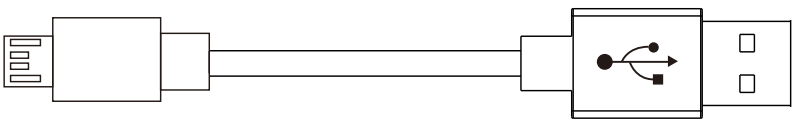
6 LED Display

Temperature	Indicator	Signal Sound
32.0°C to 37.3°C	Green	1 Single Beep
37.4°C to 43°C	Red	Beep 3 times + Red LED

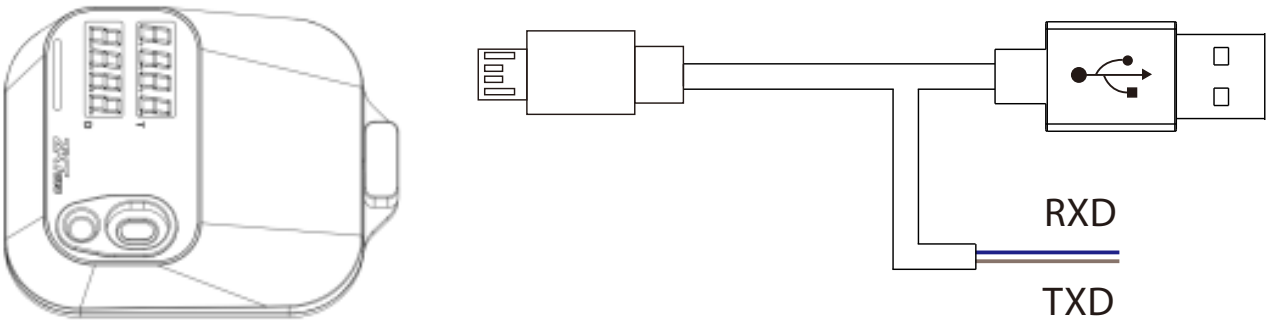
7 Wiring Connection

Rear View

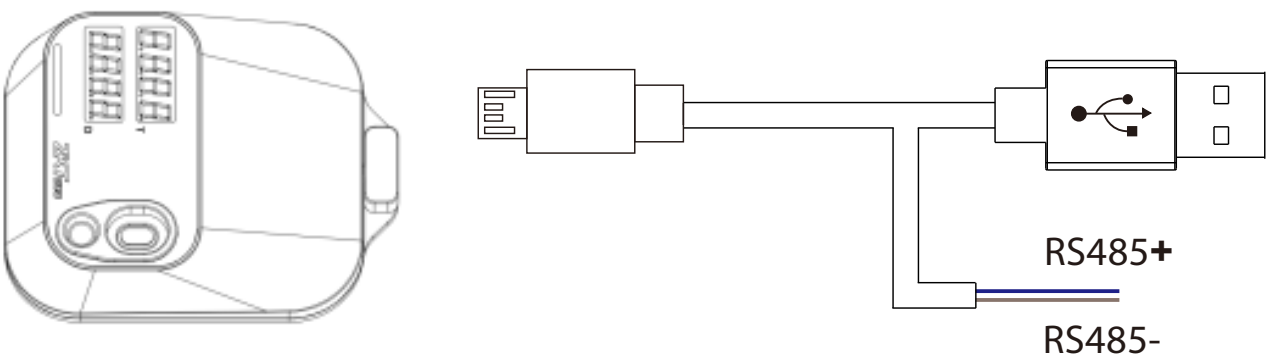
1. **User Menu:** Switch between Celsius (°C) & Fahrenheit (°F).
   Method: Long press **M** to enter the **C01** mode, press "**+**" button to switch the display unit "**C**" or "**F**". Long press **E** to save and exit.
2. The power supply voltage of TDM95 is 5V, the communication baud rate is 9600 bits per second, and it supports three communication modes which are as -
   a. **USB Communication:** Please use a standard micro USB data cable.



b. **RS232 Communication:** Use a customized USB cable for power supply and connect it to the RS232 port. Then, connect the **blue** wire to the **RXD**.



c. **RS485 Communication:** Use a customized USB cable for power supply and connect it to the RS485 port. Then, connect the **blue** wire to **485+**, and connect the **brown** wire to **485-.**



8 What's in the box?

Item Name	Quantity
TDM95	1
Quick Start Guide	1
Micro USB cable	1
RS232/RS485 USB cable	1

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