



ASY Electronics (Jiaxing) Co., Ltd

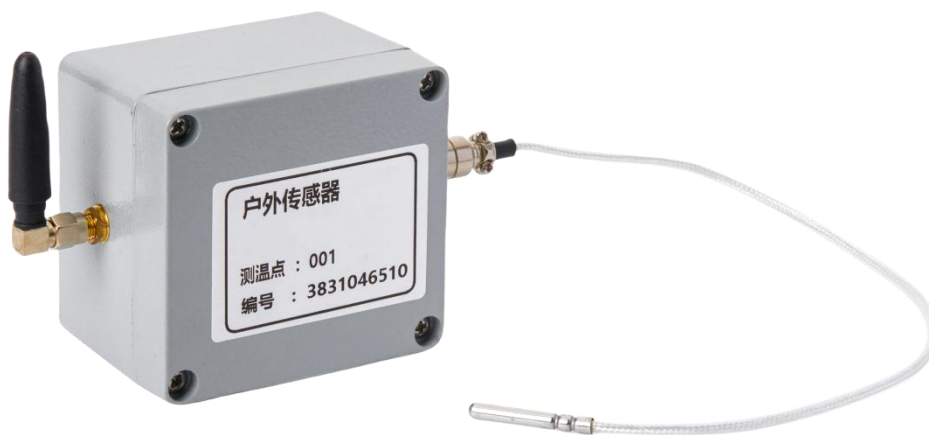
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# **KS30T-LORA (Explosion-proof model)**

## **Instruction manual for wired wireless temperature sensor**





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## **I、 Product overview**

KS30T-LORA explosion-proof lead-wire wireless temperature sensor is a temperature sensor featuring ultra-low power consumption and high accuracy. It consists of a temperature sensor, signal modulation and amplification device, logic control circuit, wireless communication circuit, lithium battery, and antenna. This temperature sensor uses ultra-low power wireless communication to transmit the collected temperature data to the wireless temperature measurement host via a wireless network.

This temperature sensor is equipped with a single-lead type and features an explosion-proof design, making it suitable for harsh environments requiring explosion protection. It can perform real-time temperature monitoring at the measurement point. Currently, this product is widely used in many industries such as power, petroleum, chemical, mining, metallurgy, and cement.



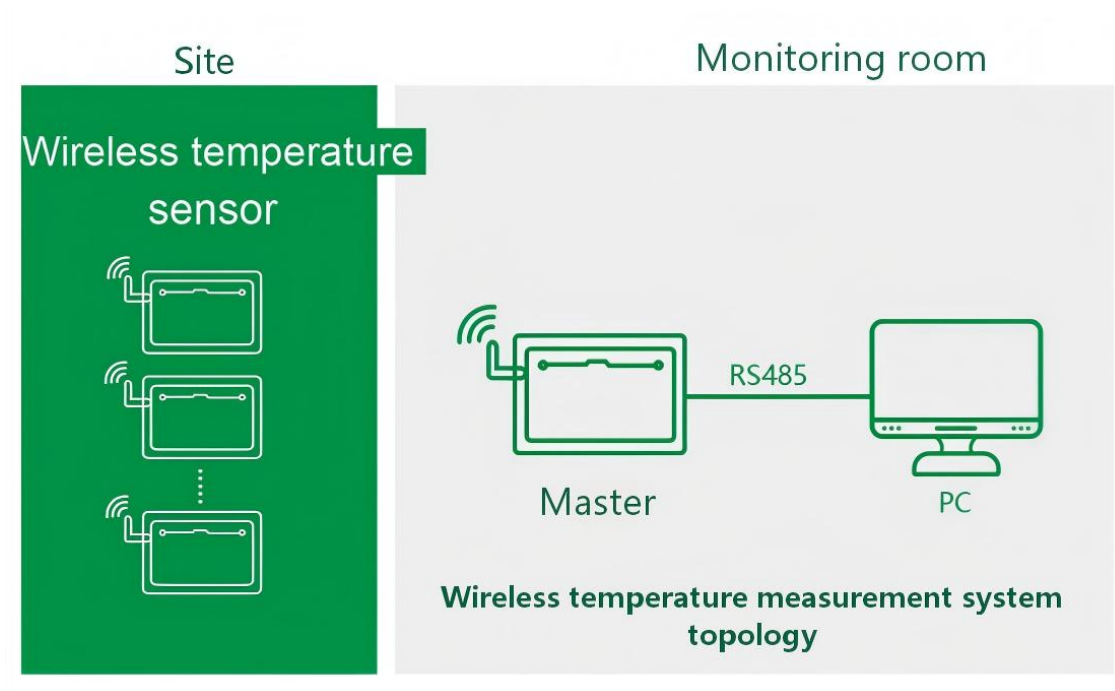
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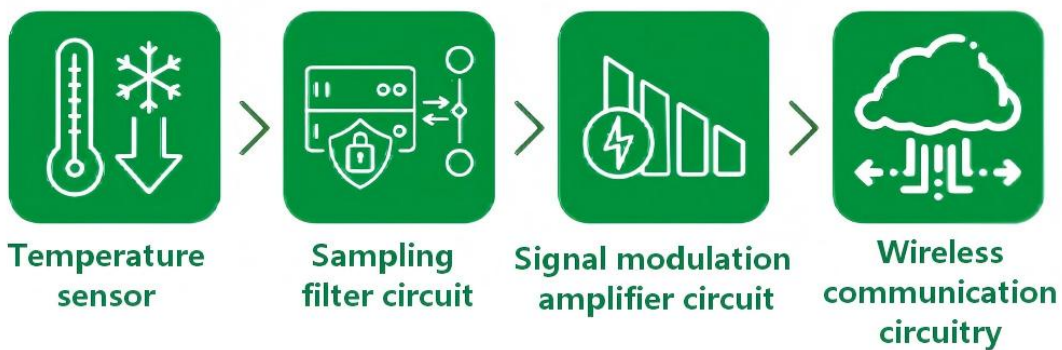
## II、 Wireless temperature measurement system structure

### 2.1 Wireless temperature measurement system structure diagram



### 2.2 Schematic diagram of wireless temperature sensor

#### Principle and structure of wireless temperature sensors





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## 2.3 Function Introduction

Main functions	Function introduction
Temperature detection function	Real-time detection of the current temperature of the measured part
Battery voltage self-test function	Real-time detection of the internal battery voltage value of the sensor
Note: All data detected by the sensors are uploaded to the wireless temperature measurement host via wireless transmission.	

## III、Main technical parameters

Temperature measurement range	-40 ~ +300°C	Wireless transmission distance	≤500 meters
Measurement accuracy	±1°C	Battery lifespan	5-8 years
Thermistor	PT1000	Installation method	Adsorption
Temperature sampling frequency	Default 10 seconds	Overall length	105mm
Communication methods	LORA	External dimensions	60mm*45mm*25mm
Wireless frequency	470-510MHz		
Installation location	Outdoor isolating switches, wall-penetrating cable clamps, transformer inlet and outlet terminals, outdoor flexible copper busbar connections, and other components.		



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## IV、 Installation method

Step 1: Pair the sensor with the temperature measurement host.

Step 2: Pair the sensor with the temperature measurement area.

Step 3: Fix the sensor to the temperature measurement area.

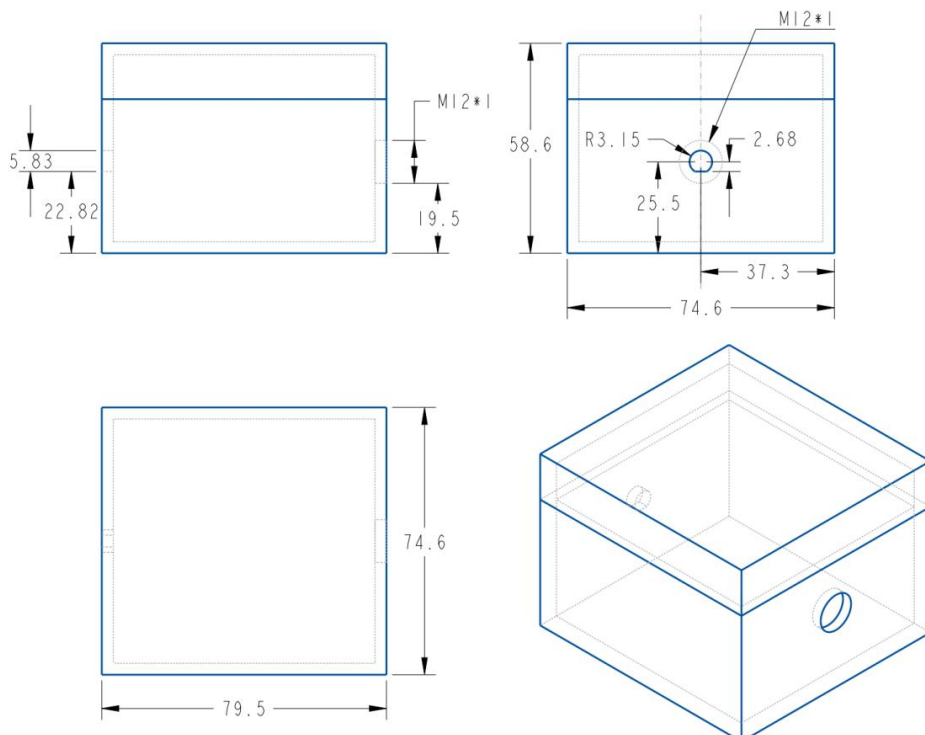
Step 4: If the sensor probe is wired, use the probe tip at the end of the wire to attach it to the temperature measurement area.

## V、 On-site case studies



## VI、 Product Dimensions

External dimensions: 79.5\*74.6\*58.6 (unit: mm, excluding lead wire temperature sensor)





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\*This information product images and technical data is for reference only, if subject to update without prior notice, the specific content of the right to interpret ASY Electronics (Jiaxing) Co., Ltd.