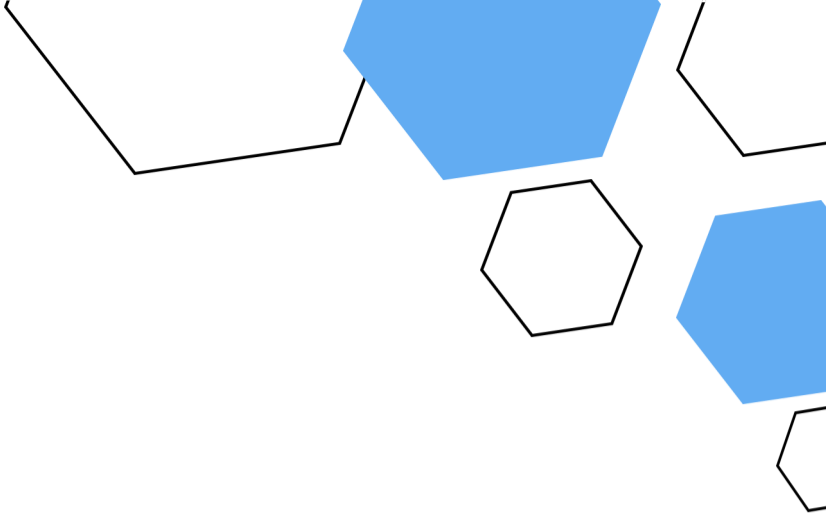




SE72x

Temperature and humidity sensors of LoRaWAN

User Guide

Introduction

- This manual aims to provide users with detailed operating instructions for the LoRaWAN Humidity and Temperature Sensor - SE72x series to help you correctly install, configure, and use the gateway device.
- When using this manual, you can read according to your actual needs. If you only need to quickly configure the sensor, please refer to the official website of ManThink Technology: <https://www.manthink.cn>
- Thank you for choosing to use ManThink's products, and we hope this user manual can provide you with the help and support you need. If you have any comments, suggestions, or feedback, please feel free to contact us at any time.
- The pictures in this document are for reference only, and the actual product appearance shall prevail.

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1.Product Introduction

1.1.Product Overview

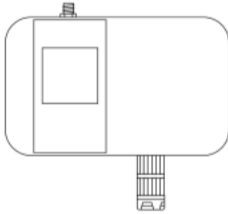
The SE72x is a series of wireless temperature and humidity sensors that measure ambient temperature and humidity using a digital temperature and humidity sensor. The measured values are periodically sent to the application platform via LoRa. Users can flexibly set the sampling period and reporting period through a handheld device or management platform. The default configuration period is 0.5 hours.

1.2.Main Features

- IP65 protection level
- Battery powered
- Low-power LCD display
- Temperature accuracy: $\pm 0.3^{\circ}\text{C}$
- Humidity accuracy: $\pm 3\%\text{RH}$
- 8-10 years of continuous operation life (0.5-hour uplink period)
- Supports US902, AU915, AS923, EU868, EU433, CN470 LoRaWAN standards

2.Humidity and Temperature Sensor Components

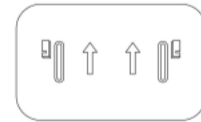
2.1.Accessories List



Humidity and Temperature Sensor×1



LoRa Antenna×1



Backplate×1

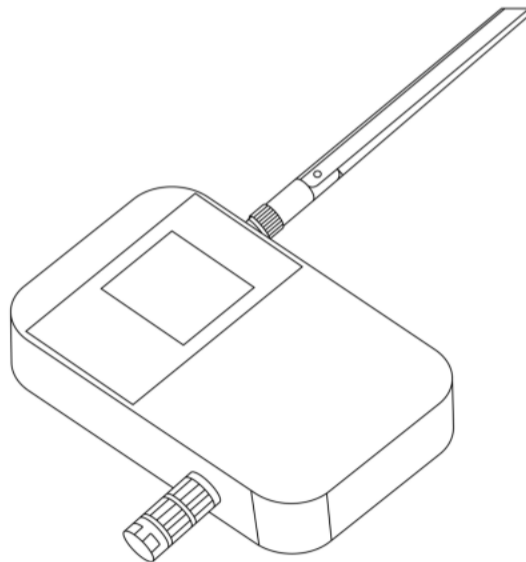


Certificate of Conformity & Warranty Card ×1

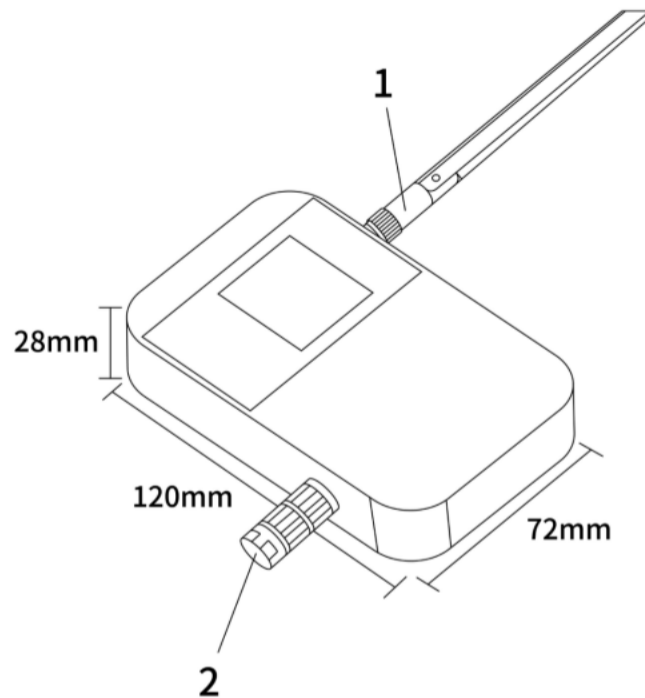


User Guide×1

2.2.Main part of Humidity and Temperature Sensor



2.2.1.Product Dimensions



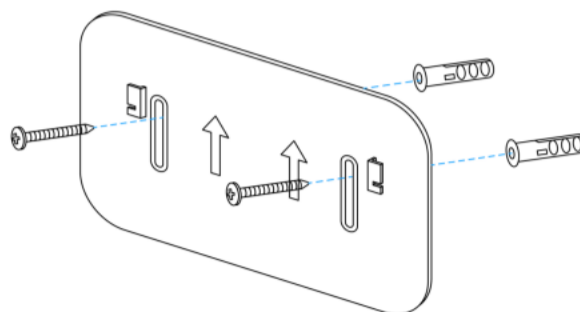
2.2.2.Interface Description

1	LoRa Antenna Interface
2	Sensor Interface

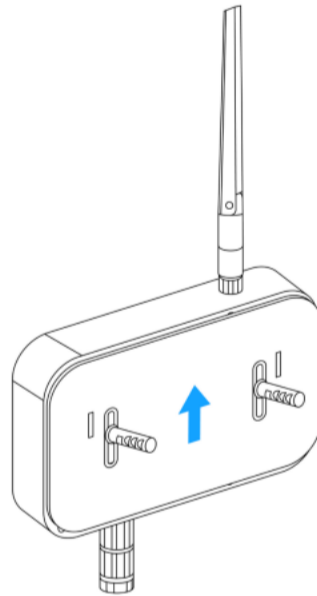
3. Installation and Fixation

3.1.Wall Mounting

- Fix the backplate to the wall (keep the arrow on the backplate pointing up)



- Tighten the LoRa antenna to the antenna interface
- Hang the humidity and temperature sensor on the backplate (align the groove on the back of the sensor with the protrusion on the backplate, then slide down)



3.2.Free Placement

Place the humidity and temperature sensor in any safe location

4.Network Access Method

1. Input the triplet information into the gateway platform
2. Ensure the gateway and SET2x are on the same frequency band
3. Use a magnet to trigger the QR code area on SET2x for 6s-8s (no need to trigger when accessing the ManThink platform)

5.Viewing Uploaded Data

1. Power on SET2x to start normal operation

2. Install the gateway at the designated location, power it on, and connect it to the network
3. If using the ManThink server, please refer to the NMS platform general usage process. If using another platform, you need to contact the application platform supplier.

6.Uplink Protocol

Index	Name	Length (byte)	Remarks
0	Command	1	Fixed to 0x21
1	Data Identifier	1	Fixed to 0x07
2	Device Type	1	Fixed to 0x03
3	Hardware Version	1	Decimal 10 indicates V1.0, and so on
4	Software Version	1	Decimal 100 indicates V1.00, and so on
5	Reporting Interval	2	Little-endian mode, unit: minutes
7	Current Device Status	1	bit0: Sensor status, 1-abnormal, 0-normal bit1: LoRaWAN mode, 1-ClassC, 0-ClassA
8	Temperature	2	Parameter value = (ambient temperature * -1000) / 10 (°C)
10	Humidity	2	Little-endian mode, unit: 0.1%RH
12	Battery Voltage	1	1~254 (2000~3600mV) 255: Constant power supply
13	RSSI	1	Parameter value = RSSI - 160 (dBm)
14	SNR	1	Actual SNR value (dB)

7.Product Models

SET24-CN470-N	CN470 Standard Version
SET24-EU433-N	EU433 Standard Version
SET28-EU868-N	EU868 Standard Version
SET28-AS923-N	AS923 Standard Version

SET24-CN470-N	CN470 Standard Version
SET28-AS923-N	AU915 Standard Version
SET28-US902-N	US902 Standard Version

8.Contact Us

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