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1 Product Introduction

LW002-TH is a LoRaWAN temperature and humidity sensor for measuring indoor and outdoor environment, and it is easily deployed and configured. It adopts dedicated digital module acquisition technology and temperature and humidity sensing technology to ensure high reliability and long-term stability of products. LW002-TH is powered by 12000mAh non-chargeable battery. The Battery life is estimated to be up to 5 years but depends on sample interval, transmit interval, data rate and environmental factors. LW002-TH could be applied to any type of environment, and ideally suited for a wide range of applications such as Intelligent agriculture, urban monitoring, air quality, industrial, environmental or farming projects.



2 Application

- Intelligent agriculture
- Greenhouse
- Animal husbandry
- Warehouse
- Fresh foods storage and transportation

- Machine room
- Medicine storage

3 Product Feature

- Based on standard LoRaWAN Protocol
- Support both APP local configuration and server remote downlink configuration of device parameters
- Support over threshold alarm
- Firmware update Over The Air (OTA)
- Support a wide range frequency plan
- built-in 12000mAh non-chargeable battery
- Ultra Low Power, Max. 5-year operating time
- Low battery indicator
- Support both Class A and Class C mode
- Support downlink and mutlicast

4 Specification

4.1 Wireless Parameter

Type	Parameters
Protocal	LoRaWAN
LoRa Data Rate	292bps~5.4kbps
LoRa Frequency	CN470/EU868/AU915/US915/AS923/IN865/KR920/EU433/CN779
Max Transmitted Power	20dbm
Sensitivity	-137dBm@SF12 300bps

4.2 Hardware Specification

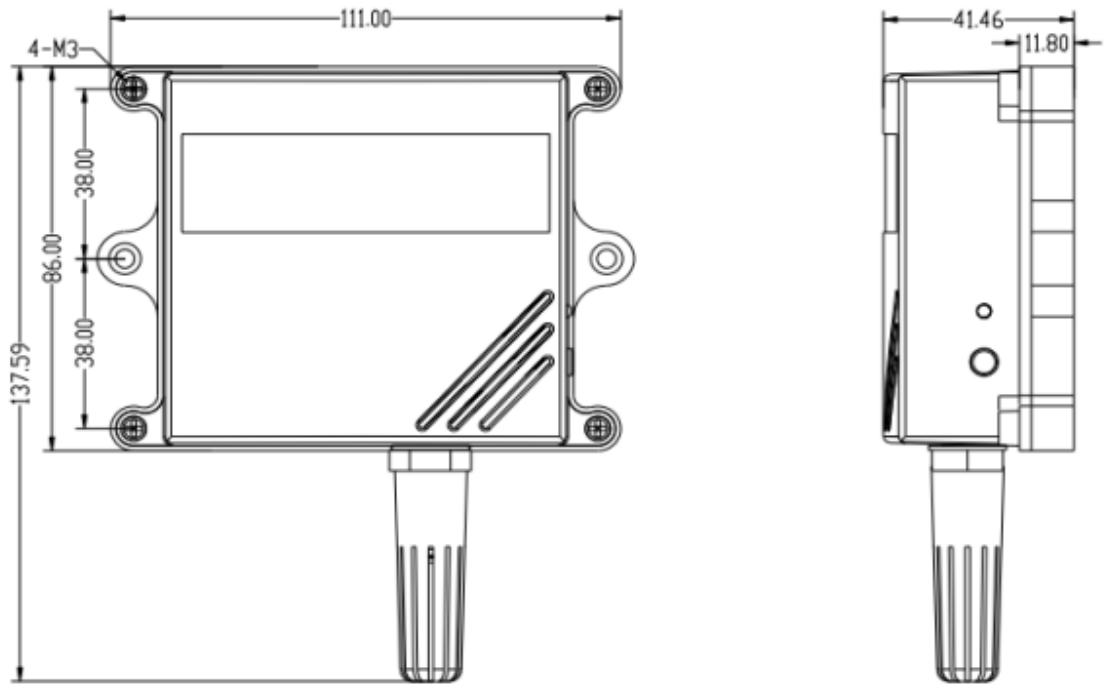
Type	Parameters
Power Supply	12000mAh non-chargeable battery or 5-24V adapter
Operating time	max.5 years @upload data twice per day
Sleep Mode Current	10uA
Transmission Current	Max120mA @20dBm
Receive Current	Max25mA @20dBm
LoRa Communication Distance	>=1500m in urban area
Temperature Accuracy	±0.3°C@ 0°C to 65°C ±0.7°C@ -40~0°C&65~120°C
Humidity Accuracy	±3%RH@ 10-90%RH @25°C ±4.5%RH@v0~10%&90~100% @25°C
Operating Temperature	-20~60°C
Operating Humidity	20% ~ 80%

4.3 Operating Enviroment

Type	Parameters
Operating Temperature	-20~60°C
Operating Humidity	20% ~ 80%

4.4 Dimension

Type	Parameters
Dimension	137.59 x 111.00 x 41.46mm
IP Rating	IP65



5 Order Information

Product code	Description
LW002-TH-EU868-A	LoRaWAN Temperature and Humidity sensor,band EU868,with adapter
LW002-TH-EU868-B	LoRaWAN Temperature and Humidity sensor,band EU868,with battery
LW002-TH-US915-A	LoRaWAN Temperature and Humidity sensor,band US915,with adapter
LW002-TH-US915-B	LoRaWAN Temperature and Humidity sensor,band US915,with battery
LW002-TH-CN470-A	LoRaWAN Temperature and Humidity sensor,band CN470,with adapter
LW002-TH-CN470-B	LoRaWAN Temperature and Humidity sensor,band CN470,with battery