



Food Safety Monitoring Solution – End User Guide

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1. Introduction

1.1 What is ThingsEye Food Safety Monitoring Solution?

The ThingsEye Intelligent Food Safety Monitoring Solution is designed to maximize food and goods quality while improving operational efficiency through 24/7 monitoring.

This solution ensures that your customers receive healthy, high-quality food, reduces food waste, saves costs, and enhances employee productivity.

Built on innovative wireless technology, ThingsEye minimizes device costs, installation, and maintenance expenses while providing wide coverage. Its user-friendly hierarchical management structure simplifies deployment and administration, making it an ideal IoT solution for food safety monitoring.

Additionally, the solution supports quick device onboarding through a scan-to-add feature, allowing users to deploy new sensors in seconds.

1.2 Features

- **Easy to Deploy**
 - Smart wireless sensors
 - Plug-and-play gateway
 - Scan-to-add device onboarding
- **Collaborative Monitoring**
 - Flexible dashboards
 - Real-time alerts and notifications
- **High Precision Measurement**
 - High-accuracy sensors
 - Reliable data readings
- **Real-Time Monitoring**
 - Continuous temperature and humidity monitoring
 - Instant temperature alarms
- **User-Friendly Interface**
 - Intuitive dashboard design

- Customizable dashboard views

1.3 Specifications

- **Wireless Technology:** LoRaWAN, NB-IoT, LTE-M
- **Long Battery Life:** Operates for several years without maintenance
- **Monitoring Parameters:** Temperature, humidity, and more
- **Data Storage:** 5 years of historical data
- **Management:** Hierarchical structure for easy administration
- **Device Onboarding:** Simple device addition for end-users
- **Mobile Support:** Dedicated mobile app for on-the-go monitoring

2. How to Build a Food Safety Solution

2.1 Network Structure

Temperature & Humidity Monitoring Structure



The network structure consists of end nodes and gateways, which work together to monitor temperature and humidity conditions in real time.

2.2 Get Account

To begin, contact your local representative to obtain a customer account on **ThingsEye.io**.

2.3 Get Devices

Reach out to your local representative to acquire the necessary devices for your food safety solution.

These devices include:

- **End Nodes:** For temperature and humidity monitoring.
- **Gateway:** For data transmission.

Ensure that all devices are pre-registered on **ThingsEye.io** before use.

2.4 Add a Branch

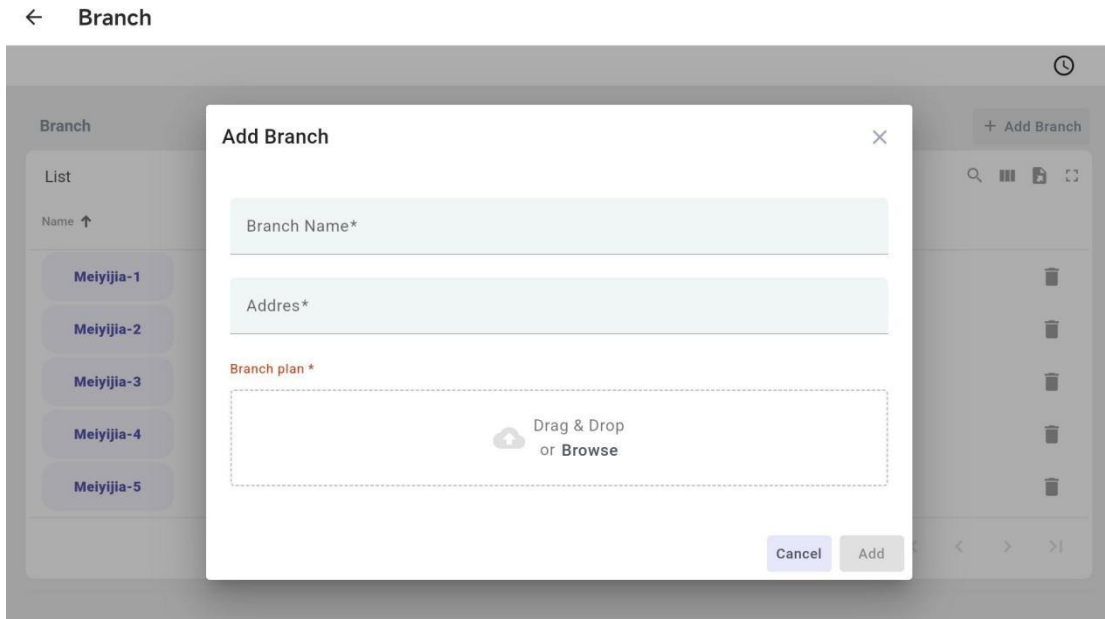
← Branch 🕒

Branch
+ Add Branch

List 🔍 📄 🗑️ 🔄

Name ↑	Address	
Meiyijia-1	2/F, No. 52 Wo Tian Road, Longgang District, Shenzhen, Guangdong Province, China (2/F, Shanghai Movie City)	🗑️
Meiyijia-2	3/F, South Zone, Jingji Royal View Times Building, No. 59 Xinfeng Road, Longgang District, Shenzhen, Guangdong, China	🗑️
Meiyijia-3	Room 1107, 11/F, Shihong Building, No. 2095 Bixin Road, Longgang District, Shenzhen, Guangdong, China	🗑️
Meiyijia-4	2/F, China Resources Supermarket, Phase II, Zhonghai Kangcheng Garden, Feiyang Road, Center City, Longgang District, Shenzhen, China	🗑️
Meiyijia-5	Factory Building, Chuangxuan Industrial Park, Baihua Community, Guangming Street, Guangming District, Shenzhen, China	🗑️

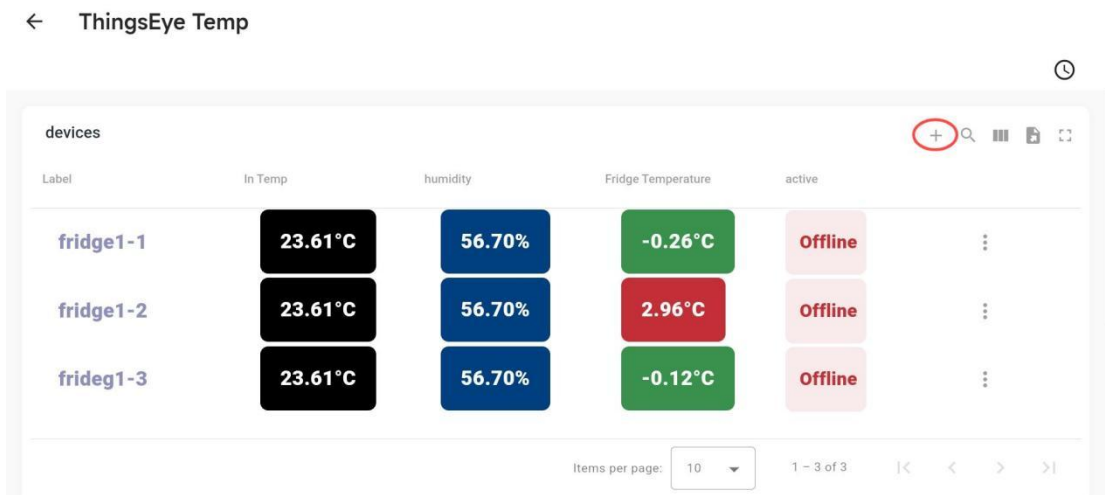
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If you have a map of the branch (e.g., a facility layout), you can upload it to the platform for better visualization and device management.

2.5 Add Devices to the Branch

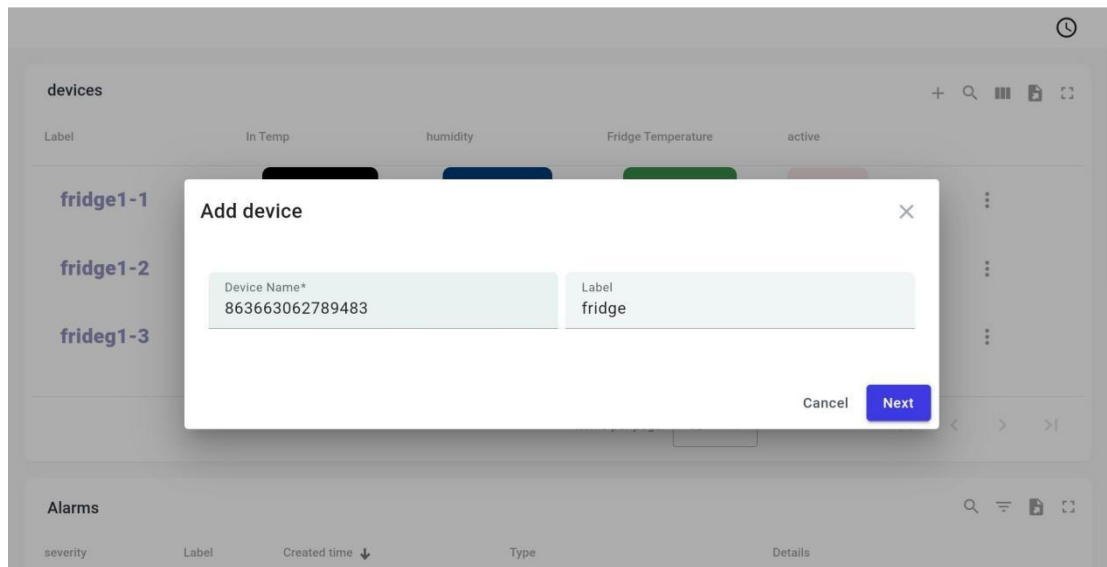
Once the branch is created, you can add devices to it. Optionally, you can drag and drop devices onto the correct positions on the uploaded map for precise placement.



Care should be taken when adding devices:

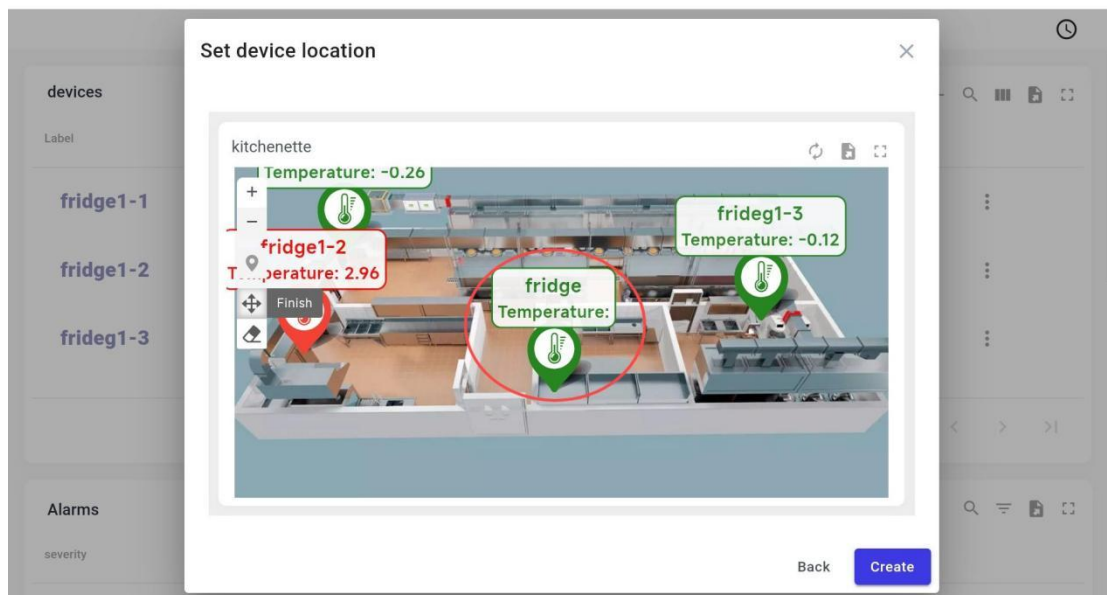
- **Device Name:** Must be the Device EUI of the device.
- **Label:** Optional, and can be used as a differentiator. Only the label will be displayed on the dashboard.

← ThingsEye Temp



After filling in the device name and label, click 'Next' to adjust the location of the device on the map.

← ThingsEye Temp



2.6 Connect the Gateway

1. Connect the gateway to your router using an Ethernet cable.
2. Power on the gateway and allow it to obtain an IP address from the router. Ensure the gateway has a stable internet connection.

2.7 Connected Devices

Once the gateway is connected, scan the code to register the device to the server. After registration, all registered end nodes will automatically connect to the network. You can verify their status on the platform.

2.8 Verify Dashboard

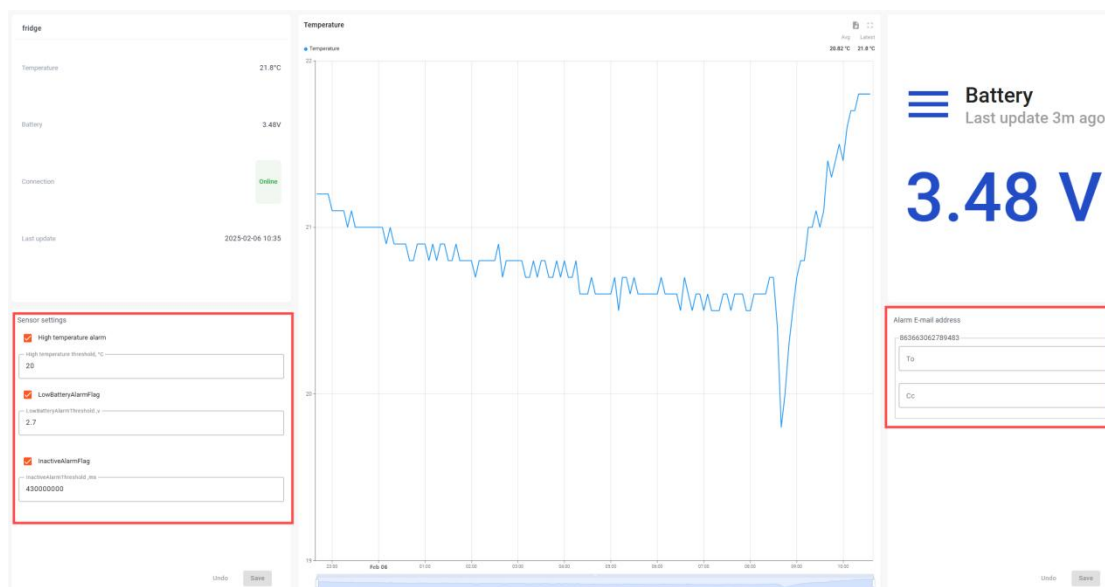
Log in to the **ThingsEye.io** dashboard to confirm that all devices are online and transmitting data correctly.

2.9 Placement of Sensors

- Place the temperature sensor probe in the center of the refrigerator's interior.
- Avoid direct contact with the refrigerator walls to ensure accurate temperature measurements.

2.10 Set Alarms for Devices

Configure temperature and power, active condition alert thresholds to receive notifications when conditions exceed predefined limits.



Notes:

- Temperature thresholds are in °C.
- Voltage thresholds below 2.7V typically indicate low battery on the device.
- Device inactivity warnings are in milliseconds (ms).

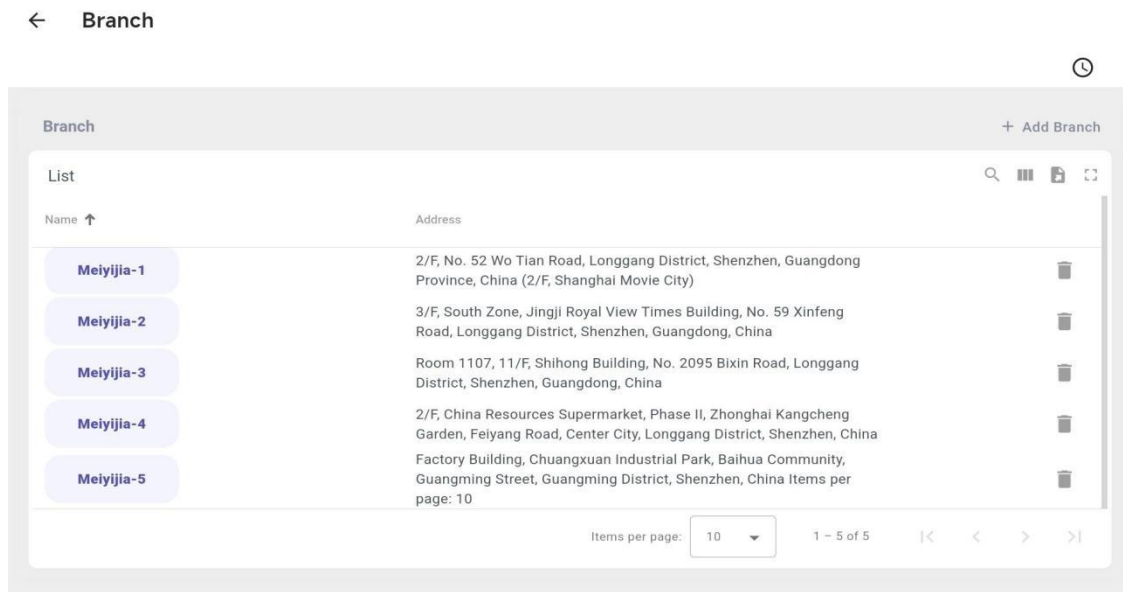
2.11 Use of Tablet

For added convenience, you can use a tablet to access the **ThingsEye.io** platform. This allows for real-time monitoring and management of your food safety solution on the go.

- **Download APP:** Scan the QR code or click the link to download the app.

	QR code	Link
Google Play		https://play.google.com/store/apps/details?id=com.teyiwulian.thingseye.app
APP Store		https://apps.apple.com/us/app/thingseye-io/id6739418014

After that you can use your dashboard as normal. The display is as follows:



← ThingsEye Temp

devices

Label	In Temp	humidity	Fridge Temperature	active
fridge1-1	23.61°C	56.70%	-0.26°C	Offline
fridge1-2	23.61°C	56.70%	2.96°C	Offline
fridge1-3	23.61°C	56.70%	-0.12°C	Offline

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← ThingsEye Temp



← details

fridge

Temperature: 22.2°C

Battery: 3.47V

Connection: Online

Last update: 2025-02-07 10:40

Sensor settings

High temperature alarm

High temperature threshold, °C: 20

Undo Save

Temperature

Avg: 21.17°C Latest: 22.2°C

Battery

Last update 2m ago

3.47 V

Alarm E-mail address

863663062789483

To:

Undo Save