



# Pro-6800 Smart Inspection APP User Manual

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## User Manual

### Manual

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# Preface

The Pro-6800 Smart Inspection APP monitors and manages devices through Bluetooth transmission, helping users to timely and deeply understand the current operating status of the devices.

This APP only supports VB-P vibration temperature sensor.

## **Smartphone specifications requirements:**

**The Android platform requires Android 7.0 and Bluetooth 5.0 or above.  
Android phones need to enable Bluetooth and Location.**

After the APP installation is completed, please follow the manual to operate.

## **TECO Group**

**Tecom Co., Ltd.**

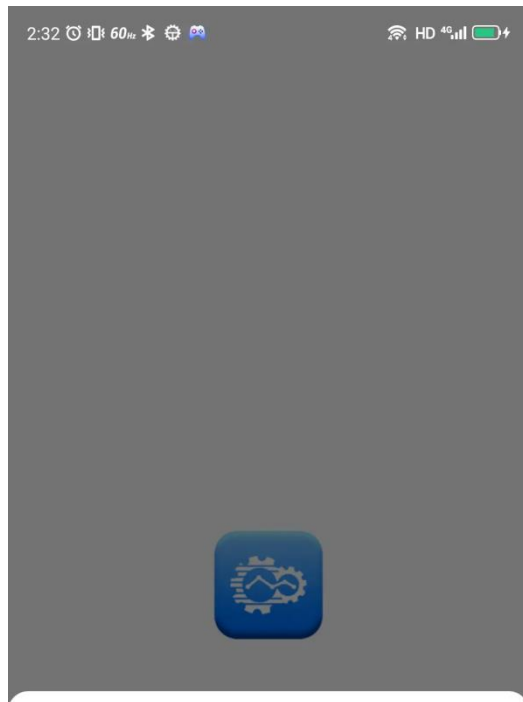
Address: 23 R&D Road 2, SBIP, HsinChu, Taiwan, R.O.C.

Phone: +886-3-5775141

# 1. Allow APP to obtain necessary permissions for operation

Turn on Bluetooth, and allowing APP to obtain required permissions (Location, Nearby devices and File Read/Write permissions).

When Bluetooth is not turned on, there will be a "Bluetooth not turned on" prompt bar at the top of the page.

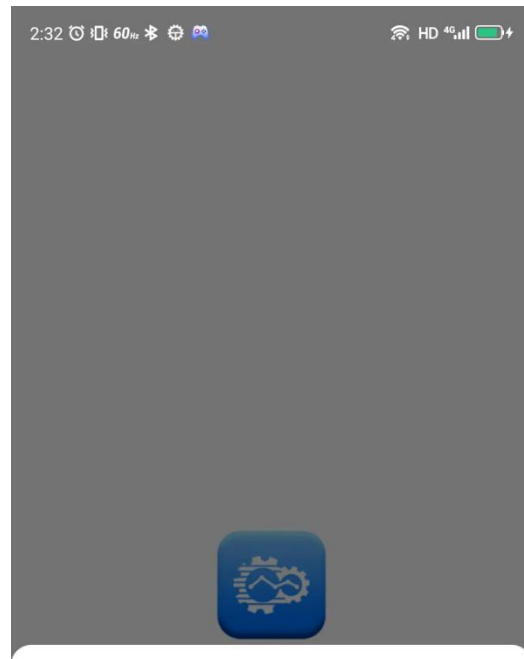


Pro-6800 requires Nearby devices permission , is it allowed ?

include connect to paired Bluetooth devices,Scan bluetooth. you can change the settings of permissions in nubia Manager-Permissions management.

Always allow

Forbid



Allow Pro-6800 to access this device's location?

include Coarse Location,Fine Location. you can change the settings of permissions in nubia Manager-Permissions management.

Allow only using

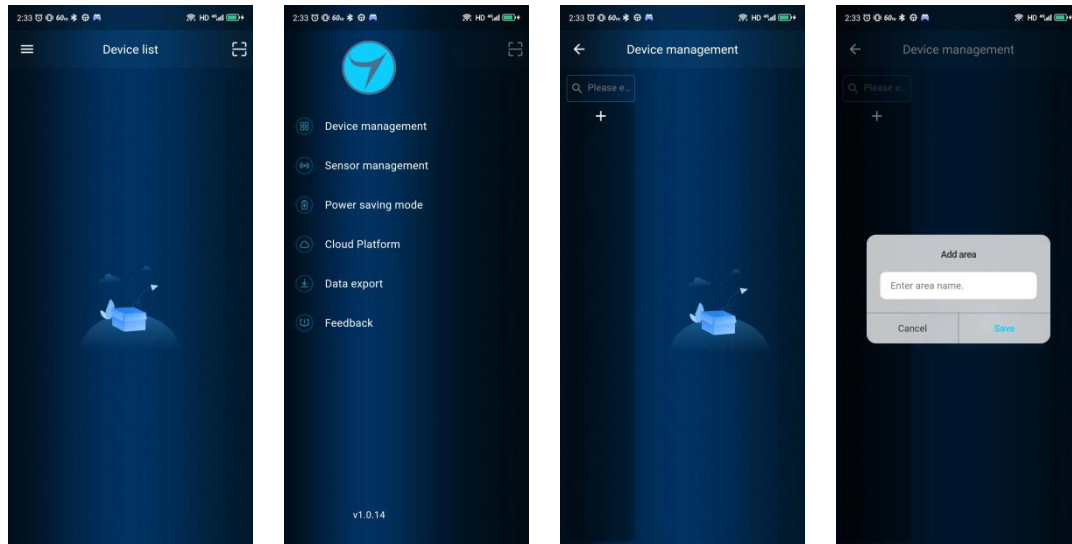
Allowed for this use only

Forbid

## 2. Device Management

### 2.1 New plant area

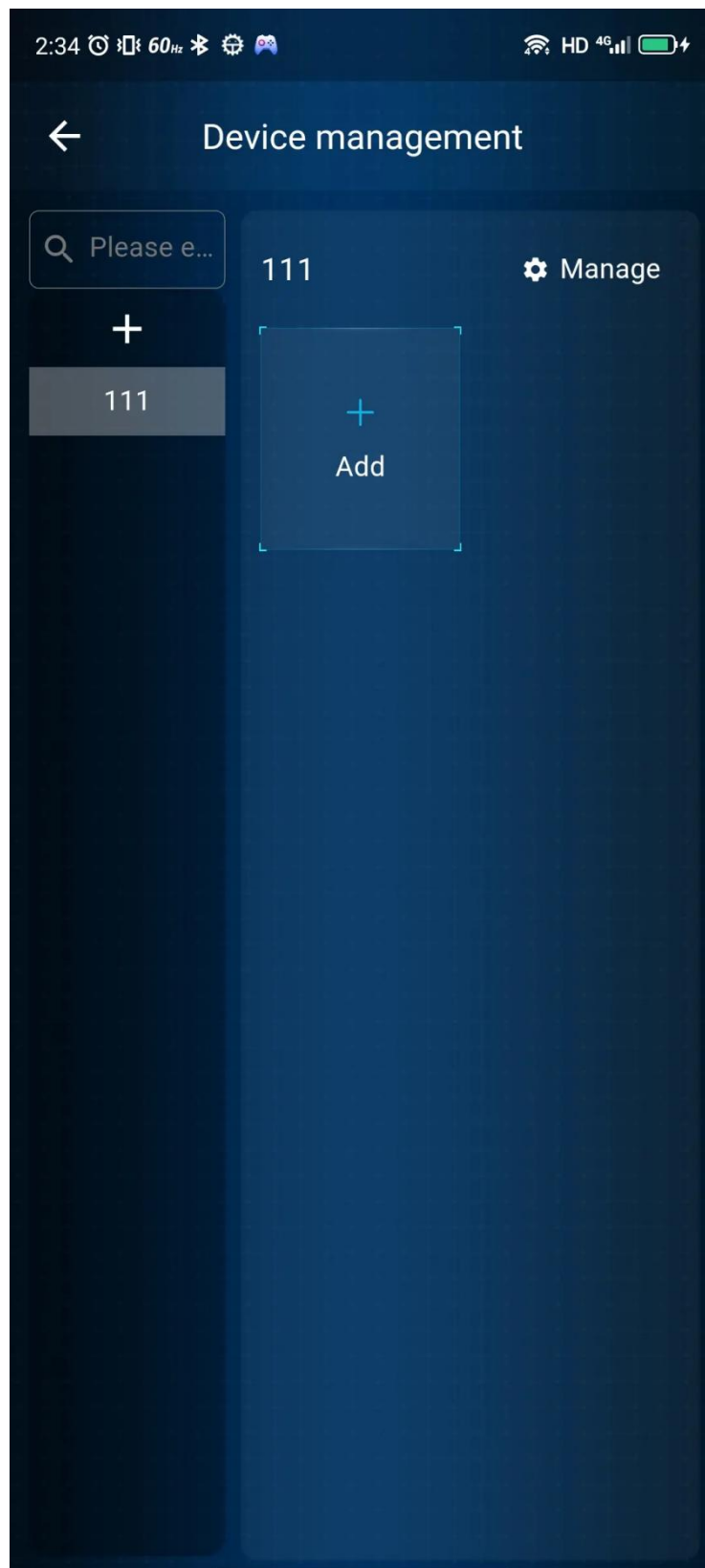
Before adding equipment, a new factory area needs to be created. Adding equipment in the factory area can achieve sub-factory management of equipment.



#### Operation process:

- Click the "☰" icon to enter the settings page.
- Click "Device management" to enter the Device management page.
- Click "+" to pop up the prompt box to create a new factory area.
- Enter the factory name and click "Save".

## 2.2 New devices



2:35 60% HD 5G

## New Device

Device number:  

Device name:

Bluetooth MAC:  

Install mode: **Elastic install** 

Device type: 

Rated speed:  **RPM**

Power:  **kW**

Speed X warning:  **mm/s**

Speed Y warning:  **mm/s**

Speed Z warning:  **mm/s**

Speed X alarm:  **mm/s**

Speed Y alarm:  **mm/s**

Speed Z alarm:  **mm/s**

Accelerate X wa...  **mm/s<sup>2</sup>**

Accelerate Y wa...  **mm/s<sup>2</sup>**

Accelerate Z wa...  **mm/s<sup>2</sup>**

Accelerate X ala...  **mm/s<sup>2</sup>**

Accelerate Y ala...  **mm/s<sup>2</sup>**

Accelerate Z ala...  **mm/s<sup>2</sup>**

Temperature wa...  **°C**

Temperature ala...  **°C**

Temperature1:  **Compensa...**

Temperature2:  **Compensa...**

Temperature3:  **Compensa...**

Extra Electricity ...  **%**

Extra Electricity ...  **%**

Machine Learn: **Unlearned** **Start Learning**

Electricity price:

Carbon coeffici...

Device icon: 

**Save**

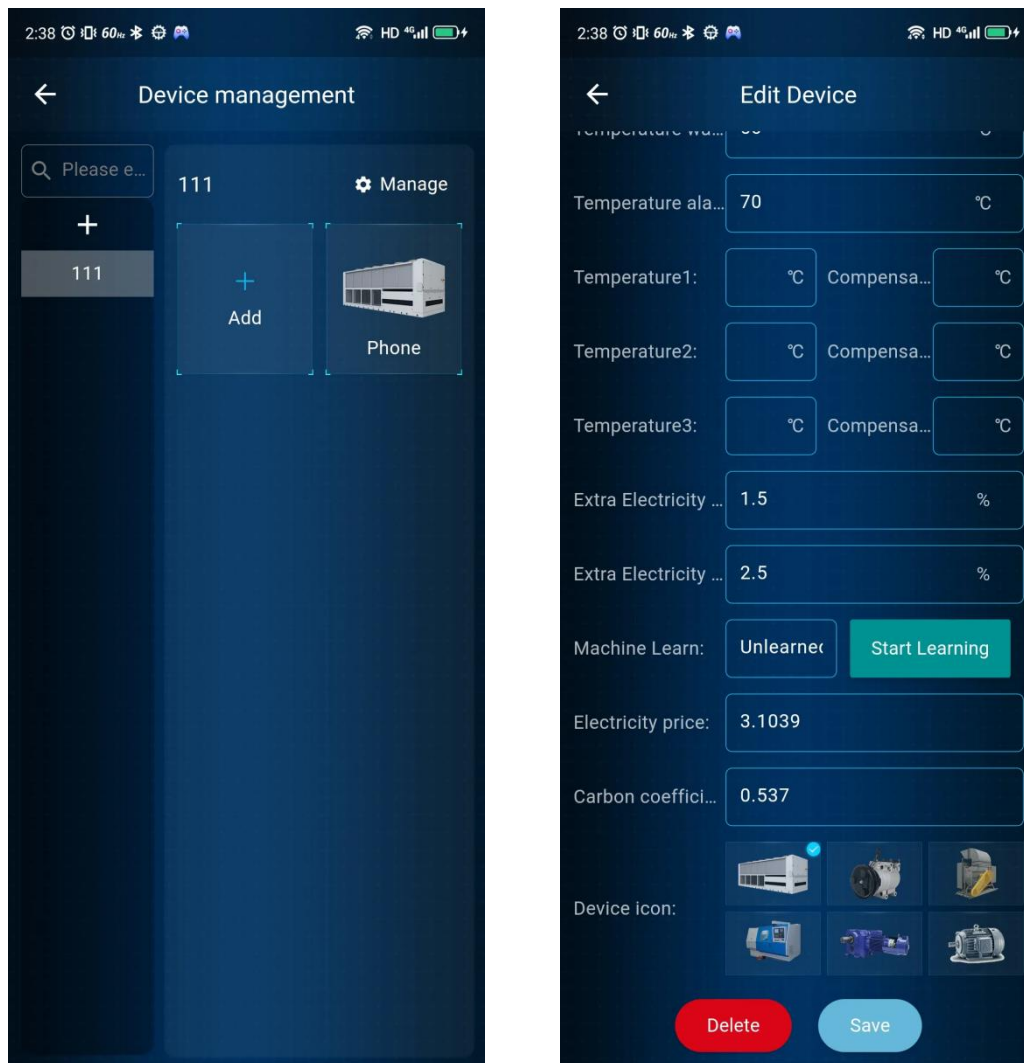
**Operation process:**

- a. Click Add to enter the Add Device page, and enter the device number and device name.
- b. Click "+" on the right side of Bluetooth MAC to enter the sensor management page and add sensors (see 3. Sensor Management).
- c. Select Install mode and Device type
- d. Enter the Rated speed and Power, and the remaining information will be automatically filled in

**Note:**

**If the device information is not filled in or filled in unsuccessfully, the device cannot be successfully paired.**

## 2.3 Machine Learning Features



“Machine Learn” and “Electricity Price” are used for estimating electricity waste. Enter the unit electricity price for your area in the "Electricity price" field. Click "Start Learning" to perform Machine Learning and electricity waste estimation.

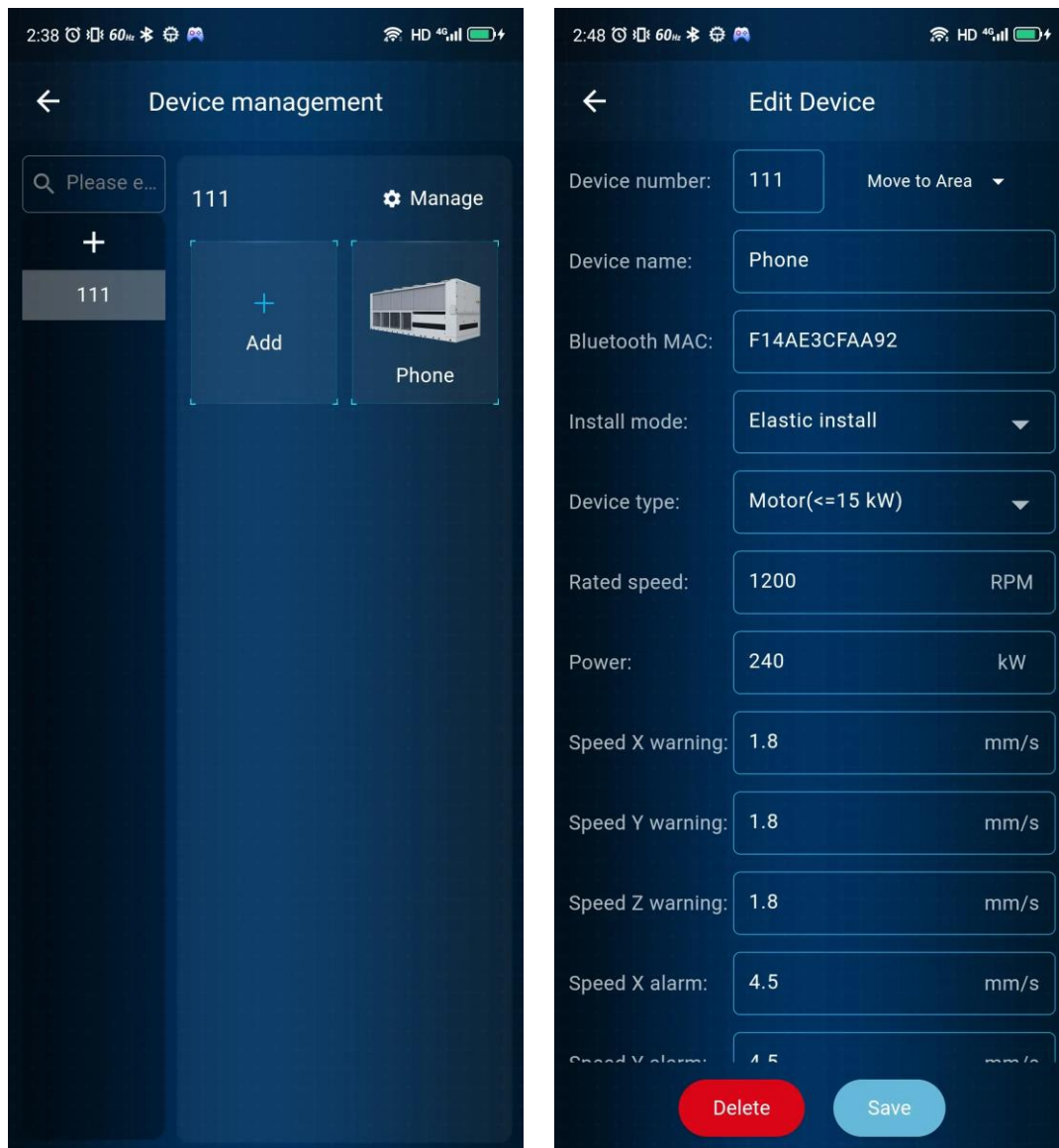
### Operation process:

- Go to Device management page
- Click on the device that has been added to enter the "Edit Device" page.
- Click “Start Learning”

### Note: Before "Starting Learning", please check:

- The Health Index.** If the Health index is H7-H1, please do not activate the “Machine Learning” function! Please give priority to finding out the cause of the abnormality. Start “Machine Learning” after the Health index rises above H8 to obtain an accurate Electricity Waste Estimation.
- The machine has been operated and 30 operation records have been collected.**

## 2.4 Editing device

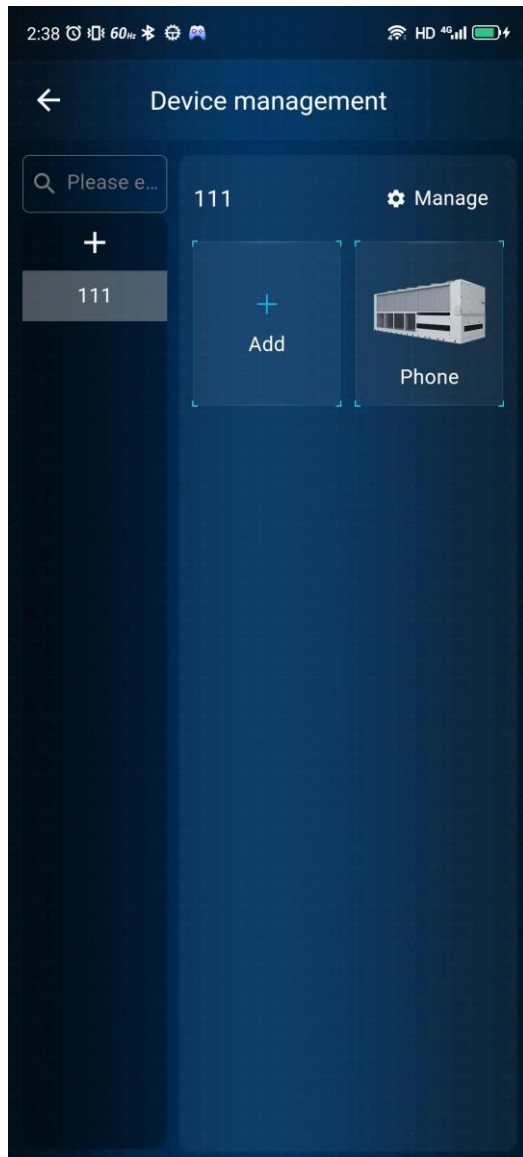


In the editing device, device-related parameters can be modified.

### Operation process:

- a. Modify device-related parameters
- b. Click "Save".

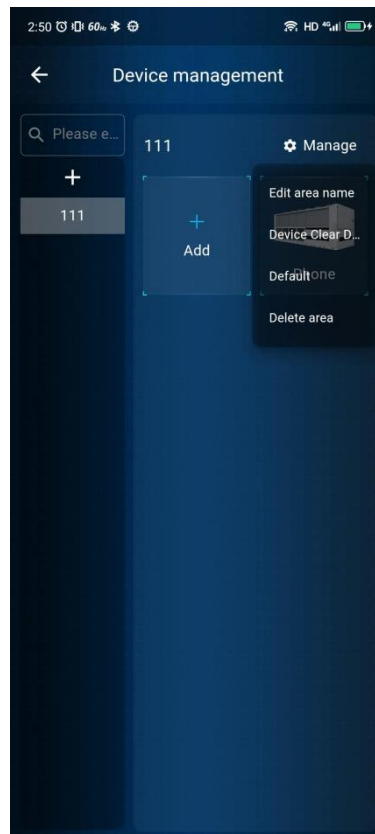
## 2.5 Delete device



### Operation process:

- Enter the Device management page and select the device
- Click "Delete"

## 2.6 Area management



### 2.6.1 Edit area name

#### Operation process:

- a. Enter the Device management page, select the factory area that needs to be modified, and click "Manage".
- b. Select "Edit area name"
- c. Enter a new factory name and click "Save"

### 2.6.2 Device clear data

Device clearing data will clear the local data downloaded by all devices under the currently selected area.

#### Operation process:

- a. Enter the Device management page, select the factory area that needs to be modified, and click "Manage".
- b. Select "Device Clear Data"

### 2.6.3 Default

Default will restore all devices under the currently selected area to their initial state by default.

**Operation process:**

- a. Enter the Device management page, select the factory area that needs to be modified, and click "Manage".
- b. Select "Default"

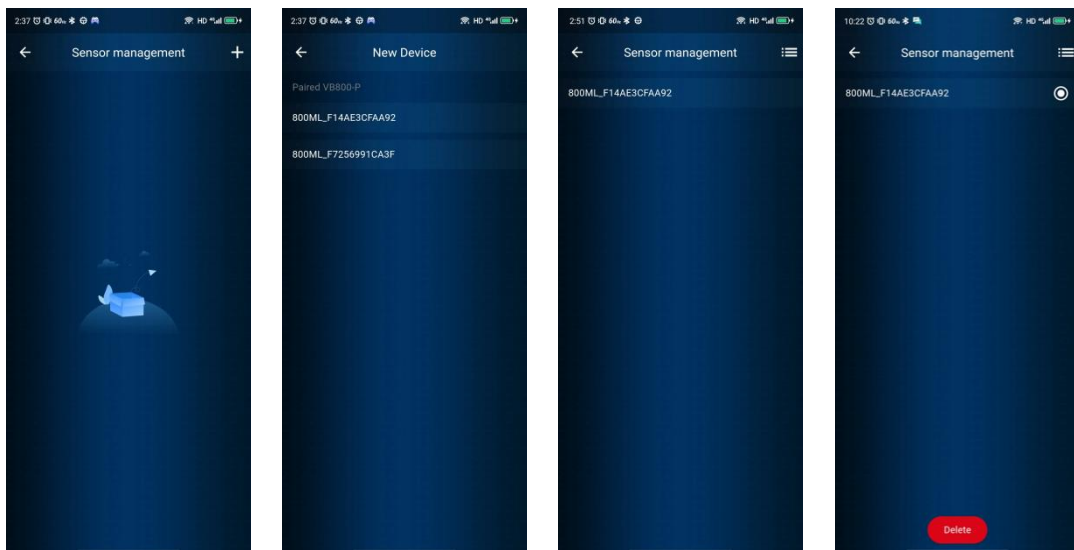
### 2.6.4 Delete area

Deleting a plant will delete the currently selected plant and all devices under that area.

**Operation process:**

- a. Enter the Device management page, select the factory area that needs to be modified, and click "Manage".
- b. Select "Delete Area"

### 3. Sensor management



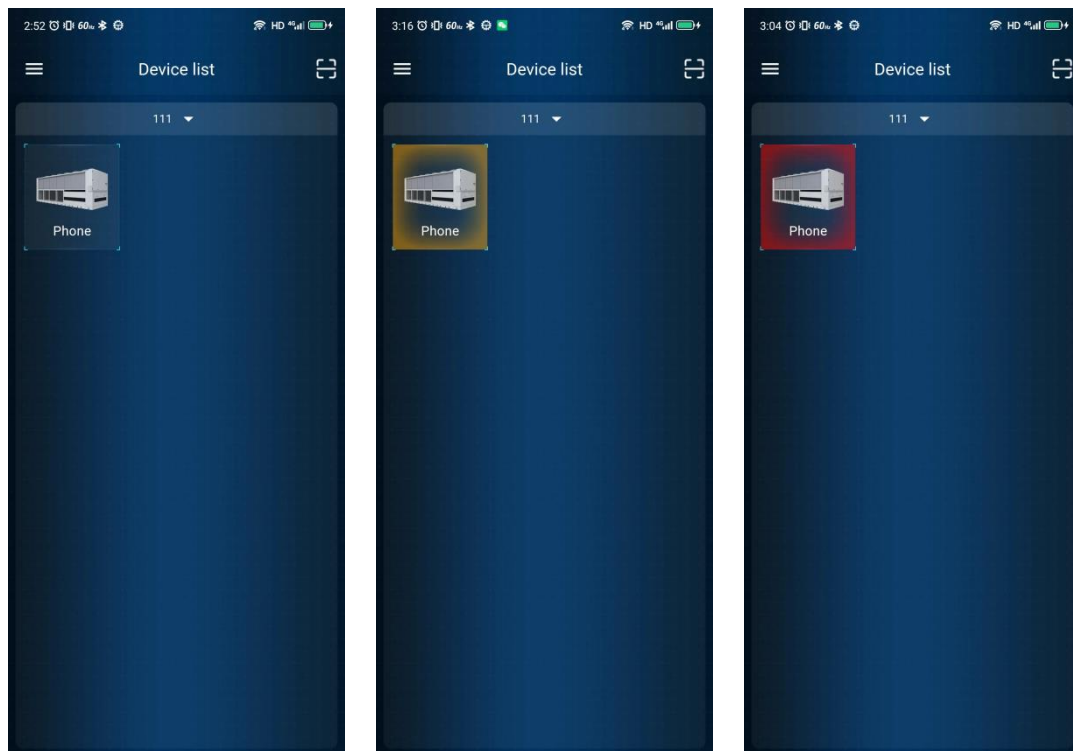
#### Operation process:

- a. Go to the Sensor management page and click the " + " button in the upper-right corner to enter the New Devices page.
- b. Select the sensor that matches the sensor name based on the Bluetooth scan results
- c. If the selection is incorrect, click the "☰" button to enter device editing, select the device to be deleted, and click "Delete" to delete the sensor.

#### Note:

The current version can only add one Bluetooth sensor at most.

## 4. Device list



### 4.1 Switch plant area

Click "▽" to display the factory area list, and select the factory area that needs to be switched.

### 4.2 Scan the code to enter the device details

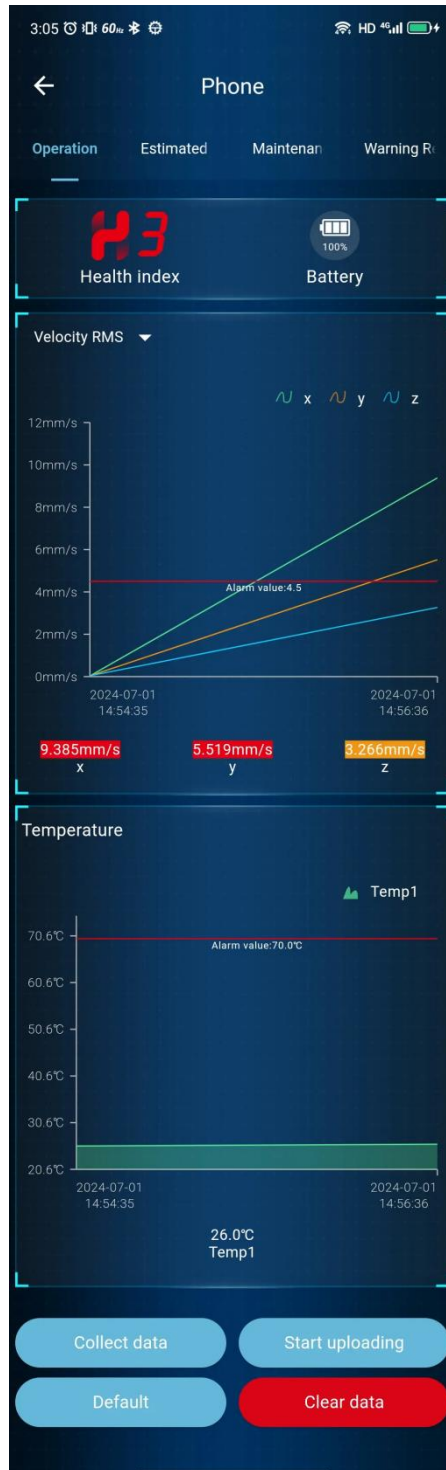
Click the "📷" button, scan the QR code or barcode of the device, and you can directly enter the device details page.

### 4.3 Device status display

When the device is in warning status, it displays a yellow background box.

When the device is in alarm status, it displays a red background box.

## 5. Device details



## **5.1 Operation**

Operation information includes: Current equipment health status, Sensor battery level, RMS and FFT chart information for velocity and acceleration, and temperature chart information.

### **5.1.1 Collect data**

Collecting data will enable Bluetooth scanning, establish a Bluetooth connection with the sensor, and collect sensor data.

### **5.1.2 Start uploading**

Upload locally the collected sensor data.

### **5.1.3 Default**

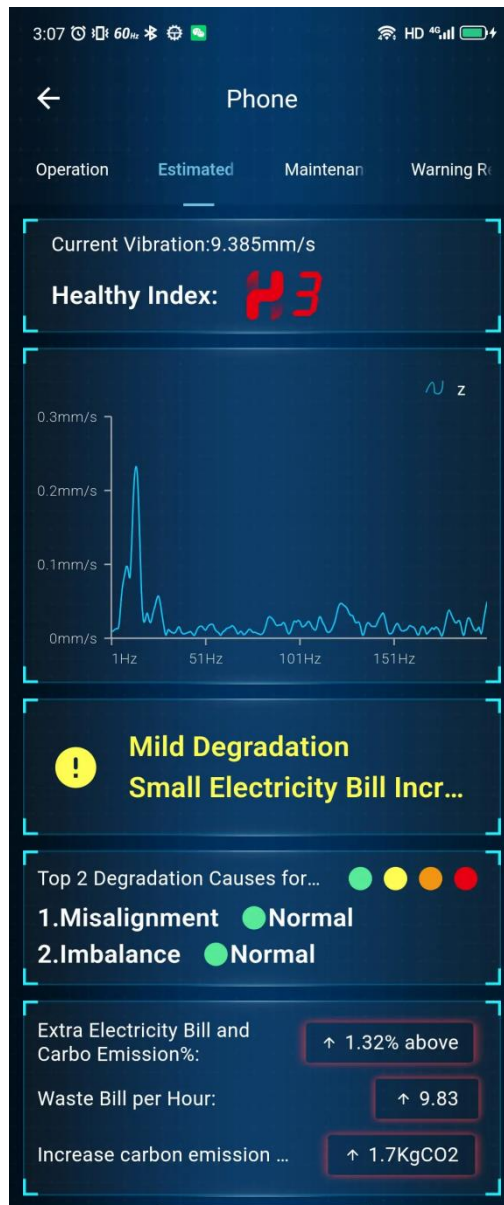
Restore the sensor state to default.

### **5.1.4 Clear data**

Clear all data collected from this sensor.

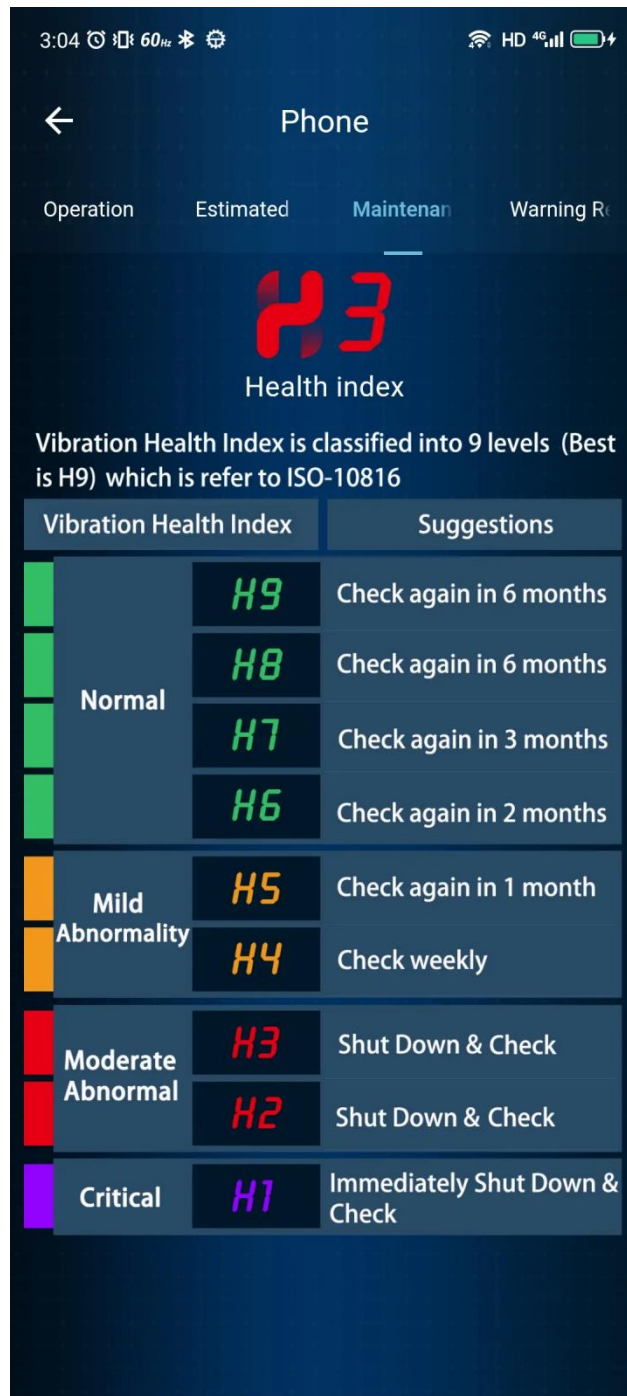
## 5.2 Estimated Electricity

Estimated Electricity includes: actual vibration value, health index, frequency chart, description of electricity waste status, two major reasons for electricity waste, estimation of increased electricity bills and increased carbon emissions, estimated increase in electricity bills per hour, and increase in carbon emissions per hour.



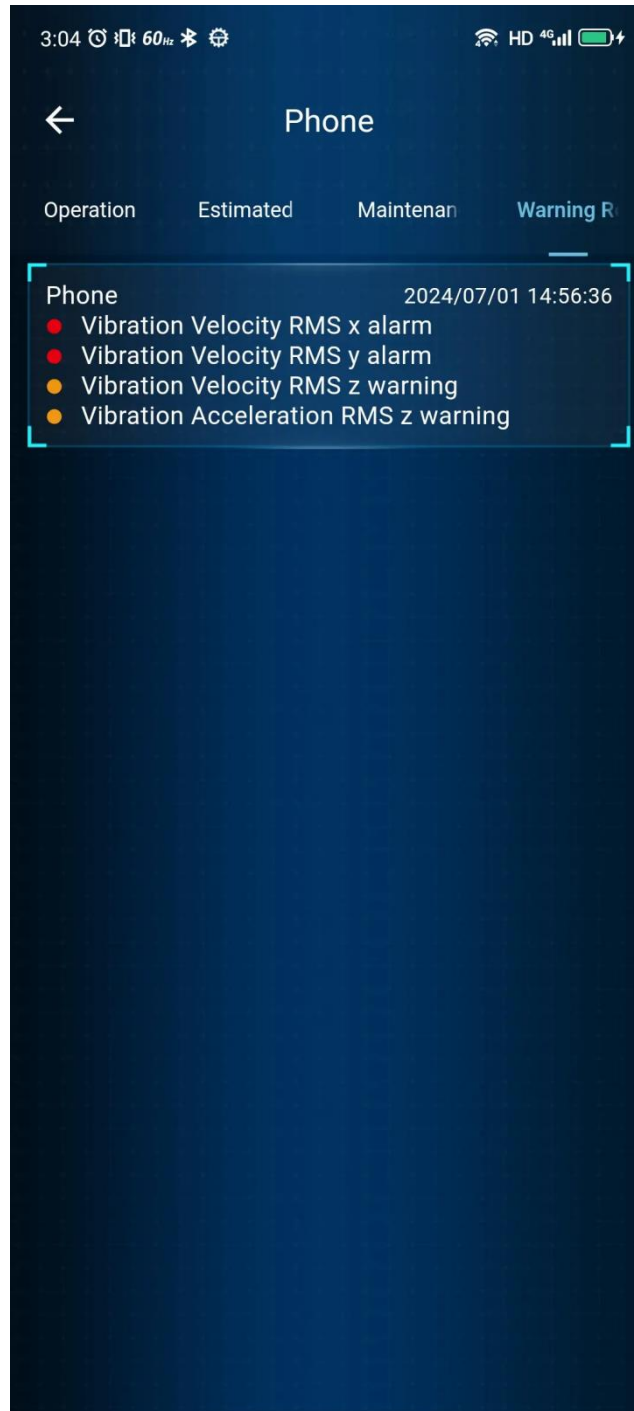
## 5.3 Maintenance Schedule

Health index level description.



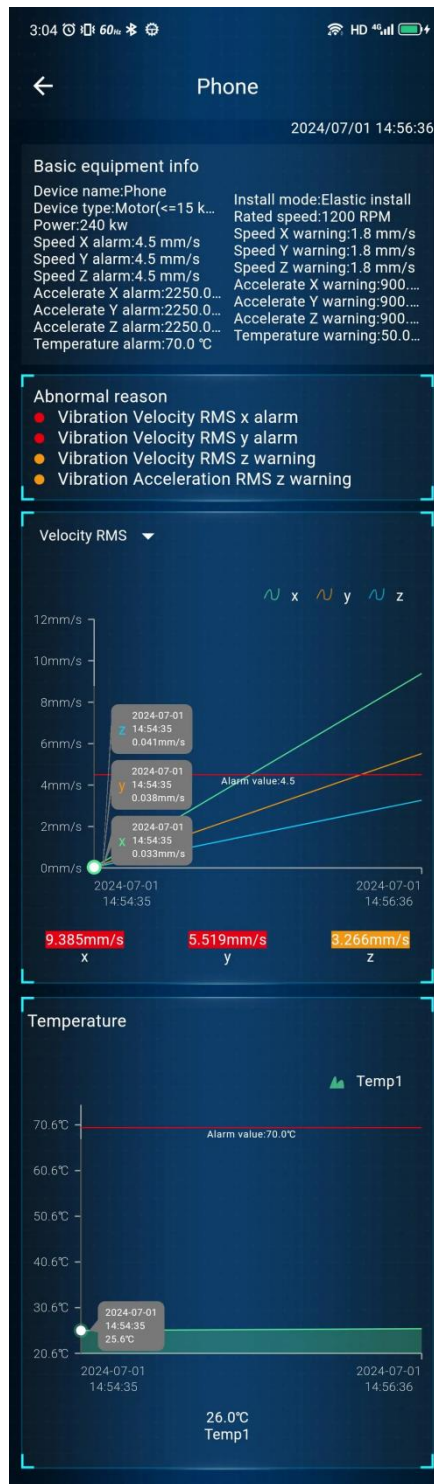
## 5.4 Warning record

Device warning record list.



## 5.4.1 Alarm details

Alarm details include: equipment operation information, abnormal reason, RMS and FFT chart information for velocity and acceleration, temperature chart information

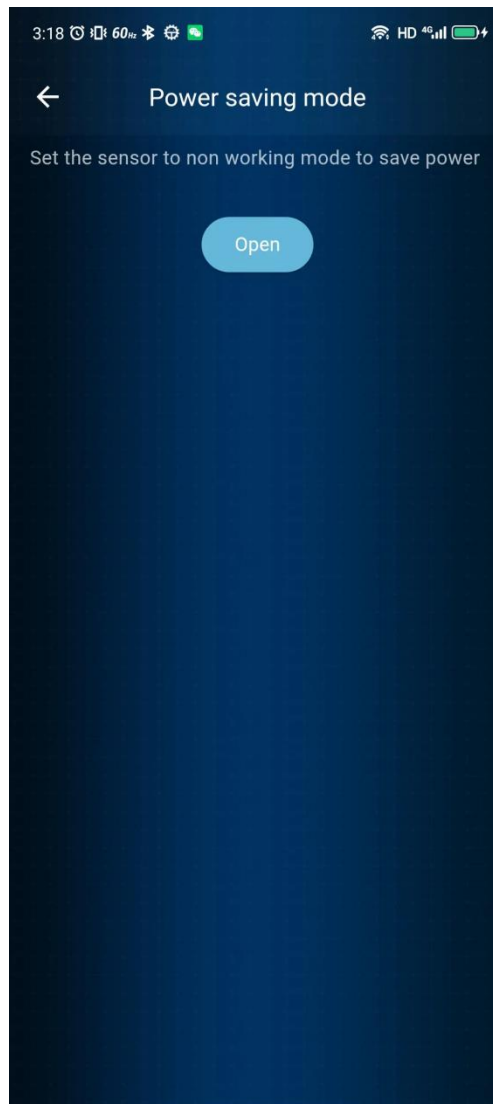


## 6. Power saving mode

After each use of the sensor, the user can choose to turn on the power-saving mode. After turning on the power-saving mode, the sensor will enter sleep mode to save the power of the sensor. When the user clicks the "collect data" function on the device details page again, the sensor will automatically end the power-saving mode.

### Operation process:

Enter the power-saving mode page, and click "Open" until the page prompts "Settings Successful", it means that the sensor has entered the power-saving mode.



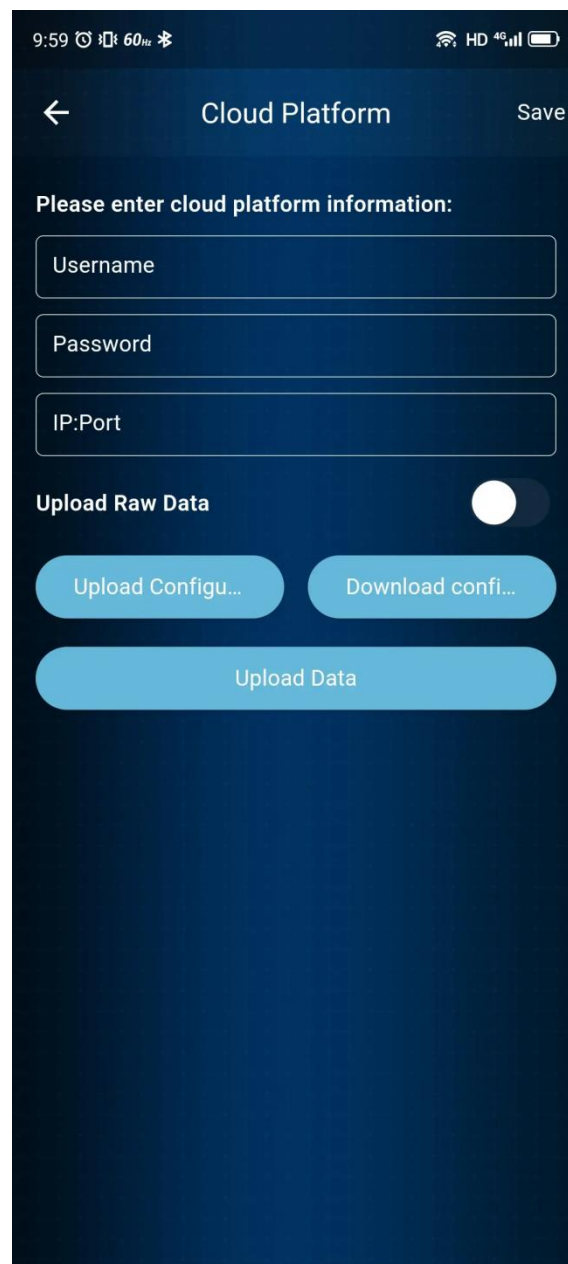
## 7. Cloud Platform

Enter Cloud Platform information to upload data collected on the APP to the Cloud Platform.

### Operation process:

Enter the username, password, and IP Address: Port Number of the inspection database management platform and click "Save".

Note: Please refer to the cloud service account card for the Username, Password and website address of the Cloud Platform.



9:59 60% HD 4G

← Cloud Platform Save

Please enter cloud platform information:

Username

Password

IP:Port

Upload Raw Data

Upload Configu... Download confi...

Upload Data

## **7.1 Upload Raw Data**

After enabling, click “Upload Data” to upload the device's Raw Data to the Cloud Platform.

## **7.2 Upload configuration information**

Upload area information and device information to the Cloud Platform.

## **7.3 Download configuration information**

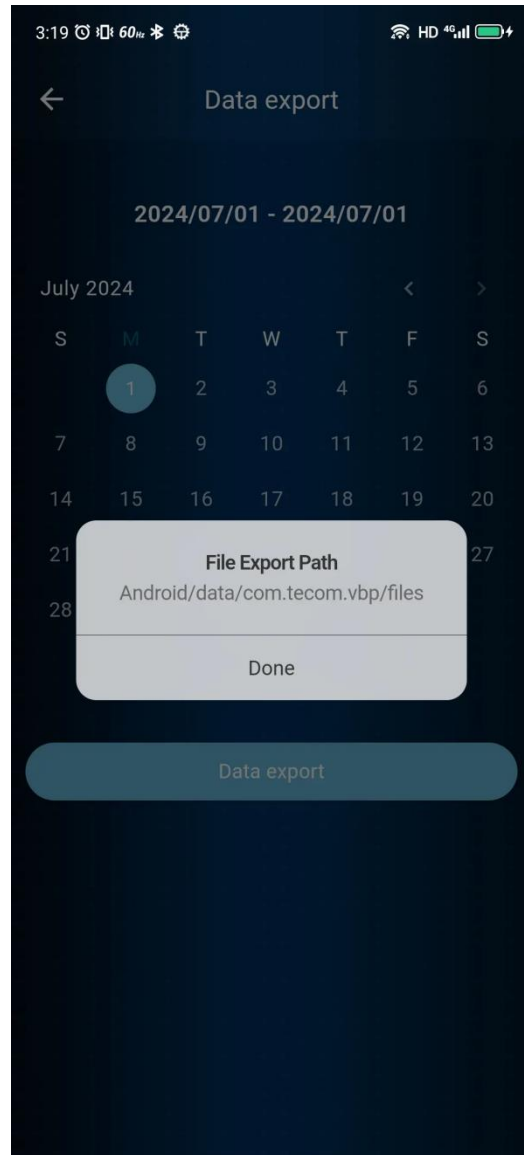
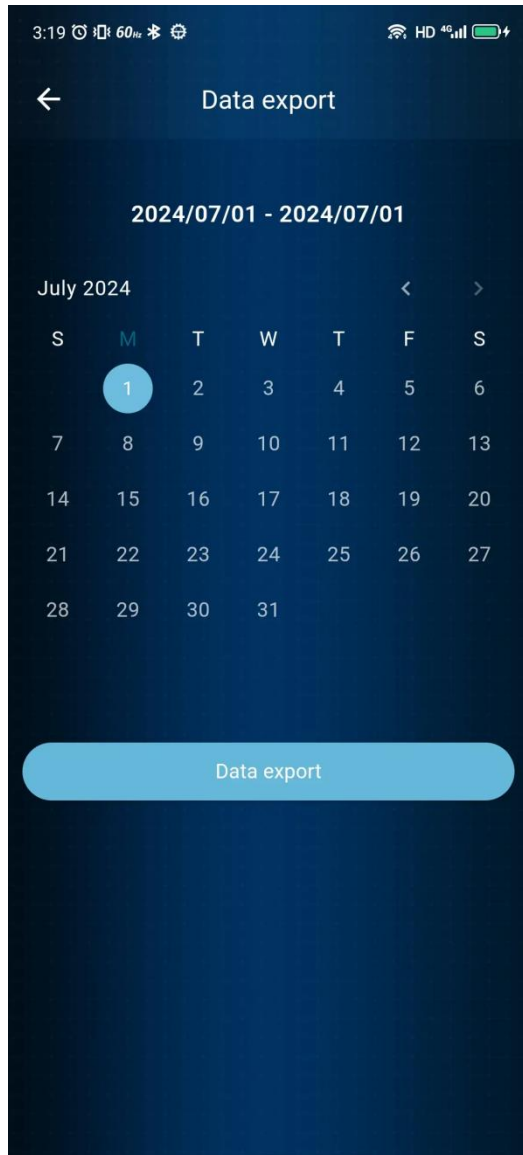
Download area information and device information from the Cloud Platform.

## **7.4 Upload data**

Upload all device data downloaded locally to the Cloud Platform.

## 8. Data export

Select the time period to be exported and click “Data Export”. Choose a suitable sharing method to share the file, or directly obtain the data file according to the file export path.



## 9. Feedback

Enter the problem description in the feedback box, click "Done", select the appropriate sharing method, and send the feedback information to us.

