

# Temperature & Humidity Monitoring Platform

——User guide

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# Preface

Thank you for using Tzone Temperature & Humidity monitoring platform. Please read the manual carefully to know well how to use it.

We believe that this management system will bring convenience to you and your customers with high-quality service system and make the image of your esteemed company as well as the management to the next step.

Please do not modify any system settings without the professional and systemic training of the platform supplier as Tzone Temperature & Humidity monitoring platform is a specialty software with pertinent settings. Feel free to contact us if any questions.

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## 1. Summarize

### 1.1 System summarize

Tzone temperature humidity system is designed for need of modern safety information management. It is good at monitoring remotely temperature and humidity. Also the curve versus temperature humidity and alarm can be controlled on the system. Tzone temperature humidity system adopts the intelligent analyse of cloud server instead of routing inspection.

### 1.2 Function summarize

- a) Temperature monitor
- b) Humidity monitor
- c) Location service
- d) Data download
- e) Data forwarding
- f) Alarm function (support SMS、Email、Message)

## 2. Preparation of system use

### 2.1 The setting of operation

Users can use Tzone temperature humidity system which is adopted the development mode of B/S via computer, cellphone or panel.

Here is the supported browser of Windows platform below:

- a) Internet Explorer 9、Internet Explorer 10、Internet Explorer 11
- b) Google Chrome
- c) Firefox

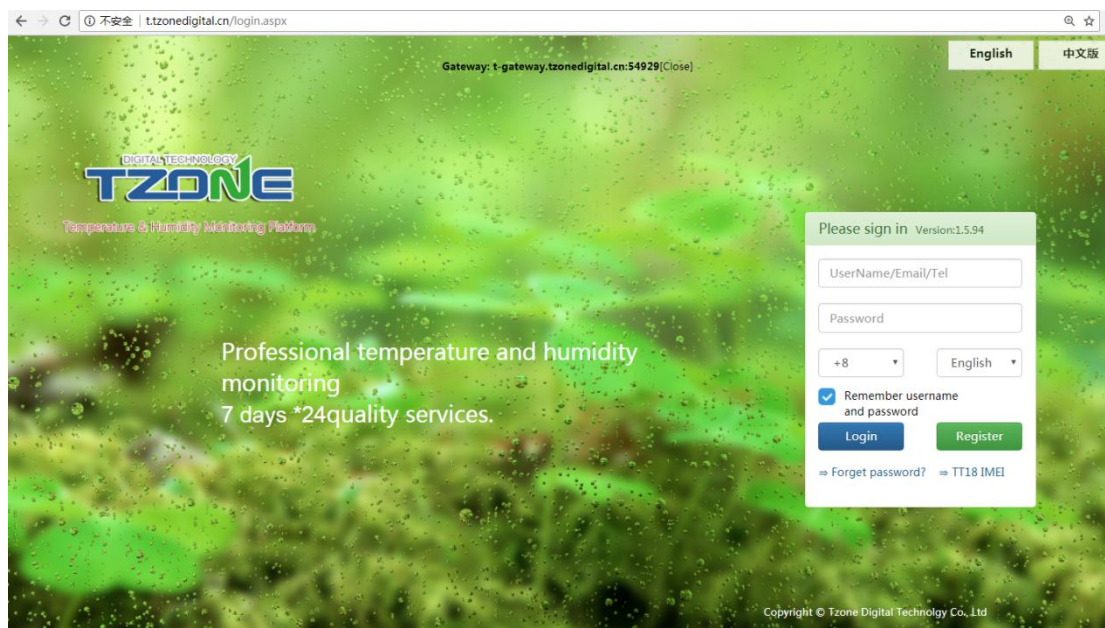
The supported browser of Mac platform below:

- a) Safari
- b) Google Chrome

The supported browser of IOS/Android platform below:

- a) Google Chrome

## 3. The Interface of Register



### 3.1 Register

Enter the website into the system login screen. There is a login link in the lower right corner. Click on the link to enter the registration interface.

← → 🔒 不安全 | t.tzonedigital.cn/register\_en-us.aspx

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**TZONE** Temperature & Humidity Monitoring Platform

User has already registered account? You can [Login](#)

\*UserName :   
4 ~ 18 characters, including letters, Numbers, underscores, begin with a letter, letters or Numbers ending!

\*E-mail :   
Enter an email address that you already have, in order to complete registration by verifying. Format such as name@example.com

\*Telephone :   
Enter your mobile phone number. Format such as 12345678910

\*Password :   
6 to 16 characters and is case sensitive

\*Confirm :   
Please enter the password again

\*Code :   
Is not case sensitive. Can't see clearly can change one

I agree with "The terms of service" and "Privacy and personal information to use policy"

### 3.2 Get Password

Click the lost password link, then input user name and the registered mailbox .if correct, the system will send an email to the corresponding mailbox. Click the password reset link in the mailbox to reset your password.

← → 🔒 | t.tzonedigital.cn/forgetpassword.aspx

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**TZONE** Temperature & Humidity Monitoring Platform

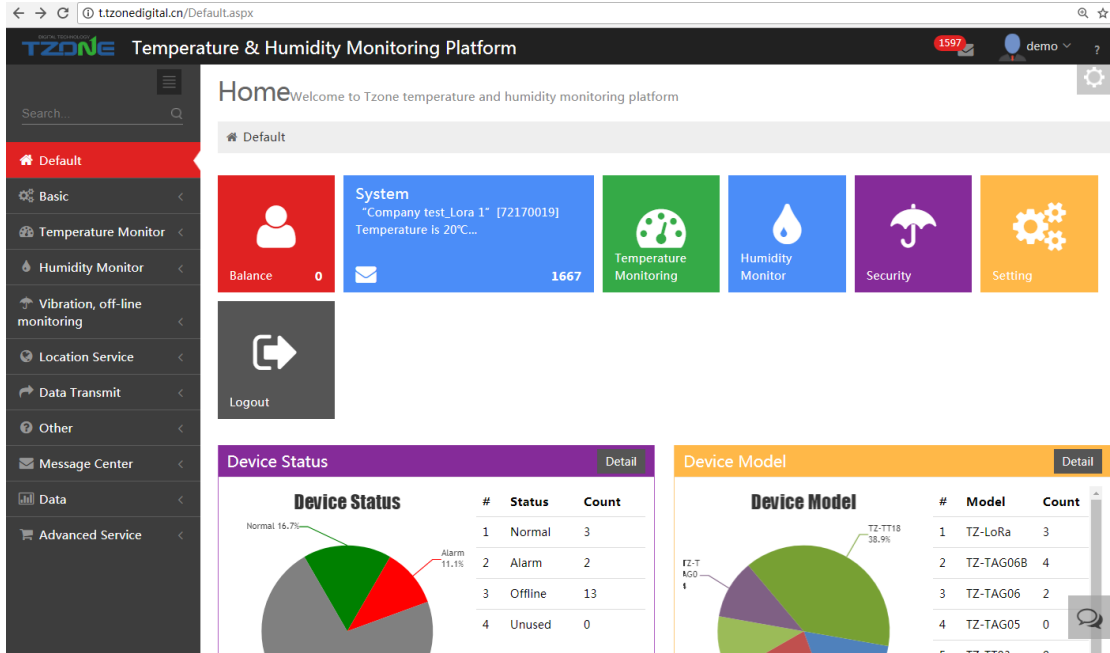
[Login](#)

\* UserName :

\* Email :

# 4. Home Page

## 4.1 Interface Layout



## 4.2 Message

The screenshot shows a mobile application interface. At the top, there is a dark navigation bar with a search icon on the right, a notification badge with the number '1597' in the center, and a user profile icon labeled 'demo' on the left. Below the navigation bar is a 'Message box' section. It contains three messages:

- Message 1:** From 'wuxinjian206' (3 Weeks). The text reads: "dear customers, you have reached the limit of LBS location analysis service. This LBS location analysis service is provide by Google LBS API. For more information, please contact with our sales team. Thanks for your support."
- Message 2:** From 'wuxinjian206' (3 Weeks). The text reads: "尊敬的用户您好：由于基站定位服务使用第三方接口(Google LBS API 提供)，已超过免费限额。如需再使用请联系我们的销售团队。感谢你的支持。"
- Message 3:** From 'System' (4 Days). The text reads: "Company test\_Lora 1"[72170019] Temperature is -25.6°C , Low temperature warning!Alarm plan:"Default Temperature Alarm"(ID:2) 08/12/2017 15:20:27(+8)"

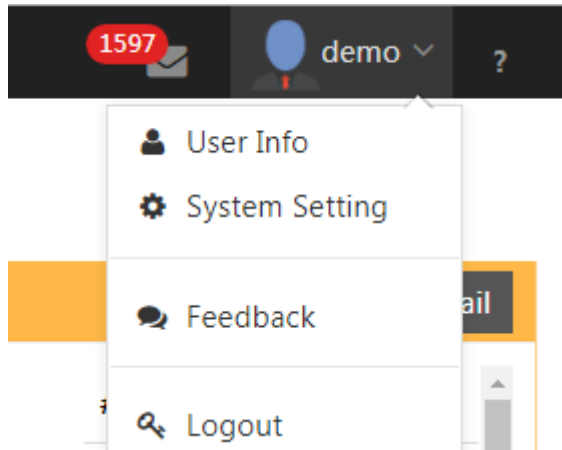
At the bottom of the message box, there is a link that says "View all the messages" with a right-pointing arrow icon.

On the right side of the screen, there is a settings menu. It features an orange square button with a white gear icon and the text "Setting" below it. Below the settings menu, there is a dark grey button labeled "Detail". At the very bottom, a table is partially visible with the following content:

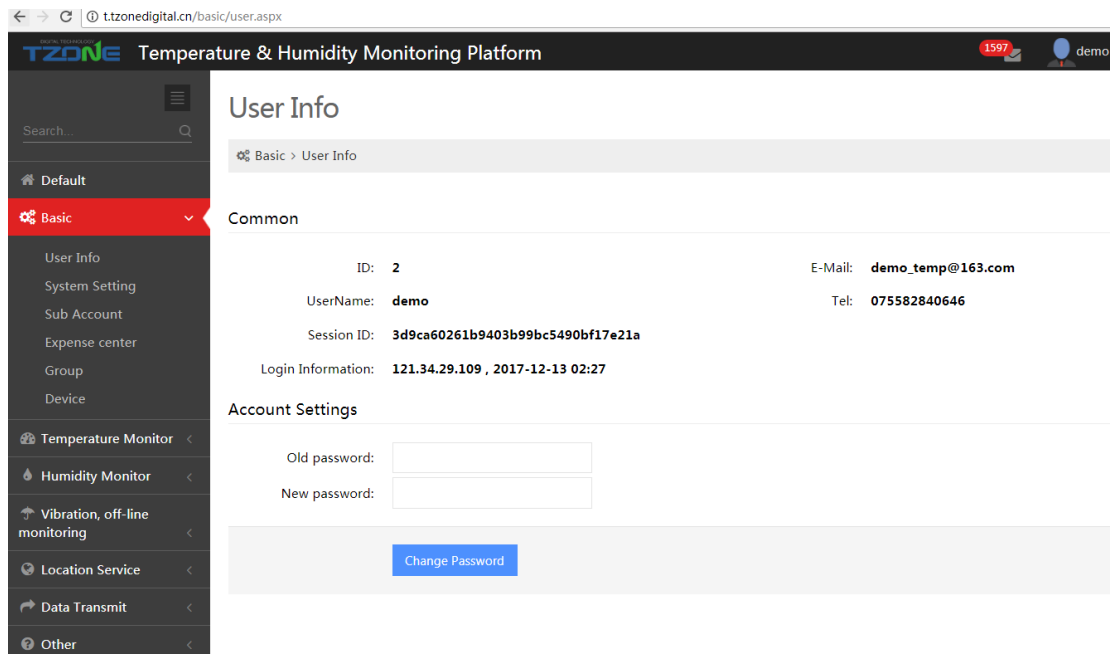
del	Count
nRa	3



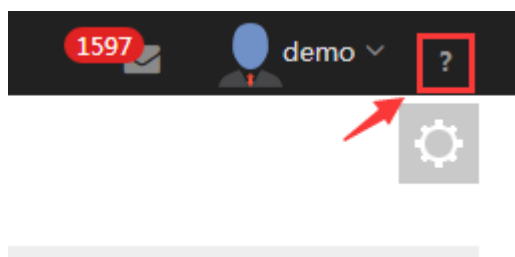
### 4.3 Account information, system setting,feedback,logout



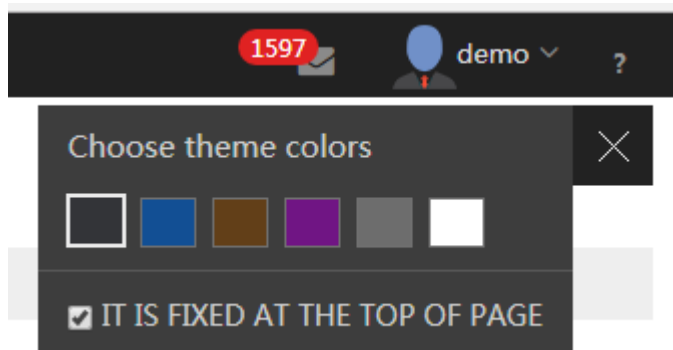
### 4.4 Change The Password



### 4.5 The manual of user guide

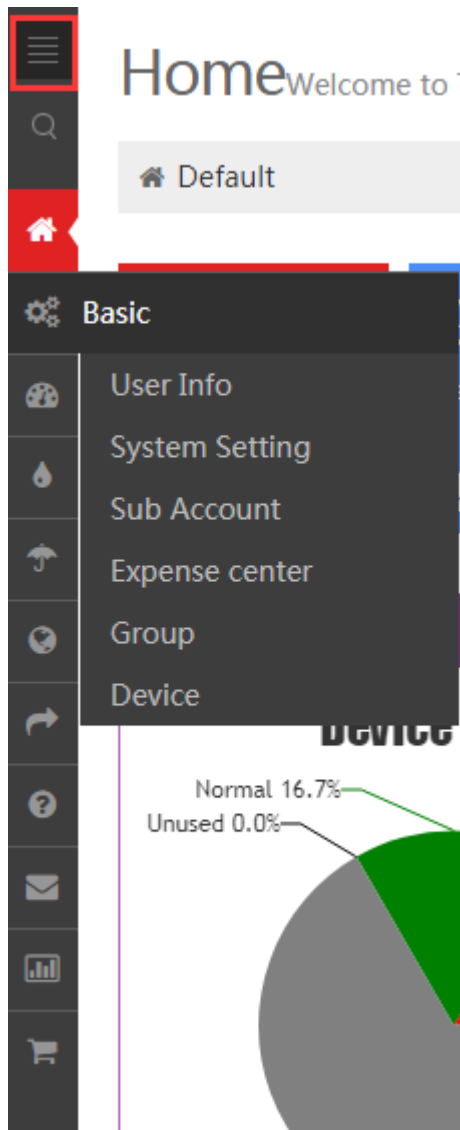


## 4.6 System Theme

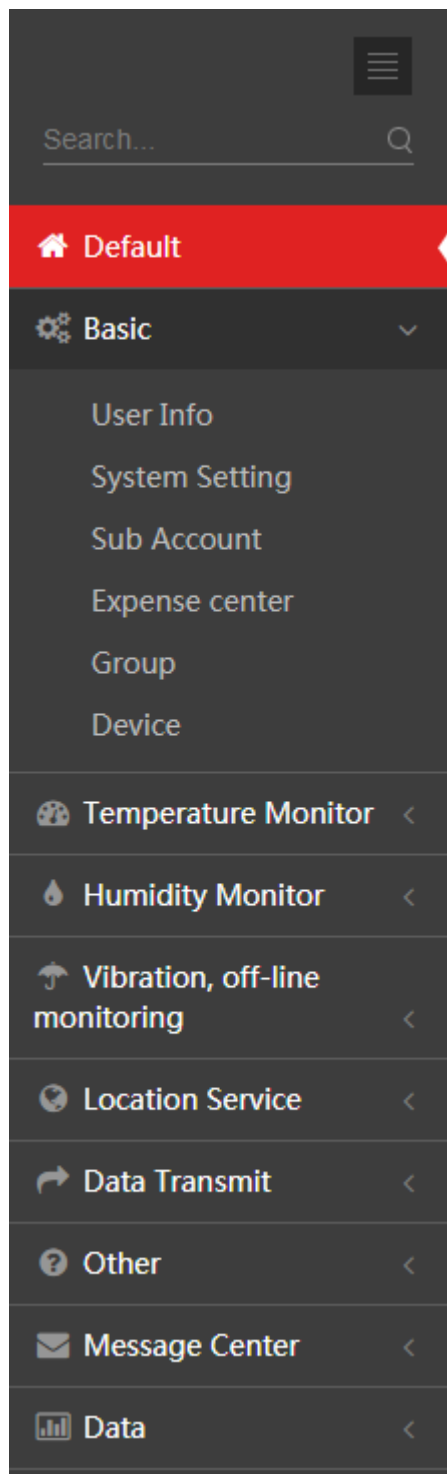


## 4.7 Function Menu


Close the menu




Unfold the menu





## 4.8 Quick Entry


Home Welcome to Tzone temperature and humidity monitoring platform 


# Default


  
 Balance 0


**System**  
 "test\_316\_AB" [06161001]  
 Temperature is 30.1°C , A hig...  
 1668

  
 Temperature Monitoring


  
 Humidity Monitor

  
 Security

  
 Setting

  
 Logout

## 4.9 Search the Real time monitor

Search 

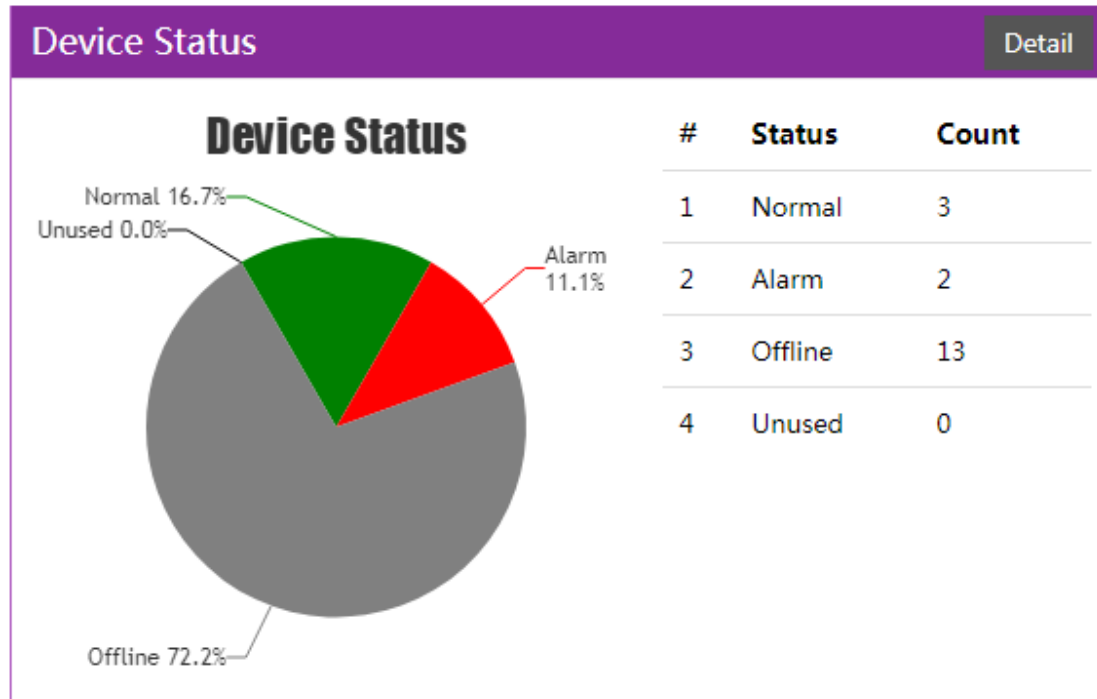
# Home

Key  Q Inquire

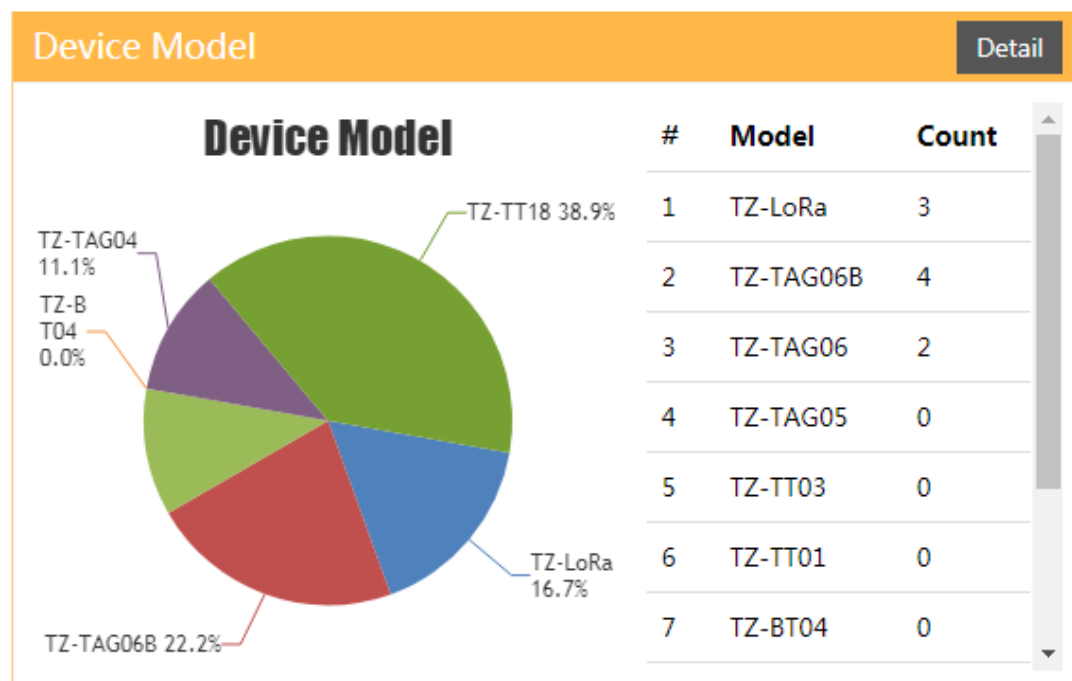
Real time monitoring

#	Device Name	Temperature	Humidity	Status	Updated
1	TAG04	15.91°C	63%	Offline	2017-12-07 02:55
2	test_316_AB	33.1°C	--%	Normal	2017-12-13 10:33
3	test_316_AA	24.3°C	--%	Normal	2017-12-13 10:42
4	Company test_Lora 1	20.2°C	46%	Offline	2017-12-11 17:48
5	Company test_Lora 2	20.1°C	46%	Offline	2017-12-11 17:50
6	LoRa Sensor 1	20°C	47%	Offline	2017-12-11 17:50
7	TAG06B-Test	-22°C	59%	Normal	2017-12-13 10:42
8	TT18_test11111	33.11°C	--%	Offline	2017-09-18 14:49
9	TT18_News 3	21.85°C	68%	Offline	2017-11-28 08:58
10	Mabed5	30.62°C	29%	Offline	2017-07-24 15:47
11	TT18 test office	26.5°C	44%	Normal	2017-12-13 10:40
12	Mabed4TT18	33.6°C	26%	Offline	2017-07-24 16:33

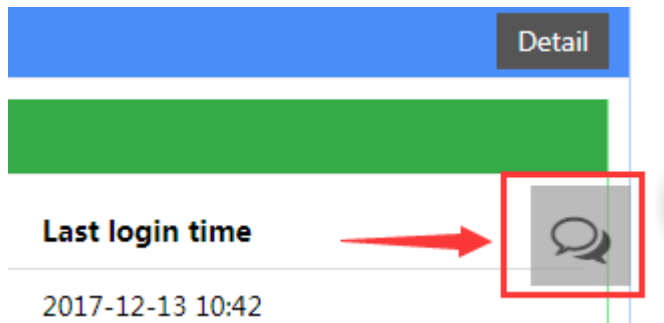
#### 4.10 Device status



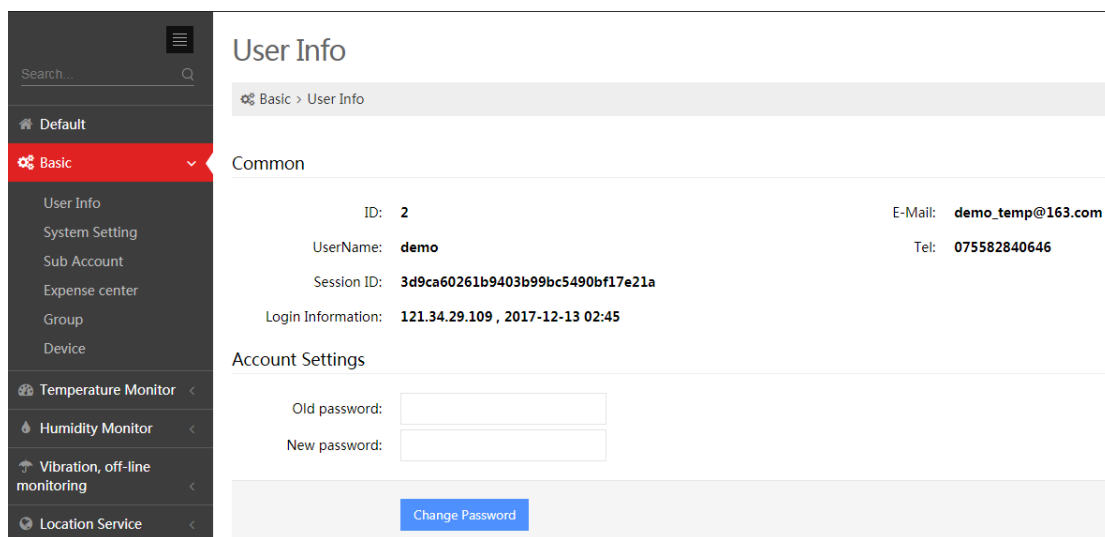
#### 4.11 Device Model



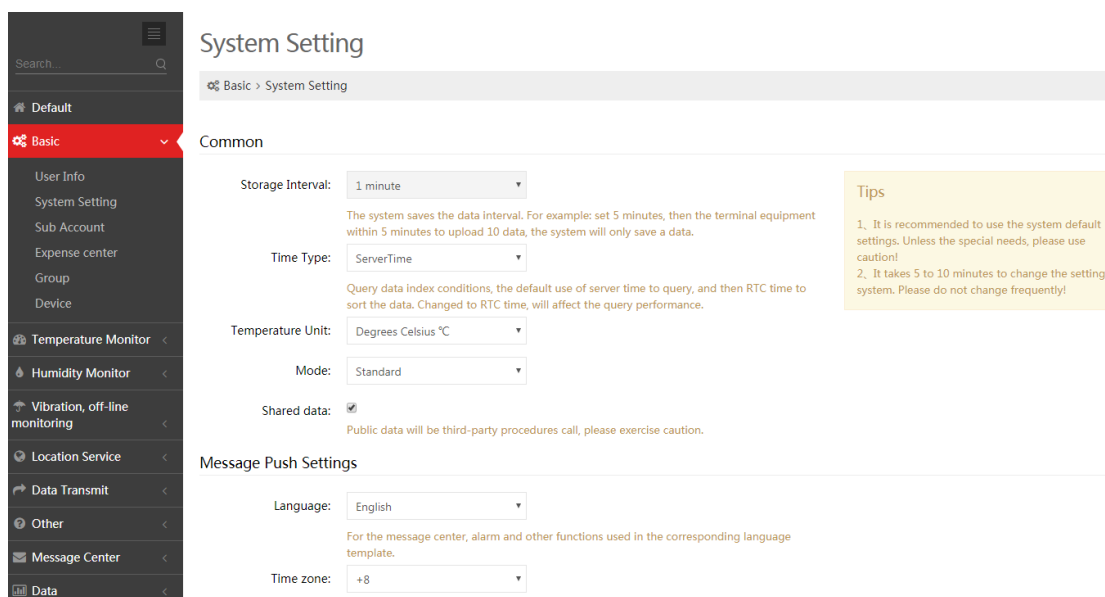
## 4.12 Feedback



## 5. Basic Information of the system



### 5.1 System setting

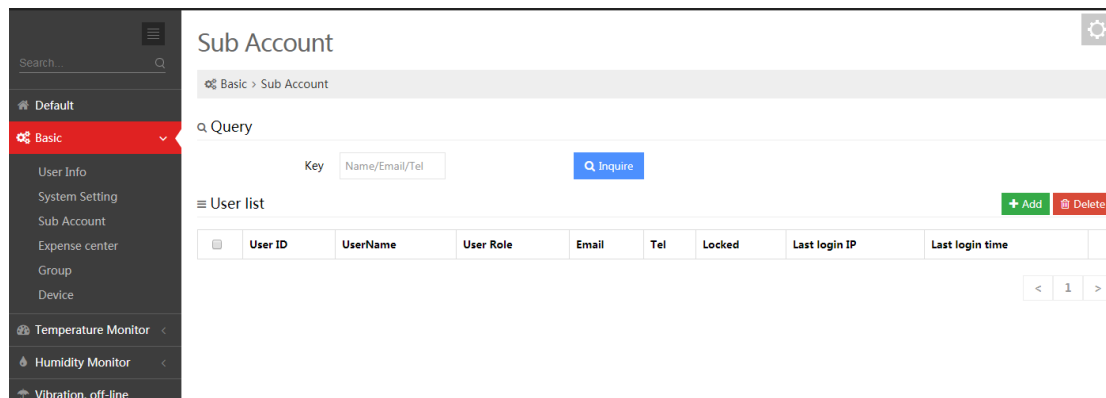


- a、 language, time zone. It is used for the language module of message center, alarm and others function.
- b、 Storage interval, the time interval of system saves the data. For example, set for 5 mins, then the terminal device upload 10 data within 5 mins, the system will only save one data.
- c、 time type. Query data index condition, by default, the server time is used for queries, and then data is sorted by RTC time. If use RTC time for queries, it will affect query performance.
- d、 temperature unit, support Fahrenheit, degrees Celsius, if system says it cannot be changed after changing to choose another one, please logout the system and login again.
- e、 Mode setting, you could choose “standard” or “integration” as you like.

Under mode “integration”, the module of temperature monitor and humidity monitor will be combined.

- f、 optimize the experience of the new version. Enabled to optimize the experience of new features, but there may be some bugs.

## 5.2 Sub account



- a、 Sub account has two permissions.
- b、 only query function: can only check temperature monitor, humidity monitor, security monitor, location service
- c、 include the above functions, and has the function of device management.

## 5.3 Expense center

Search...

Default

Basic

User Info

System Setting

Sub Account

Expense center

Group

Device

Temperature Monitor

Humidity Monitor

Vibration, off-line monitoring

### Cost Center

Basic > Expense center

#### Account Overview

Tips

Dear users, kindly please understand the charge as the system needs to pay an annual servers, broadband and other high cost, in order to better provide quality services to you

Balance: 0 [Recharge](#)

#### Consumer details

Serial number	Recorded	Expenditure	Balance	Transaction hour	Remark
---------------	----------	-------------	---------	------------------	--------

A. It should be paid in advance and the fee will be deducted automatically by the system. The system will renew for one month when the day before the equipment is about to run out 23:00pm. (Time is based on the UTC)

B. One equipment costs RMB 5 each month. (One month is based on 31 days)

C. There is a 7 days free trial for the new added equipment. There is no 7 days free trial if the equipment was deleted or used before.

## 5.4 Group management

Search...

Default

Basic

User Info

System Setting

Sub Account

Expense center

Group

Device

Temperature Monitor

Humidity Monitor

Vibration, off-line monitoring

Location Service

Data Transmit

### Group Management

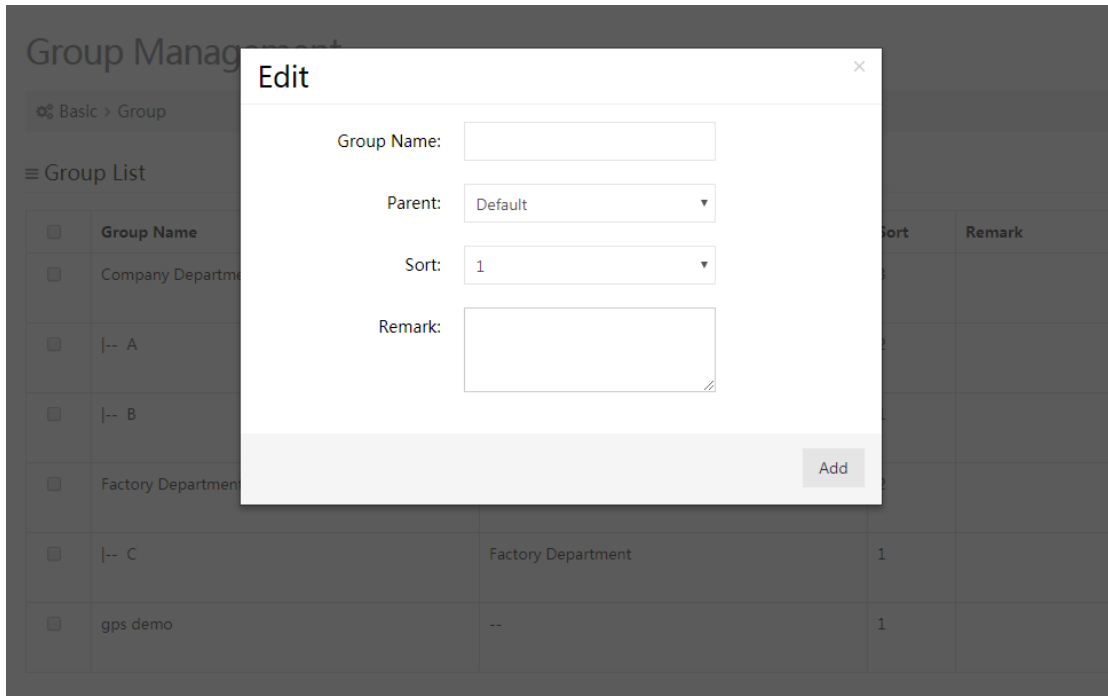
Basic > Group

Group List [+ Add](#) [Delete](#)

Group Name	Parent	Sort	Remark
Company Department	--	3	<a href="#">Modify</a> <a href="#">Permission</a> <a href="#">Delete</a>
-- A	Company Department	2	<a href="#">Modify</a> <a href="#">Permission</a> <a href="#">Delete</a>
-- B	Company Department	1	<a href="#">Modify</a> <a href="#">Permission</a> <a href="#">Delete</a>
Factory Department	--	2	<a href="#">Modify</a> <a href="#">Permission</a> <a href="#">Delete</a>
-- C	Factory Department	1	<a href="#">Modify</a> <a href="#">Permission</a> <a href="#">Delete</a>
gps demo	--	1	<a href="#">Modify</a> <a href="#">Permission</a> <a href="#">Delete</a>

Support three-level by group.

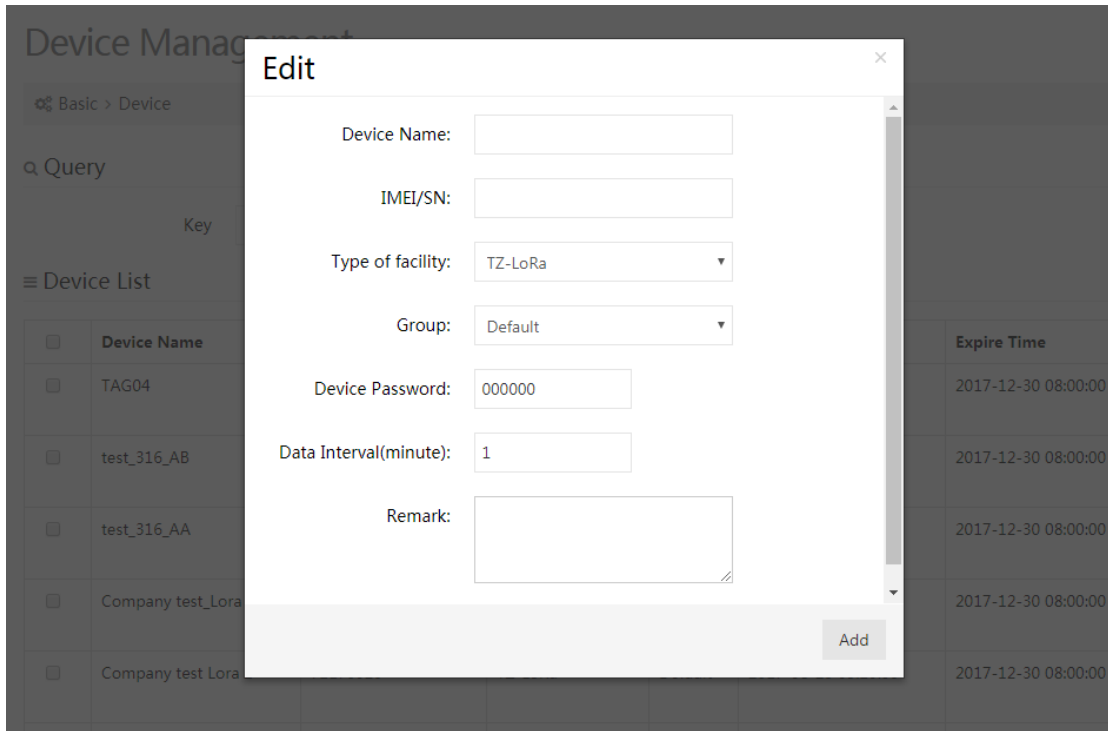




## 5.5 Device management

The image displays the "Device Management" interface of the TZONE Temperature & Humidity Monitoring Platform. The page includes a search bar and a "Device List" table. The table contains the following data:

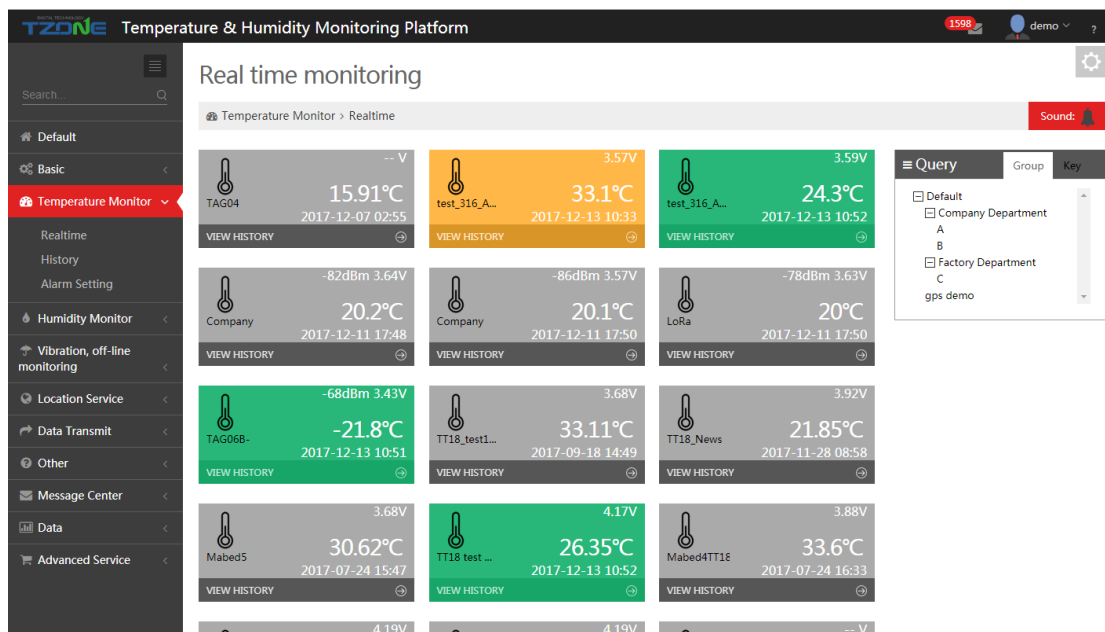
Device Name	IMEI/SN	Type of facility	Group	Create Time	Expire Time	Actions
TAG04	04160102	TZ-TAG04	Default	2017-12-05 20:55:48	2017-12-30 08:00:00	Modify, Delete, Detail
test_316_AB	06161001	TZ-TAG06	Default	2017-09-28 13:20:33	2017-12-30 08:00:00	Modify, Delete, Detail
test_316_AA	06160938	TZ-TAG06	Default	2017-09-28 09:58:32	2017-12-30 08:00:00	Modify, Delete, Detail
Company test_Lora 1	72170019	TZ-LoRa	Default	2017-08-30 15:49:27	2017-12-30 08:00:00	Modify, Delete, Detail
Company test Lora 2	72170020	TZ-LoRa	Default	2017-08-25 09:20:33	2017-12-30 08:00:00	Modify, Delete, Detail
LoRa Sensor 1	72170016	TZ-LoRa	Default	2017-08-25 09:20:19	2017-12-30 08:00:00	Modify, Delete, Detail
TAG06B-Test	62160193	TZ-TAG06B	Default	2017-07-31 18:46:14	2017-12-30 08:00:00	Modify, Delete, Detail



The color of gray stands that the equipment is overdue. After revising, the system has to rework after 5 mins.

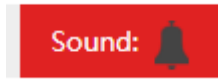
## 6. Temperature Monitor

### 6.1 Real Time Monitoring

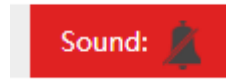


A. Gray: Off-line state

- B. Green: Normal
- C. Red: Alarm (set is by yourself)
- D. Yellow: Early Alarm (set is by yourself)

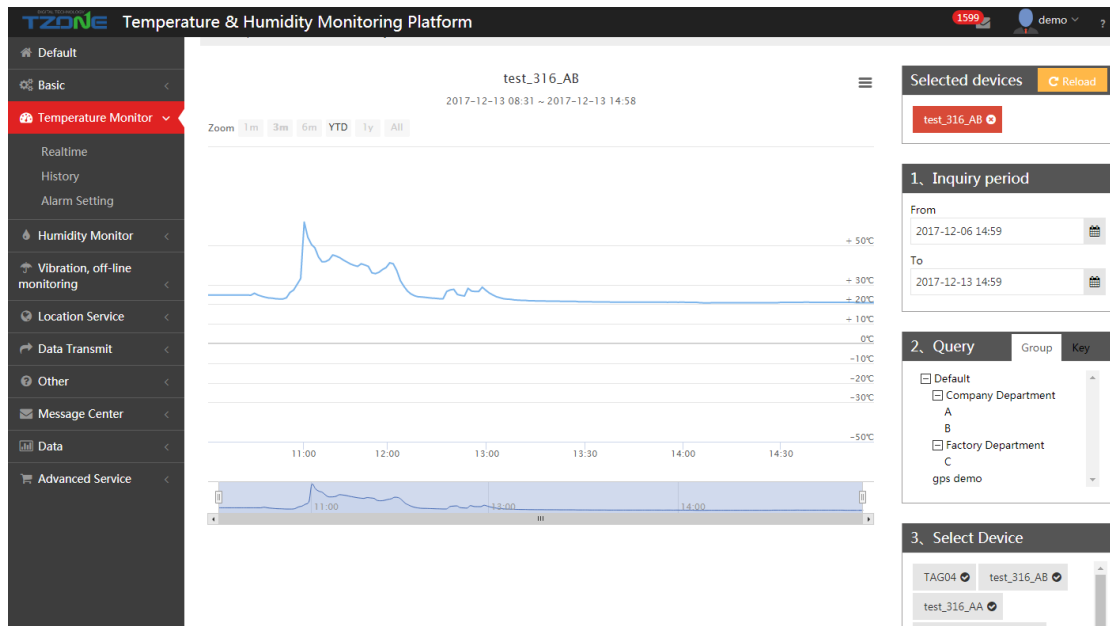


It sounds when the alarm is issued.  
It doesn't sound when the alarm is issued.



It doesn't

## 6.2 History record



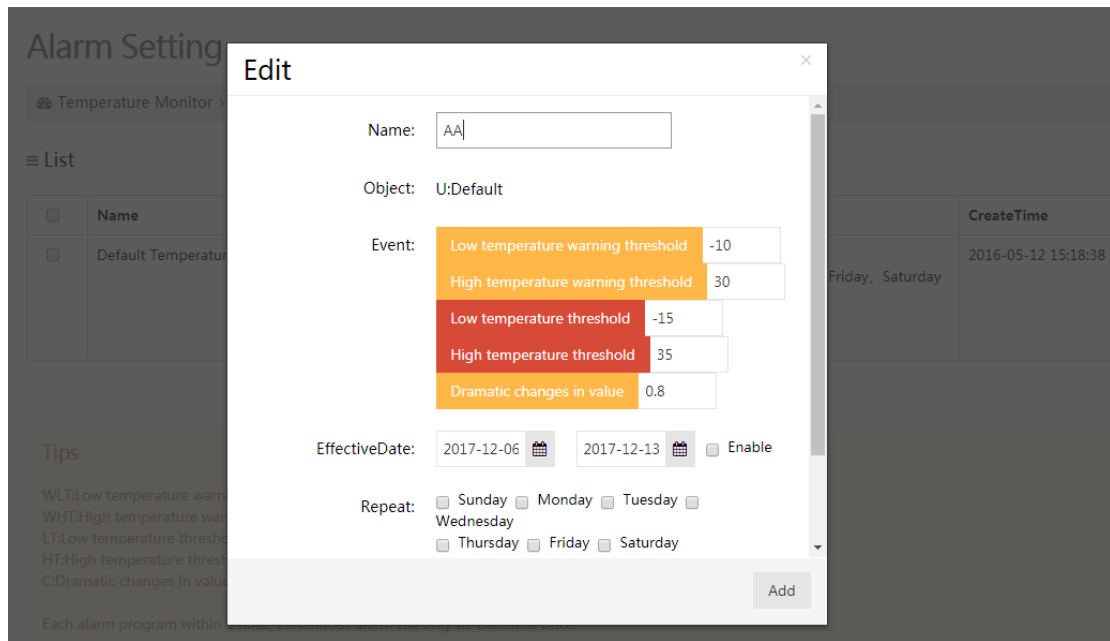
## 6.3 Alarm solution

Name	Object	Event	EffectiveTime	CreateTime	
Default Temperature Alarm	Uldemo	WLT:-25°C WHT:30°C LT:-30°C HT:35°C C:80%	2016-01-01 00:17:00~2017-12-31 15:17:00 (UTC) Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday 00:00~23:59	2016-05-12 15:18:38	Modify Delete

**Tips**

WLT:Low temperature warning threshold  
WHT:High temperature warning threshold  
LT:Low temperature threshold  
HT:High temperature threshold  
C:Dramatic changes in value

Each alarm program within 1 hour, continuous alarm will only be executed once.



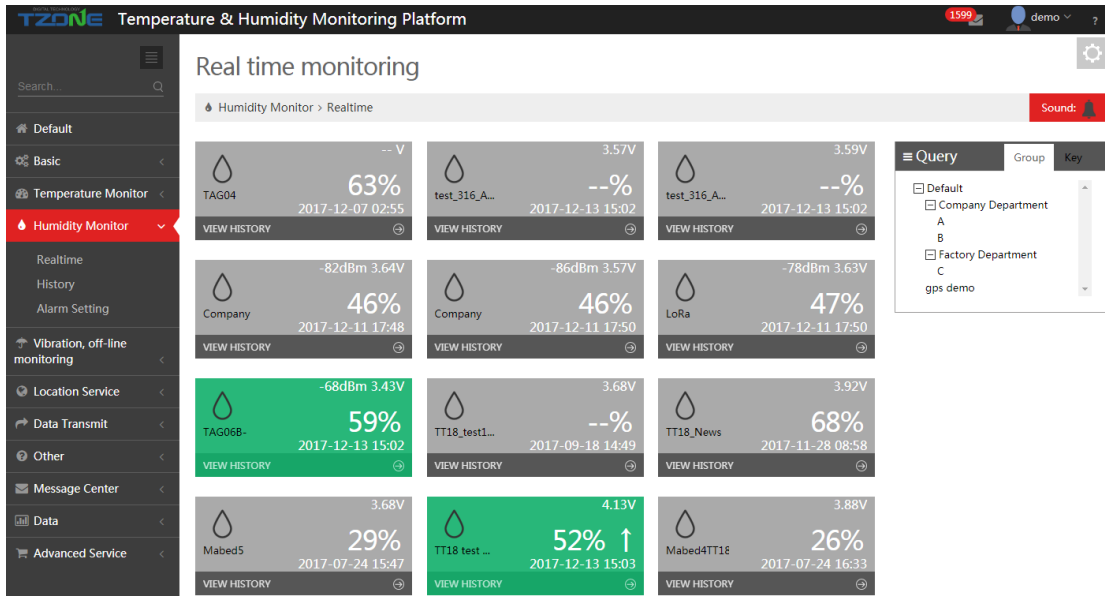
WLH:warning low humidity threshold  
 WHH:warning high humidity threshold  
 LH:low humidity threshold  
 HH:high humidity threshold  
 C:sharp change value

Add group, device alarm, need to enter from the group management, equipment management

## VII. Humidity Monitor

# 7. Humidity Monitor

## 7.1 Real Time Monitor



- A. Gray: Off-line state (more than 30 mins)
- B. Green: Normal
- C. Red: Alarm (The humidity is above 80% or under 20%)



It sounds when the alarm is issued.



It doesn't sound when the alarm is issued.

## 7.2 History record



## 7.3 Alarm solution

Temperature & Humidity Monitoring Platform

### Alarm Setting

Humidity Monitor > Alarm Setting

List

Name	Object	Event	EffectiveTime	CreateTime
Default Humidity Alarm	U:demo	WLH:30% WHH:70% LH:20% HH:80% C:10%	2016-01-01 15:18:00~2017-12-31 15:18:00 (UTC) Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday	2016-05-12 15:20:25

Tips

- WLH:Early warning of low humidity threshold
- WHH:Warning high humidity threshold
- LH:Low humidity threshold
- HH:High humidity threshold
- C:Dramatic changes in value

Each alarm program within 1 hour, continuous alarm will only be executed once.

### Edit

Name: BB

Object: U:Default

Event:

- Early warning of low humidity threshold 0.3
- Warning high humidity threshold 0.7
- Low humidity threshold 0.2
- High humidity threshold 0.8
- Dramatic changes in value 0.8

EffectiveDate: 2017-12-06 2017-12-13  Enable

Repeat:  Sunday  Monday  Tuesday  Wednesday  Thursday  Friday  Saturday

Add

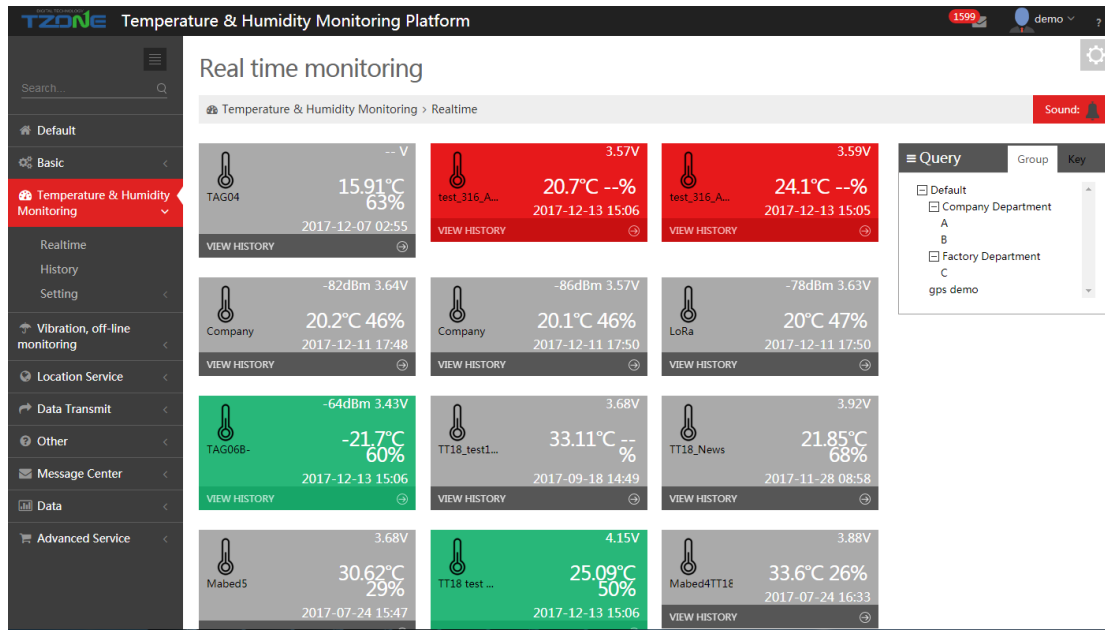
WLH:warning low humidity threshold  
 WHH:warning high humidity threshold  
 LH:low humidity threshold  
 HH:high humidity threshold  
 C:sharp change value

Add group, device alarm, need to enter from the group management, equipment management

## 8. Temperature & humidity monitor

Need to set as integration mode in system setting.

### 8.1 Real Time Monitor



A. Gray: Off-line state (more than 30 mins)

B. Green: Normal

C. Red: Alarm (The humidity is above 80% or under 20%)

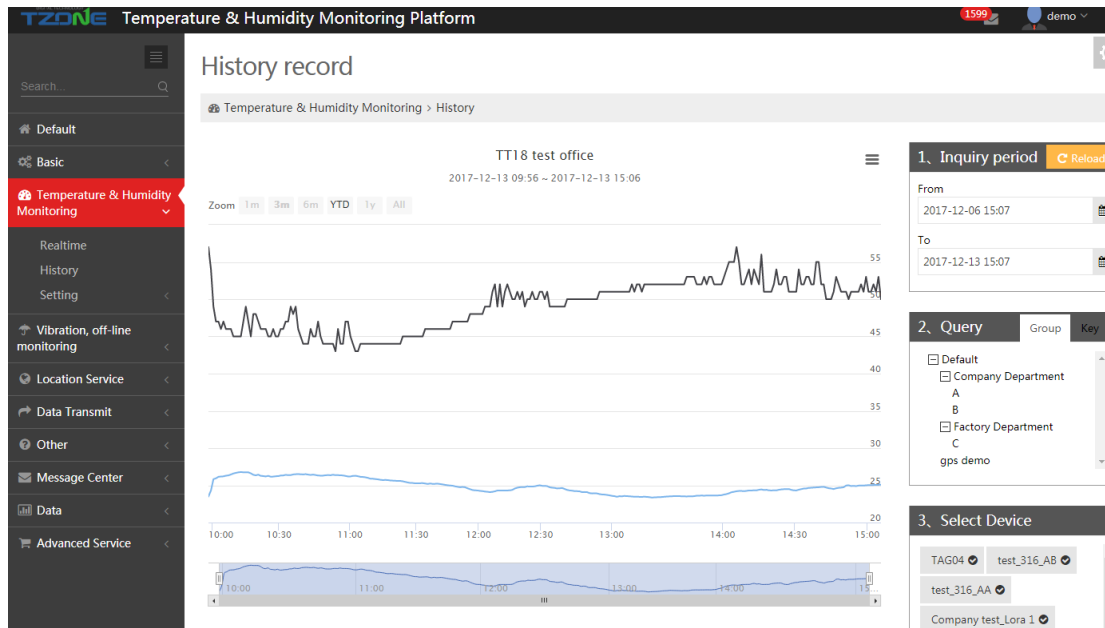


it sounds when the alarm is issued  
when the alarm is issued



it doesn't sound

## 8.2 History record

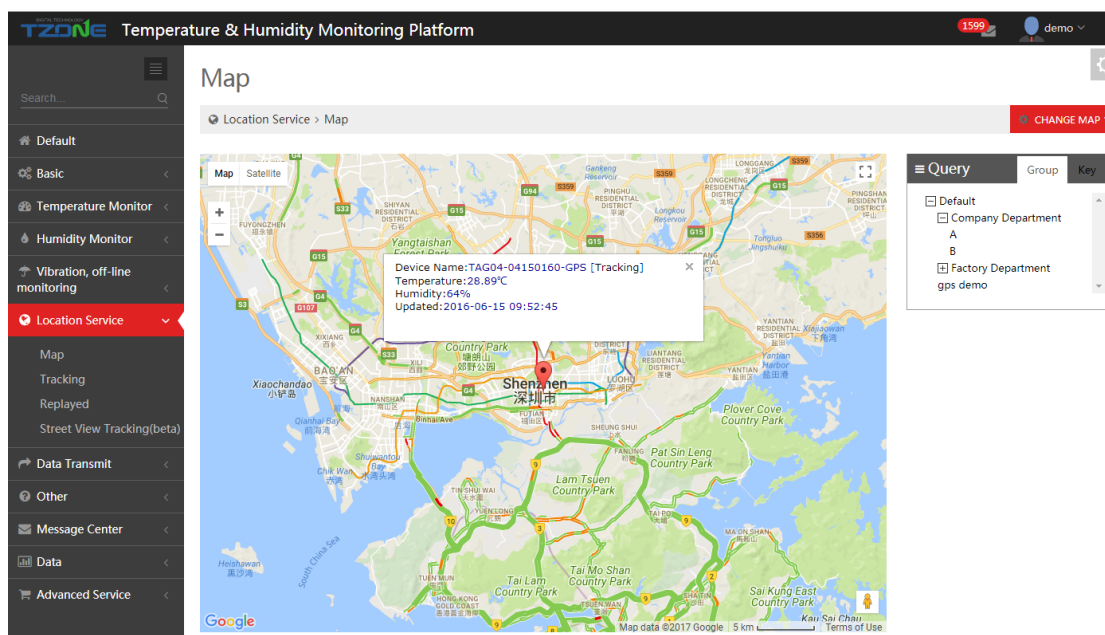


## 8.3 Alarm setting

Alarm setting has “temperature” “humidity”, please set according to 6.3,7.3.

## 10. Location service

### 10.1 Device distribution map





Device distribution: show all user location devices. Or by grouping all targeting devices under groups.

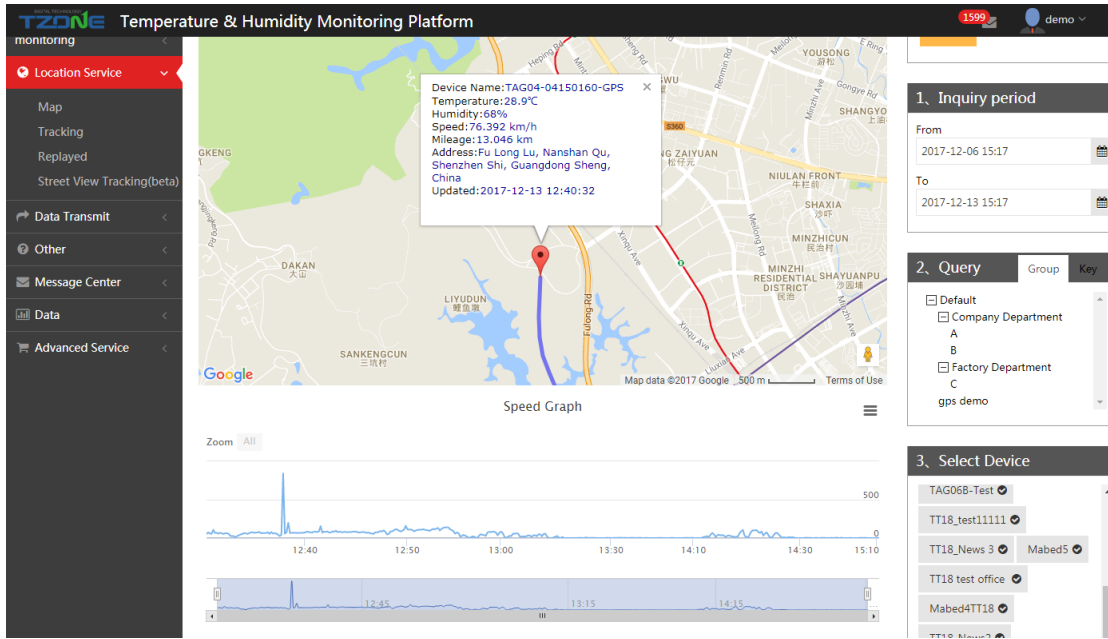
Note : positioning display is the last time for device to report platform location data.

## 10.2 Real time tracking

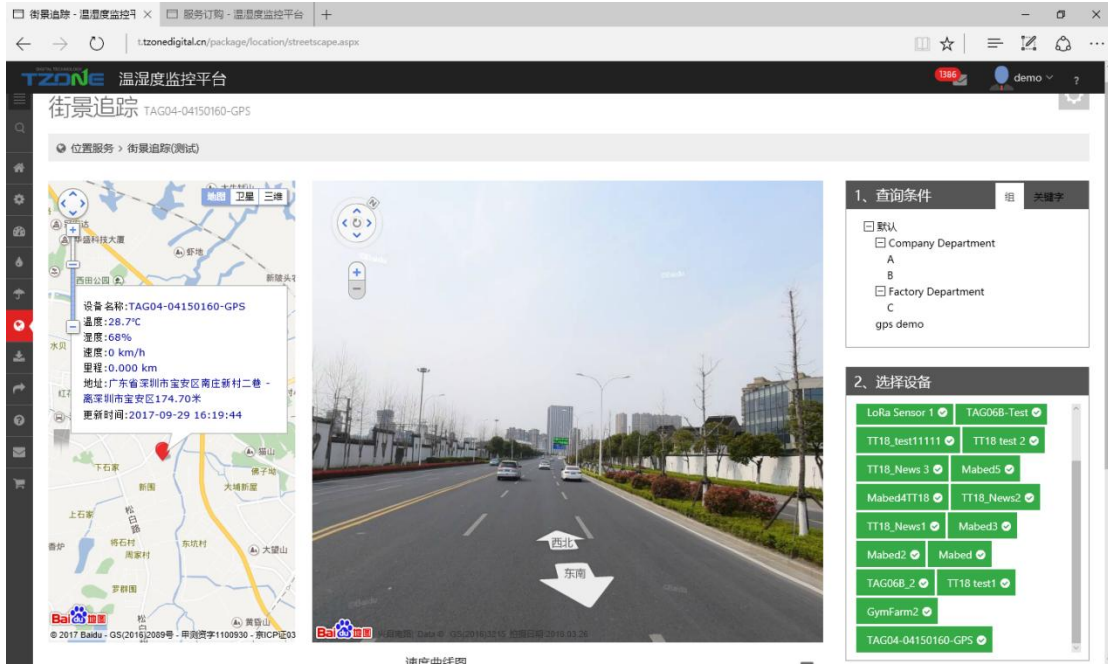
Real time tracking of the single device.

Note : positioning display is the last time for device to report platform location data.

## 10.3 Track playback



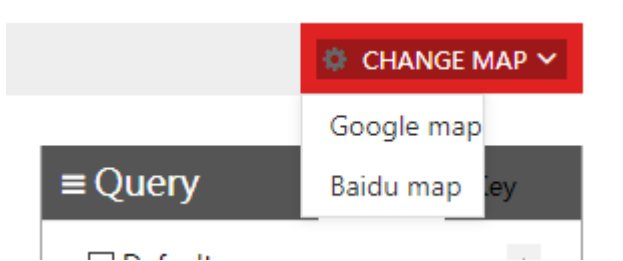
## 10.4 Street view



## 10.5 Map using

### 10.5.1 switch the map

Support Google map and Baidu Map



## 10.5.2 Baidu map

A、map shows mode, supports map, satellite,three dimensions



b、enlarge, shrink down, move



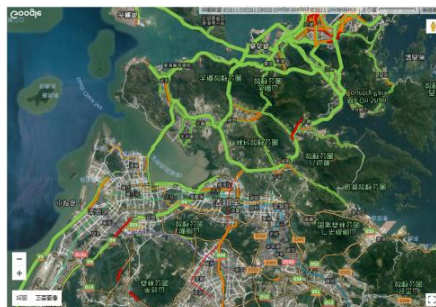
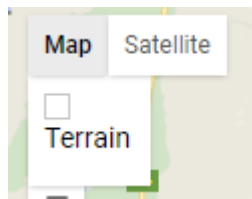
enlarge“+”or mouse skates forward

Shrink down “-”or mouse skates backward

The direction arrow is the corresponding direction of movement, or press the left mouse button

### 10.5.3 Google map

A、 map shows mode, supports map, satellite.



b、 enlarge, shrink down, move



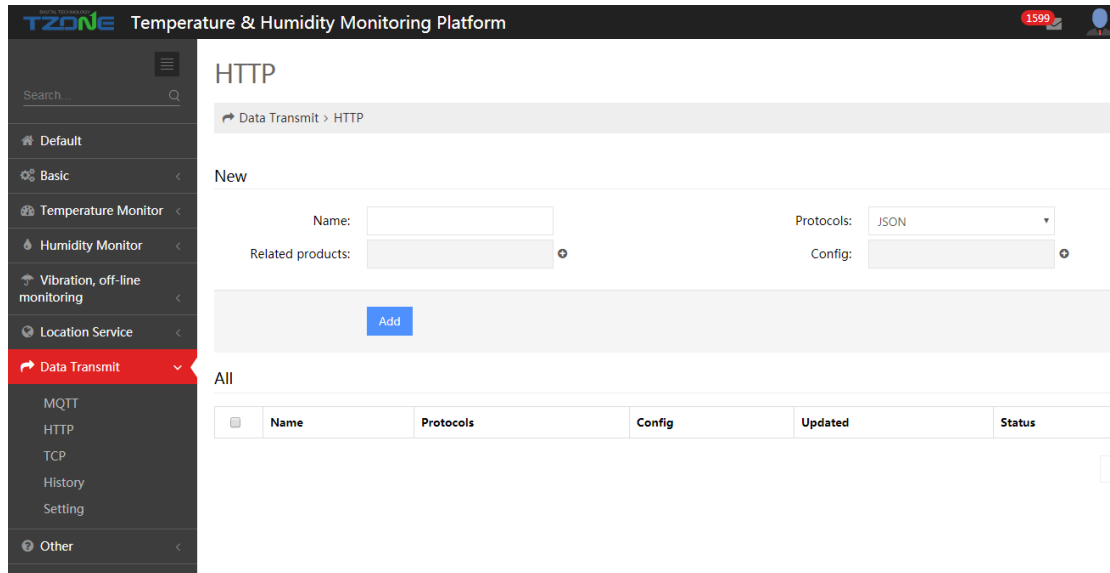
enlarge“+”or Ctrl + mouse skates forward

Shrink down“-”or Ctrl +mouse skates backward

Move: press the left mouse button

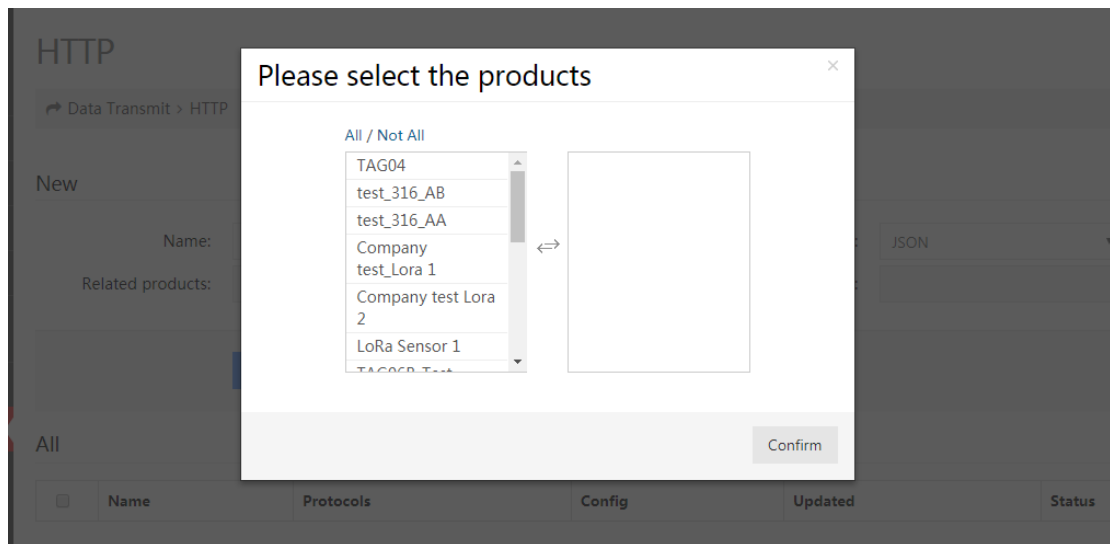
# 11 Data forwarding

## 11.1 HTTP

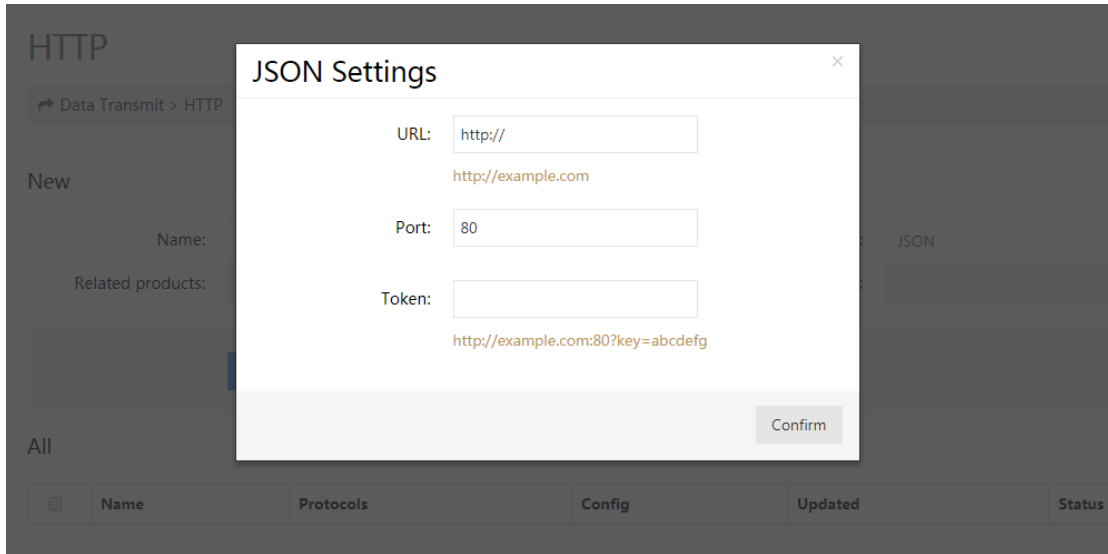


Added steps:

- A、 fill in the name
- B、 choose the protocol, support JSON and XML
- C、 associated products



D、 Configuration



## 11.2 MQTT

Basically same as HTTP

## 11.3 TCP

Basically same as HTTP

## 11.4 Forwarding record

Search

- Default
- Basic
- Temperature & Humidity Monitoring
- Vibration, off-line monitoring
- Location Service
- Data Transmit
- MQTT
- HTTP
- TCP
- History
- Setting
- Other
- Message Center
- Data
- Advanced Service
- Administrator

### History

Data Transmit > History

Mode Type	Protocols	Content	Status	Time
HTTP	JSON	<pre>{   "URL": "http://121.34.31.150",   "Port": "18801",   "Key": "" } {"Method": "POST", "Timestamp": "1513150205788", "Version": "1", "Datas": [{"PID": "636", "Temperature": "-21.90", "Humidity": "0.58", "Voltage": "3.43", "L_wgs84": "22.5384683333333,114.063446666667", "Timestamp": "1513150214000"}]}</pre>	Sending fails	2017-12-13 15:30
HTTP	JSON	<pre>{   "URL": "http://121.34.31.150",   "Port": "18801",   "Key": "" } {"Method": "POST", "Timestamp": "1513150205788", "Version": "1", "Datas": [{"PID": "636", "Temperature": "-21.90", "Humidity": "0.58", "Voltage": "3.43", "L_wgs84": "22.5384683333333,114.063446666667", "Timestamp": "1513150214000"}]}</pre>	Sending fails	2017-12-13 15:30
HTTP	JSON	<pre>{   "URL": "http://121.34.31.150",   "Port": "18801",   "Key": "" } {"Method": "POST", "Timestamp": "1513150129748", "Version": "1", "Datas": [{"PID": "636", "Temperature": "-21.90", "Humidity": "0.58", "Voltage": "3.43", "L_wgs84": "22.5384683333333,114.063446666667", "Timestamp": "1513150152000"}]}</pre>	Sending fails	2017-12-13 15:29
HTTP	JSON	<pre>{   "URL": "http://121.34.31.150",   "Port": "18801",   "Key": "" } {"Method": "POST", "Timestamp": "1513150129748", "Version": "1", "Datas": [{"PID": "636", "Temperature": "-21.90", "Humidity": "0.58", "Voltage": "3.43", "L_wgs84": "22.5384683333333,114.063446666667", "Timestamp": "1513150152000"}]}</pre>	Sending fails	2017-12-13 15:28
HTTP	JSON	<pre>{   "URL": "http://121.34.31.150",   "Port": "18801",   "Key": "" } {"Method": "POST", "Timestamp": "1513150053707", "Version": "1", "Datas": [{"PID": "636", "Temperature": "-22.00", "Humidity": "0.58", "Voltage": "3.43", "L_wgs84": "22.5384683333333,114.063446666667", "Timestamp": "1513150091000"}]}</pre>	Sending fails	2017-12-13 15:27
HTTP	JSON	<pre>{   "URL": "http://121.34.31.150",   "Port": "18801",   "Key": "" } {"Method": "POST", "Timestamp": "1513150053707", "Version": "1", "Datas": [{"PID": "636", "Temperature": "-22.00", "Humidity": "0.58", "Voltage": "3.43", "L_wgs84": "22.5384683333333,114.063446666667", "Timestamp": "1513150091000"}]}</pre>	Sending fails	2017-12-13 15:27

## 11.5 Setting

**TZONE Temperature & Humidity Monitoring Platform**

### Setting

← Data Transmit > Setting

#### Common

Functional status:

Volume of use: 1 / 10

[Save Settings](#)

**Sidebar Menu:** Default, Basic, Temperature & Humidity Monitoring, Vibration, off-line monitoring, Location Service, **Data Transmit** (MQTT, HTTP, TCP, History, Setting)

## 12. Others

### 12.1 Low power monitor

**TZONE Temperature & Humidity Monitoring Platform**

### Low Voltage

Other > Low Voltage

Device Name	IMEI/SN	Voltage	Updated
-------------	---------	---------	---------

**Query:** Group: Key

- Default
- Company Department
  - A
  - B
- Factory Department
  - C
- gps demo

**Sidebar Menu:** Default, Basic, Temperature Monitor, Humidity Monitor, Vibration, off-line monitoring, Location Service, Data Transmit, **Other** (Low Voltage, Voltage Report, Alarm)



## 12.2 Voltage record

Temperature & Humidity Monitoring Platform

### Voltage Report

Other > Voltage Report

Voltage	RTC	Time
3.57V	2017-12-13 15:32	2017-12-13 15:32
3.57V	2017-12-13 15:31	2017-12-13 15:31
3.57V	2017-12-13 15:30	2017-12-13 15:30
3.57V	2017-12-13 15:29	2017-12-13 15:29
3.57V	2017-12-13 15:27	2017-12-13 15:27
3.57V	2017-12-13 15:26	2017-12-13 15:26
3.57V	2017-12-13 15:25	2017-12-13 15:25
3.57V	2017-12-13 15:24	2017-12-13 15:24
3.57V	2017-12-13 15:23	2017-12-13 15:23
3.57V	2017-12-13 15:22	2017-12-13 15:22

1. Inquiry period Reload

From: 2017-12-06 15:33  
To: 2017-12-13 15:33

2. Query Group Key

- Default
- Company Department
  - A
  - B
- Factory Department
  - C

gps demo

3. Select Device

TAG04 test\_316\_AB

## 12.3 Alarm record

Temperature & Humidity Monitoring Platform

### Alarm Record

Other > Alarm

Alarm Type	Alarm Content	Alarm Program Snapshot	Time
Temperature	"test_316_AB" [06161001]当前温度39.8°C, 发生高温报警! 报警方案: "Default Temperature Alarm" (ID:2) 2017/12/13 11:32:00(+8)	Default Temperature Alarm(ID:2):-25.30 -30.35 0.8	2017-12-13 11:32
Temperature	"test_316_AB" [06161001] Temperature is 30.1°C , A high Temperature warning!Alarm plan: "Default Temperature Alarm" (ID:2) 13/12/2017 10:31:12(+8)	Default Temperature Alarm(ID:2):-25.30 -30.35 0.8	2017-12-13 10:31
Humidity	"TAG06B_2" [62160093] humidity is 71.00% , A high humidity warning!Alarm plan: "Default Humidity Alarm" (ID:3) 13/12/2017 09:45:42(+8)	Default Humidity Alarm(ID:3):0.3,0.7 0.2,0.8 0.1	2017-12-13 09:45
Humidity	"TAG06B_2" [62160093] humidity is 78.00% , A high humidity warning!Alarm plan: "Default Humidity Alarm" (ID:3) 11/12/2017 10:18:44(+8)	Default Humidity Alarm(ID:3):0.3,0.7 0.2,0.8 0.1	2017-12-11 10:18
Humidity	"TAG06B_2" [62160093] humidity is 76.00% , A high humidity warning!Alarm plan: "Default Humidity Alarm" (ID:3) 08/12/2017 20:48:46(+8)	Default Humidity Alarm(ID:3):0.3,0.7 0.2,0.8 0.1	2017-12-08 20:48
Humidity	"TAG06B_2" [62160093] humidity is 71.00% , A high humidity warning!Alarm plan: "Default Humidity Alarm" (ID:3) 08/12/2017 19:48:09(+8)	Default Humidity Alarm(ID:3):0.3,0.7 0.2,0.8 0.1	2017-12-08 19:48
Humidity	"TAG06B_2" [62160093] humidity is 71.00% , A high humidity warning!Alarm plan: "Default Humidity Alarm" (ID:3) 08/12/2017 18:08:33(+8)	Default Humidity Alarm(ID:3):0.3,0.7 0.2,0.8 0.1	2017-12-08 18:08
Temperature	"Company test_Lora 1" [72170019] Temperature is 20°C , 1 minute Temperature changes dramatically 44% Alarm plan: "Default Temperature Alarm" (ID:2) 08/12/2017 17:16:19(+8)	Default Temperature Alarm(ID:2):-25.30 -30.35 0.8	2017-12-08 17:16
Humidity	"Company test_Lora 1" [72170019] humidity is 55.00% , 1 minute humidity changes dramatically 14% Alarm plan: "Default Humidity Alarm" (ID:3) 08/12/2017 17:16:19(+8)	Default Humidity Alarm(ID:3):0.3,0.7 0.2,0.8 0.1	2017-12-08 17:16
Humidity	"TAG06B_2" [62160093] humidity is 71.00% , A high humidity warning!Alarm plan: "Default Humidity Alarm" (ID:3) 08/12/2017 16:13:33(+8)	Default Humidity Alarm(ID:3):0.3,0.7 0.2,0.8 0.1	2017-12-08 16:13

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## 13. Message center

### 13.1 Send message

Support Message, email and SMS.

Note: SMS is customized.



## 13.1.2 Send the message to administrator

The screenshot shows the 'Send message to administrator' interface. The left sidebar contains navigation options: Default, Basic, Temperature Monitor, Humidity Monitor, Vibration, off-line monitoring, Location Service, Data Transmit, Other, Message Center (selected), Send message, Inbox, Outbox, and Setting. The main content area is titled 'Sent to the administrator' and includes a breadcrumb trail: Message Center > Send message > Sent to the administrator. Below this is a 'Send message' form with the following fields: Message Type (set to 'Message'), Recipient (set to 'System'), and Content (an empty text area). A blue 'Send' button is located at the bottom of the form.

## 13.2 Inbox

The screenshot shows the 'Inbox' interface. The left sidebar is the same as in the previous screenshot, with 'Message Center' selected. The main content area is titled 'Inbox' and includes a breadcrumb trail: Message Center > Inbox. Below this is a 'Query' section with a 'Message Type' dropdown set to 'Complete' and an 'Inquire' button. The 'Message List' section displays a table of messages with columns for Message, Message Type, Sender, and Time. Each message row includes a checkbox, a 'Delete' button, and a 'Detail' button.

Message	Message Type	Sender	Time	
<input type="checkbox"/> "test_316_AA" [06160938]当前温度31.3°C, 发生高温报警! 报警方案: "Default Temperature Alarm" (ID:2) 2017/12/13 15:34:20(+8)	Message		2017-12-13 15:34	<input type="button" value="Delete"/> <input type="button" value="Detail"/>
<input type="checkbox"/> "test_316_AB" [06161001]当前温度39.8°C, 发生高温报警! 报警方案: "Default Temperature Alarm" (ID:2) 2017/12/13 11:32:00(+8)	Message		2017-12-13 11:32	<input type="button" value="Delete"/> <input type="button" value="Detail"/>
<input type="checkbox"/> "test_316_AB" [06161001] Temperature is 30.1°C , A high Temperature warning!Alarm plan: "Default Temperature Alarm" (ID:2) 13/12/2017 10:31:12(+8)	Message		2017-12-13 10:31	<input type="button" value="Delete"/> <input type="button" value="Detail"/>
<input type="checkbox"/> "Company test_Lora 1" [72170019] Temperature is 20°C , 1 minute Temperature changes dramatically 444% Alarm plan: "Default Temperature Alarm" (ID:2) 08/12/2017 17:16:19(+8)	Message		2017-12-08 17:16	<input type="button" value="Delete"/> <input type="button" value="Detail"/>
<input type="checkbox"/> "Company test_Lora 1" [72170019] Temperature is -25.6°C , Low temperature warning!Alarm plan: "Default Temperature Alarm" (ID:2) 08/12/2017 15:20:27(+8)	Message		2017-12-08 15:20	<input type="button" value="Delete"/> <input type="button" value="Detail"/>

Check the message

**Temperature & Humidity Monitoring Platform**

Search...

- Default
- Basic
- Temperature Monitor
- Humidity Monitor
- Vibration, off-line monitoring
- Location Service
- Data Transmit
- Other
- Message Center
- Data
- Advanced Service

### System Message

MessageMessage  
 Type : Sender : System  
 Recipient : demo  
 Time : 2017/12/13 15:34:20  
 State : Send successfully

"test\_316\_AA" [06160938]当前温度31.3°C, 发生高温预警! 报警方案: "Default Temperature Alarm" (ID:2) 2017/12/13 15:34:20(+8)

### 13.3 Outbox

**Temperature & Humidity Monitoring Platform** 1599

Search...

- Default
- Basic
- Temperature Monitor
- Humidity Monitor
- Vibration, off-line monitoring
- Location Service
- Data Transmit
- Other
- Message Center**
  - Send message
  - Inbox
  - Outbox
  - Setting
- Data
- Advanced Service

### Outbox

Message Center > Outbox

Query

Message Type: Complete    Key:     [Inquire](#)

Message List

	Message	Message Type	Recipient	Time
<input type="checkbox"/>				

### 13.4 Configuration

To open or close the message and other related function control via the configuration

- ☰
- 🏠 Default
- ⚙️ Basic <
- 🌡️ Temperature Monitor <
- 💧 Humidity Monitor <
- 📶 Vibration, off-line monitoring <
- 📍 Location Service <
- ➡️ Data Transmit <
- ❓ Other <
- ✉️ Message Center ▾
- ➡️ Send message
- ➡️ Inbox
- ➡️ Outbox
- ➡️ Setting
- 📊 Data <
- 🛒 Advanced Service <

## Configuration

✉️ Message Center > Setting

### Common

Functional status  ▾

### Temperature alarm

Functional status  ▾

### Humidity alarm

Functional status  ▾

### Security alarm

Functional status  ▾

Save Settings

# 14. Data download

## 14.1 Temperature & humidity data download

The screenshot shows the 'Temperature & Humidity Monitoring Platform' interface. The main heading is 'Download the temperature and humidity data'. Below this is a table with columns for 'Device Name' and 'IMEI/SN'. Each row has 'Execd' and 'PDF' buttons. To the right, there are two panels: '1. Inquiry period' with 'From' and 'To' date pickers, and '2. Query' with a 'Group' dropdown and a 'Key' search box. The 'Data' menu item is highlighted in the left sidebar.

Device Name	IMEI/SN	Execd	PDF
TAG04	04160102	<input type="checkbox"/>	<input type="checkbox"/>
test_316_AB	06161001	<input type="checkbox"/>	<input type="checkbox"/>
test_316_AA	06160938	<input type="checkbox"/>	<input type="checkbox"/>
Company test_Lora 1	72170019	<input type="checkbox"/>	<input type="checkbox"/>
Company test Lora 2	72170020	<input type="checkbox"/>	<input type="checkbox"/>
LoRa Sensor 1	72170016	<input type="checkbox"/>	<input type="checkbox"/>
TAG06B-Test	62160193	<input type="checkbox"/>	<input type="checkbox"/>
TT18_test11111	864811037027336	<input type="checkbox"/>	<input type="checkbox"/>
TT18_News 3	864811037029381	<input type="checkbox"/>	<input type="checkbox"/>
Mabed5	863586033014865	<input type="checkbox"/>	<input type="checkbox"/>

Support PDF、Excel

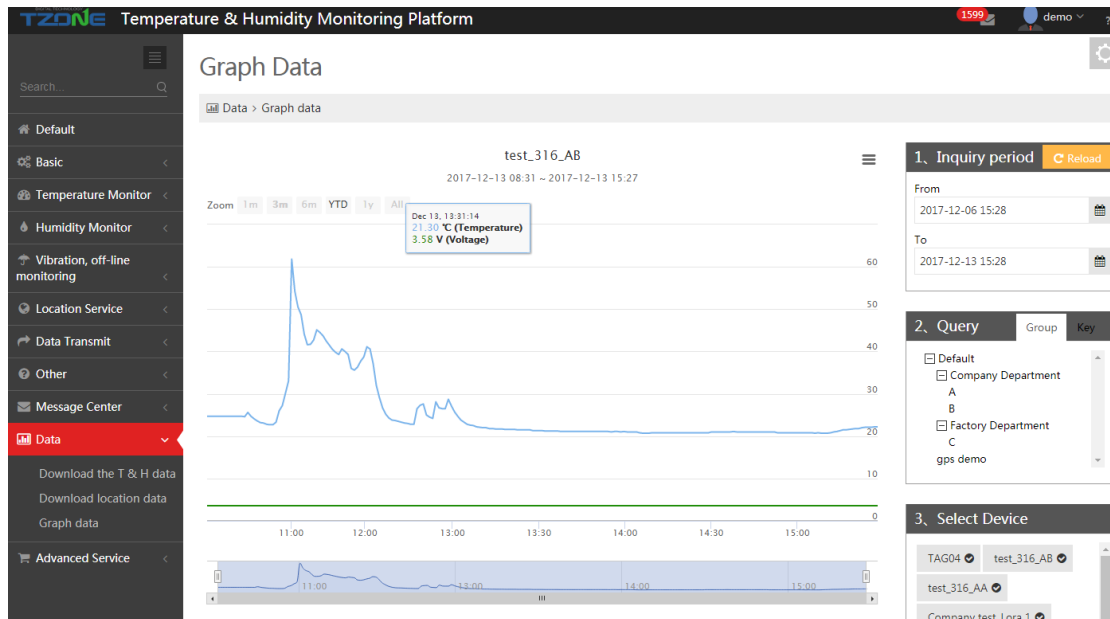
## 14.2 Location data download

The screenshot shows the 'Temperature & Humidity Monitoring Platform' interface. The main heading is 'Download location data'. Below this is a table with columns for 'Device Name' and 'IMEI/SN'. Each row has 'Execd' and 'PDF' buttons. To the right, there are two panels: '1. Inquiry period' with 'From' and 'To' date pickers, and '2. Query' with a 'Group' dropdown and a 'Key' search box. The 'Data' menu item is highlighted in the left sidebar.

Device Name	IMEI/SN	Execd	PDF
TAG04	04160102	<input type="checkbox"/>	<input type="checkbox"/>
test_316_AB	06161001	<input type="checkbox"/>	<input type="checkbox"/>
test_316_AA	06160938	<input type="checkbox"/>	<input type="checkbox"/>
Company test_Lora 1	72170019	<input type="checkbox"/>	<input type="checkbox"/>
Company test Lora 2	72170020	<input type="checkbox"/>	<input type="checkbox"/>
LoRa Sensor 1	72170016	<input type="checkbox"/>	<input type="checkbox"/>
TAG06B-Test	62160193	<input type="checkbox"/>	<input type="checkbox"/>
TT18_test11111	864811037027336	<input type="checkbox"/>	<input type="checkbox"/>
TT18_News 3	864811037029381	<input type="checkbox"/>	<input type="checkbox"/>
Mabed5	863586033014865	<input type="checkbox"/>	<input type="checkbox"/>

Support PDF、Excel

## 14.3 Curve data analysis



Support to display temperature, humidity and voltage in the same time

## 15. Advanced service

The screenshot shows the 'Service Subscription' page under the 'Advanced Service' menu. It features a 'Tips' section and a table listing various services. The table has columns for ID, Service Name, Area, Price, Remark, and Status.

ID	Service Name	Area	Price	Remark	Status
1	Lacci location services	China	0.06 /time (< 50000 times a day)	Currently only support China mobile, China unicom base station positioning	<a href="#">Open</a>
2	Reverse address resolution services	China	free(< 6000 times a day)	In addition to map the latitude and longitude resolution address, currently only support China area.	<a href="#">Open</a>
3	Global base station location services	Global	0.1 /time	Support the global mainstream mobile operators	<a href="#">Open</a>
4	Data transmit service	Global	Free (default limit 1)	Support for HTTP, MQTT, TCP	<a href="#">Open</a>
5	E-mail Service	Global	free(< 50 times a day)	Used for alarm mail push function.	<a href="#">Open</a>

# 16 The Function of Administrator

## 16.1 User Management

**Temperature & Humidity Monitoring Platform**

Administrator > User Management

Query:  [Inquire](#)

**User list** [Delete](#)

User ID	UserName	User Role	Email	Tel	Locked	Last login IP	Last login time	
492	zhongke	General user	skjdjd@ll.com	4487665454	No	112.26.58.116	2017-12-13 11:40:14	<a href="#">Modify</a> <a href="#">Delete</a> <a href="#">Detail</a>
491	arshakeda	General user	kubankrup@mail.ru	79002970000	No	62.183.124.156	2017-12-13 15:40:20	<a href="#">Modify</a> <a href="#">Delete</a> <a href="#">Detail</a>
490	xiaoguo	Sub Account	5465468@uu.cin	6546879754	No	121.34.29.109	2017-12-13 09:49:36	<a href="#">Modify</a> <a href="#">Delete</a> <a href="#">Detail</a>
489	wanxiang	General user	skdjfei@dd.com	564687644	No	116.228.202.202	2017-12-13 15:40:14	<a href="#">Modify</a> <a href="#">Delete</a> <a href="#">Detail</a>
487	pengce	General user	shdhsdi@ksdj.com	66546467878	No	58.62.166.89	2017-12-13 10:11:42	<a href="#">Modify</a> <a href="#">Delete</a> <a href="#">Detail</a>

## 16.2 Device management

**Temperature & Humidity Monitoring Platform**

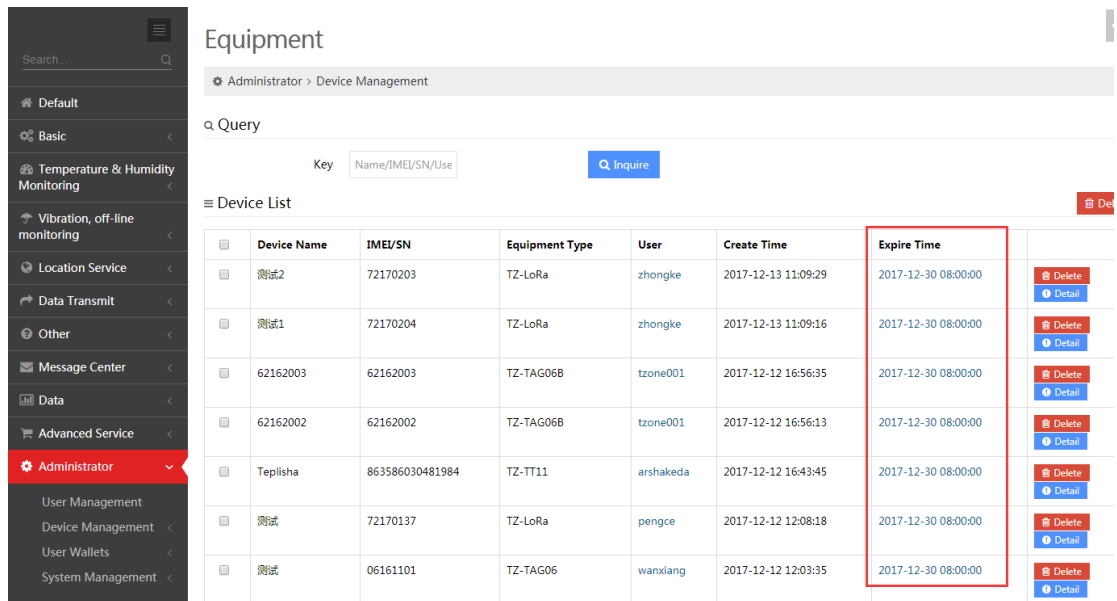
Administrator > Device Management

Query:  [Inquire](#)

**Device List** [Delete](#)

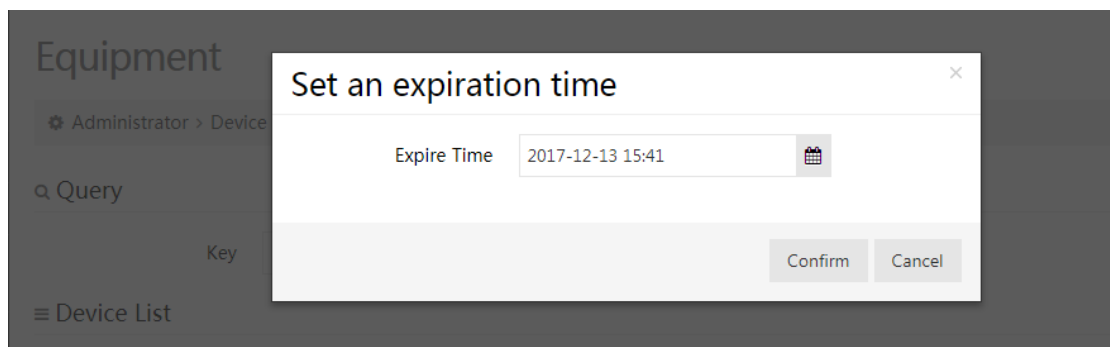
Device Name	IMEI/SN	Equipment Type	User	Create Time	Expire Time	
测试2	72170203	TZ-LoRa	zhongke	2017-12-13 11:09:29	2017-12-30 08:00:00	<a href="#">Delete</a> <a href="#">Detail</a>
测试1	72170204	TZ-LoRa	zhongke	2017-12-13 11:09:16	2017-12-30 08:00:00	<a href="#">Delete</a> <a href="#">Detail</a>
62162003	62162003	TZ-TAG06B	tzone001	2017-12-12 16:56:35	2017-12-30 08:00:00	<a href="#">Delete</a> <a href="#">Detail</a>
62162002	62162002	TZ-TAG06B	tzone001	2017-12-12 16:56:13	2017-12-30 08:00:00	<a href="#">Delete</a> <a href="#">Detail</a>
Teplisha	863586030481984	TZ-TT11	arshakeda	2017-12-12 16:43:45	2017-12-30 08:00:00	<a href="#">Delete</a> <a href="#">Detail</a>
测试	72170137	TZ-LoRa	pengce	2017-12-12 12:08:18	2017-12-30 08:00:00	<a href="#">Delete</a> <a href="#">Detail</a>
测试	06161101	TZ-TAG06	wanxiang	2017-12-12 12:03:35	2017-12-30 08:00:00	<a href="#">Delete</a> <a href="#">Detail</a>

## 16.2.1 Activate device



The screenshot shows the 'Equipment' management interface. On the left is a navigation menu with options like Default, Basic, Temperature & Humidity Monitoring, etc. The main area is titled 'Equipment' and shows a breadcrumb 'Administrator > Device Management'. Below this is a search bar with 'Query' and a 'Key' field containing 'Name/IMEI/SN/Use'. A 'Device List' table is displayed with the following columns: Device Name, IMEI/SN, Equipment Type, User, Create Time, and Expire Time. The 'Expire Time' column is highlighted with a red border. Each row has 'Delete' and 'Detail' buttons.

Device Name	IMEI/SN	Equipment Type	User	Create Time	Expire Time	Actions
测试2	72170203	TZ-LoRa	zhongke	2017-12-13 11:09:29	2017-12-30 08:00:00	Delete, Detail
测试1	72170204	TZ-LoRa	zhongke	2017-12-13 11:09:16	2017-12-30 08:00:00	Delete, Detail
62162003	62162003	TZ-TAG06B	tzone001	2017-12-12 16:56:35	2017-12-30 08:00:00	Delete, Detail
62162002	62162002	TZ-TAG06B	tzone001	2017-12-12 16:56:13	2017-12-30 08:00:00	Delete, Detail
Teplisha	863586030481984	TZ-TT11	arshakeda	2017-12-12 16:43:45	2017-12-30 08:00:00	Delete, Detail
测试	72170137	TZ-LoRa	pengce	2017-12-12 12:08:18	2017-12-30 08:00:00	Delete, Detail
测试	06161101	TZ-TAG06	wanxiang	2017-12-12 12:03:35	2017-12-30 08:00:00	Delete, Detail



The screenshot shows a modal dialog box titled 'Set an expiration time'. It has a close button (X) in the top right corner. The dialog contains a label 'Expire Time' followed by a text input field containing the date and time '2017-12-13 15:41'. To the right of the input field is a calendar icon. At the bottom of the dialog are two buttons: 'Confirm' and 'Cancel'.

Check the sensor that needs to be activated, set the expiration time, and click the "Activate" button.

## 16.2.2 Transfer device

The screenshot shows the 'Change User' dialog box in the TZONE Temperature & Humidity Monitoring Platform. The dialog box contains a table with the following data:

User ID	UserName	
492	zhongke	<input checked="" type="checkbox"/>
491	arshakeda	<input checked="" type="checkbox"/>
490	xiaoguo	<input checked="" type="checkbox"/>
489	wanxiang	<input checked="" type="checkbox"/>
487	pengce	<input checked="" type="checkbox"/>
485	aleks48	<input checked="" type="checkbox"/>
484	fmontes	<input checked="" type="checkbox"/>
483	chandon	<input checked="" type="checkbox"/>
482	wenxiaoming	<input checked="" type="checkbox"/>
481	jaffal	<input checked="" type="checkbox"/>

The background shows the 'Equipment' section with a 'Device List' table. The 'Device List' table has columns for 'Device Name', 'Device ID', 'Device Type', 'Device Model', 'Device Location', 'Device Status', and 'Device Expire Time'. The 'Device List' table contains the following data:

Device Name	Device ID	Device Type	Device Model	Device Location	Device Status	Device Expire Time
测试2						
测试1						
62162003						
62162002						
Teplisha						
测试	72170137	TZ-LoRa	pengce		2017-12-12 12:08:18	2017-12-30 08:00
测试	06161101	TZ-TAG06	wanxiang		2017-12-12 12:03:35	2017-12-30 08:00

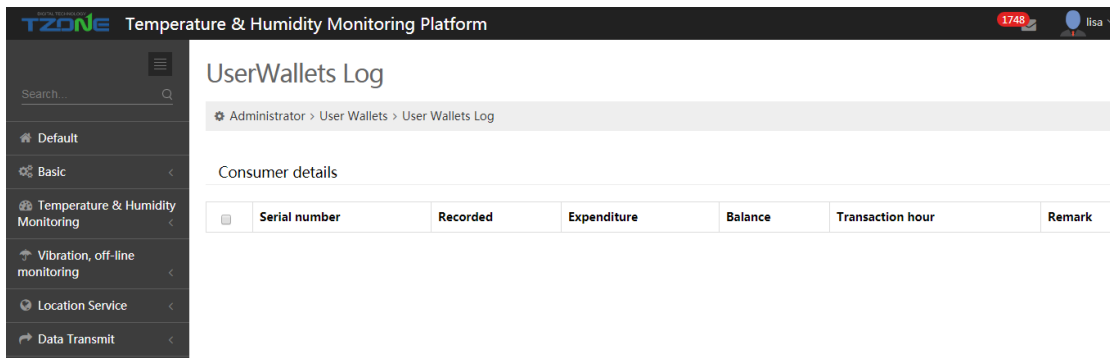
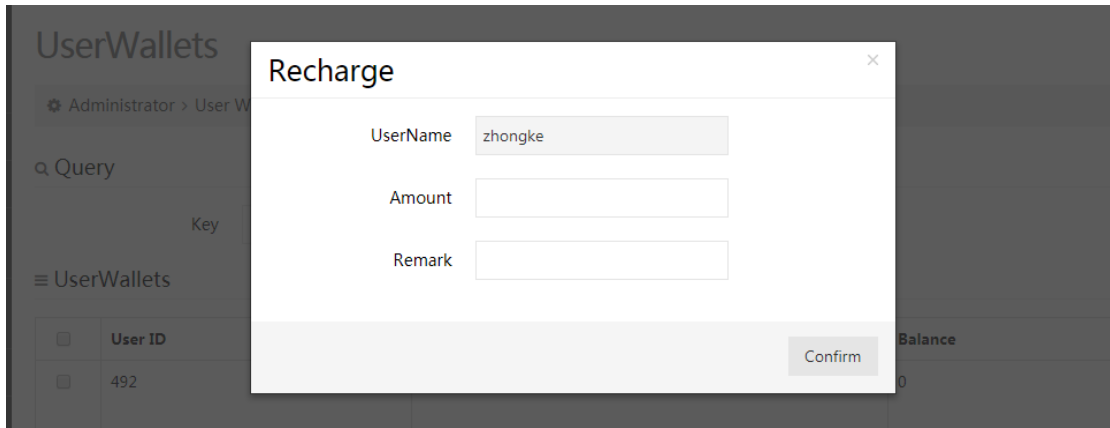
Click the user ID which you'd like to transfer.

## 16.3 Expense management

The screenshot shows the 'UserWallets' page in the TZONE Temperature & Humidity Monitoring Platform. The page displays a table with the following data:

User ID	UserName	Balance	
492	zhongke	0	<input checked="" type="checkbox"/> Recharge <input type="checkbox"/> Detail
491	arshakeda	0	<input checked="" type="checkbox"/> Recharge <input type="checkbox"/> Detail
490	xiaoguo	0	<input checked="" type="checkbox"/> Recharge <input type="checkbox"/> Detail
489	wanxiang	0	<input checked="" type="checkbox"/> Recharge <input type="checkbox"/> Detail
487	pengce	0	<input checked="" type="checkbox"/> Recharge <input type="checkbox"/> Detail
485	aleks48	0	<input checked="" type="checkbox"/> Recharge <input type="checkbox"/> Detail
484	fmontes	0	<input checked="" type="checkbox"/> Recharge <input type="checkbox"/> Detail





## 16.4 Email system settings

The screenshot displays the 'Mailbox configuration' page within the TZONE Temperature & Humidity Monitoring Platform. The interface includes a dark sidebar on the left with a search bar and a menu of options: Default, Basic, Temperature & Humidity Monitoring, Vibration, off-line monitoring, Location Service, Data Transmit, Other, Message Center, Data, Advanced Service, and Administrator (highlighted in red). The Administrator menu is expanded to show sub-options: User Management, Device Management, User Wallets, and System Management. The main content area shows the breadcrumb 'Administrator > System Management > E-mail Setting' and the title 'Mailbox configuration'. Under the 'Setting' section, there are several configuration items: 'Whether to allow the system to send Email' (checked), 'SMTP server address' (smtp-mail.outlook.com), 'Port' (25), 'Email' (reportbt@outlook.com), 'UserName' (system), 'Password' (empty), and 'SSL' (checked). A blue 'Confirm' button is located at the bottom of the settings area.

**TZONE** Temperature & Humidity Monitoring Platform

### Mailbox configuration

Administrator > System Management > E-mail Setting

#### Setting

Whether to allow the system to send Email:

SMTP server address:

Port:

Email:

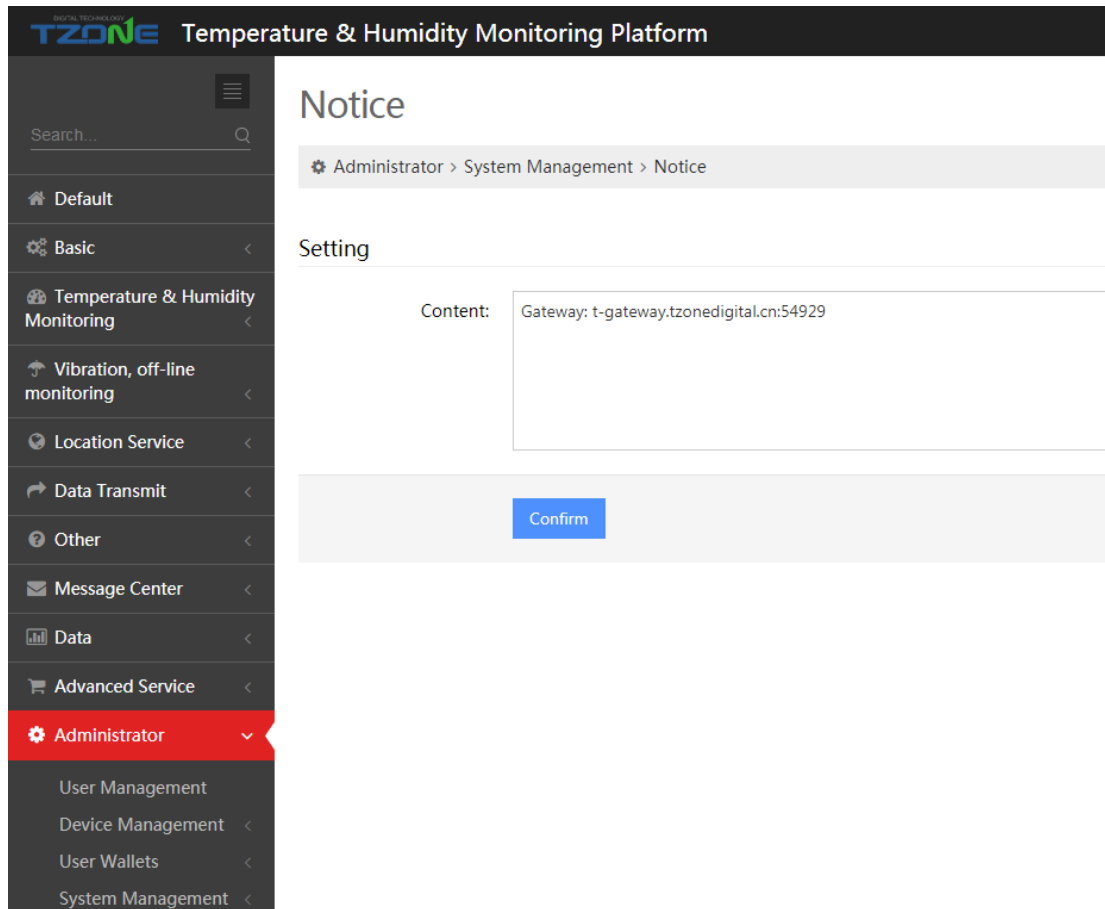
UserName:

Password:

SSL:

[Confirm](#)

## 16.5 Announcement settings



Displayed above of the login screen.

## 17. System internal service introduction ( for the professional)

### 17.1 Gateway program

Taking charge of the data's receive, management and store, analyzing the alarm and so on.

1.1. The unified time of all equipments are UTC time. (Set up TCP, the system will send Server UTC time: yyyy-MM-dd HH:mm:ss. It can be used for correcting your equipment's time)

1.2. On the same equipment, it is only supported one TCP/UDP. (take IMEI as the criterion)

1.3. The biggest connection number is 1000.

1.4. The overdue time of session is 120 secs. (The connection will be broken by the

system only if there is no data in 120 secs after the equipment connects the server.)

1.5. There is a time of effectiveness 5 mins for system if the equipment is added or altered.

1.6. The rule of storing data:

a. The data of temperature humidity of products TT18、TT11、TAG04、TT01、TT03 cannot be changed in 10 mins. The data is stored for only once.

b. Any change of temperature, humidity, energy and voltage of battery will be stored.

c. All the data will be stored for 7 days log (Stored with the format of TXT)

1.7. Filtrate conditions:

a. The uploaded data cannot meet the requirement of protocol.

b. The time of uploading is more than 1 hour or less than 7 days with server time.

c. The equipment is overdue (Note: there is no overdue time for open testing function (t-open.tzonedigital.cn))

1.8. Reply message:

a. Welcome to TZONE Gateway Server ( connect successfully )

b. @UTC,yyyy-MM-dd HH:mm:ss# use to calibrate time for device

c. @ACK,N# N is serial number,> 0, means successful,-1,means failure.

d. @ERROR,N# | error N is error code

Error code	Description
000	Unknown error
001	server taking data service doesn't work, it cannot take data for the time being.
002	The current number of connections exceeds the maximum number of the server that can be borne.
003	The customer side sends data too fast.
004	Data parsing error
005	The data time is not within the range that the sever receives.
006	unknown device of customer side
007	The device has been disabled

## 17.2 Push Message Service

Responsible for the management of message submitted by the system and the alarm signal analyze. It will be informed to the user via message, email and SMS

2.1. The biggest internal for message detection is 60s ( $\leq 60$ )

2.2. The delayed time of sending message is normally less than 2 minutes.

2.3. The delayed time of the "message box" on the Web is normally less than 10s.

### **17.3 Charged Service**

3.1 It should be paid in advance and the fee will be deducted automatically by the system. The system will renew for one month when the day before the equipment is about to run out 23:00pm. (Time is based on the UTC)

3.2 One equipment costs RMB 5 each month. (One month is based on 31 days)

3.3 There is a 7 days free trial for the new added equipment. There is no 7 days free trial if the equipment was deleted or used before.

### **17.4 Data forwarding service**

It is responsible to forward data in HTTP, MQTT, TCP, and access to third-part platform.

4.1、 forwarding time interval is 1 min one time.

4.2、 It will try again to forwarding when it fails.

### **17.5 Cache middleware**

It is used in multi-server distribution to protect data from missing.

It is normal when it delays less then 10mins according to the server configuration and concurrent pressure.

### **17.6 Others service**

For each alarm solution, in one hour, it will continuous alarm for one time.