

# UbiBot® Smart Sensing & Monitoring Solution



[www.ubibot.com](http://www.ubibot.com)

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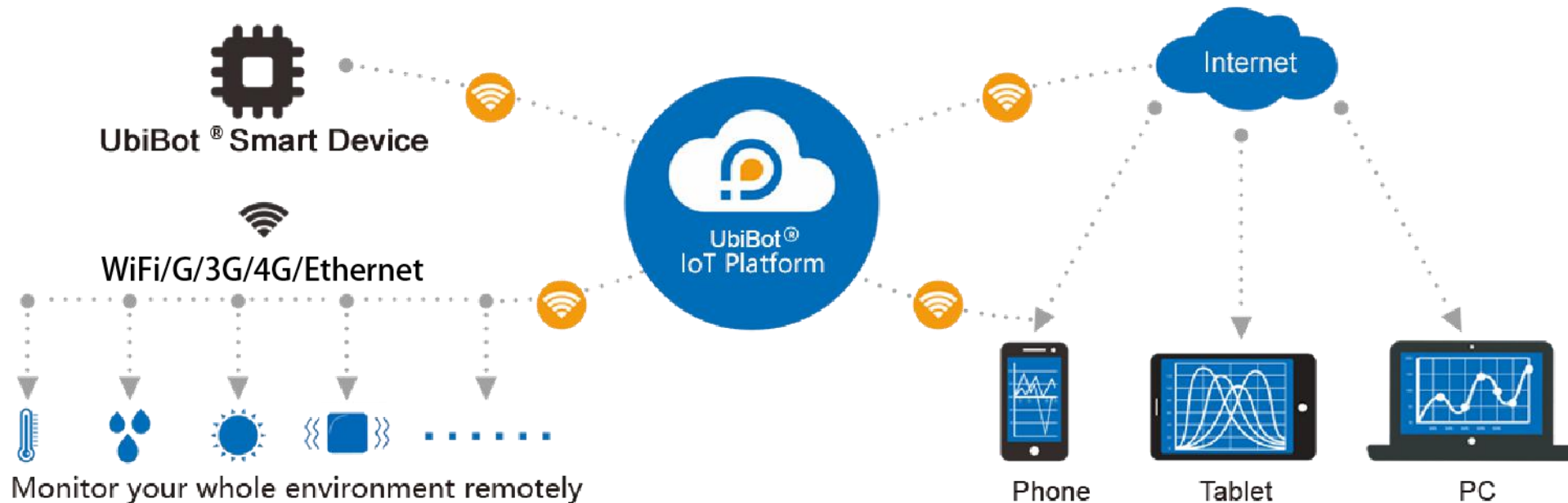


# /01

**Introduction**

# Introduction

UbiBot<sup>®</sup> offers a revolutionary way to monitor environmental conditions. Integrated with multiple sensors, the devices are able to monitor real-time environmental conditions, such as temperature, humidity, ambient light, soil temperature & humidity, CO2, etc. The sensors synchronise data to our UbiBot<sup>®</sup> IoT Platform via WiFi or Mobile network (no need of separate hub). You can then access your data from anywhere with a smartphone APP or the web.



# Introduction



## WS1

This WiFi enabled device continually monitors temperature, humidity and ambient light.

## WS1 Pro

This advanced device has WiFi and SIM card internet connection, with a large LCD screen.

## GS1

Industrial-grade GS1 is specially designed for harsh industrial environments.

## GS2

GS2 is an EC & PH value monitoring device, specially designed for the agricultural hydroponic industry.

## SP1

SP1 has WiFi and SIM card internet connection. You are able to remotely control other devices connected with it.

## MS1

MS1 provide accurate sensing of person / animal's slight moving.



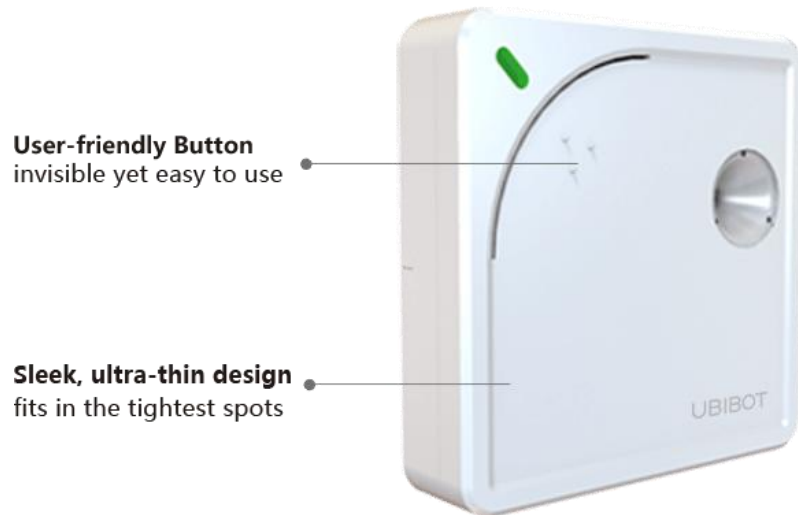
# /02

**Products**

# Wireless Environmental Monitoring WS1

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Ubitot wireless smart sensor WS1 is a highly sensitive, low-power and durable device. Due to its compact volume and lightweight, the device is easy-deployed and suitable for many conditions. It has built-in temperature, humidity and ambient light sensors, uploading data to the UbiBot cloud platform via WiFi network.



Size: 65mm \* 65mm \* 16.5mm



Weight: 32 ± 3g (without batteries)



Power Supply: 2 x AA batteries / Micro USB (5V/1A)



Network: WiFi (2.4G)



Ports: 1 Mini USB, 1 Micro USB



Alarm: APP, Wechat, Email, SMS Text, Voice Call, HTTP Interaction

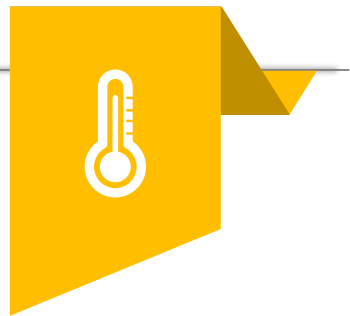
# Wireless Environmental Monitoring WS1

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WS1's built-in industrial-grade sensors gives you accurate sensing of environmental conditions.

The optional external temperature probe allows you to monitor liquids, freezers, fridges, and other harsh environments.

With WiFi network connection, it automatically synchronises its data to the UbiBot ® IoT Platform, which gives you secure access to the data from anywhere in the world via the website or our App.



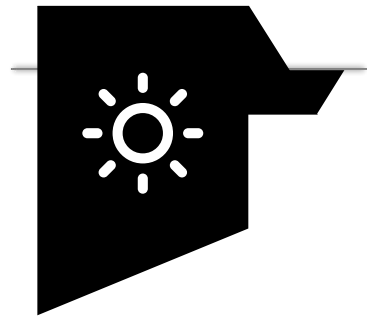
## Temperature

Precision :  $\pm 0.3^{\circ}\text{C}$   
Range:  $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$   
 $-4^{\circ}\text{F} \sim 140^{\circ}\text{F}$



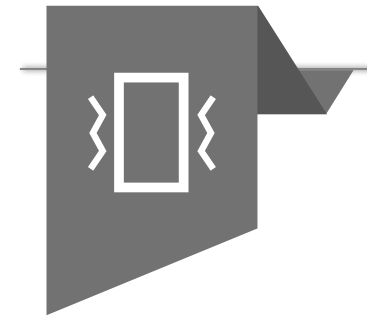
## Humidity

Precision:  $\pm 3\% \text{RH}$   
Range: 10% ~ 90%



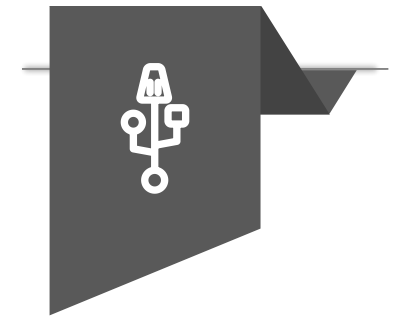
## Ambient Light

Precision:  $\pm 2\%$   
Range: 0.01 ~ 83K lux



## Vibration Index

Precision: 4mg  
Range: -16~16g



## External Probe

1\*DS18B20 Temperature Probe  
Precision:  $\pm 0.5^{\circ}\text{C}$   
Range:  $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$   
 $- 67 \text{ to } 257^{\circ}\text{F}$



# Wireless Environmental Monitoring WS1 Pro

In addition to having the same features of WS1, WS1 Pro also has 4.4-inch high-quality LCD screen to display the current environmental conditions and shows any alerts and notifications in real-time.

**WS1 Pro has WiFi and Sim Card 2-way network connection.**



Size: 126mm \* 86mm \* 22.5mm



Weight: 143 ± 3g (without batteries)



Screen: 4.4" LCD



Power Supply: 4 x AA batteries / Micro USB (5V/2A)



Network: WiFi, GPRS / 3G / 4G\*



Ports: 2 Micro USB



Alarm: APP, Wechat, Email, SMS Text, Voice Call, HTTP Interaction

# Wireless Environmental Monitoring WS1 Pro

The WS1 Pro device has two on-board USB ports.

The lower one supports RS485 interface probes, such as TH30S-B temperature & humidity probe, Soil probe, PT-100, etc. While, only one can be connected at a time.

It supports two DS18B20 temperature probes, and can be connected simultaneously with the external power source by a USB splitter.



## Temperature

- Precision :  $\pm 0.3^{\circ}\text{C}$
- Range:  $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$   
 $-4^{\circ}\text{F} \sim 140^{\circ}\text{F}$



## Humidity

- Precision:  $\pm 3\% \text{ RH}$
- Range:  $10\% \sim 90\%$



## Ambient Light

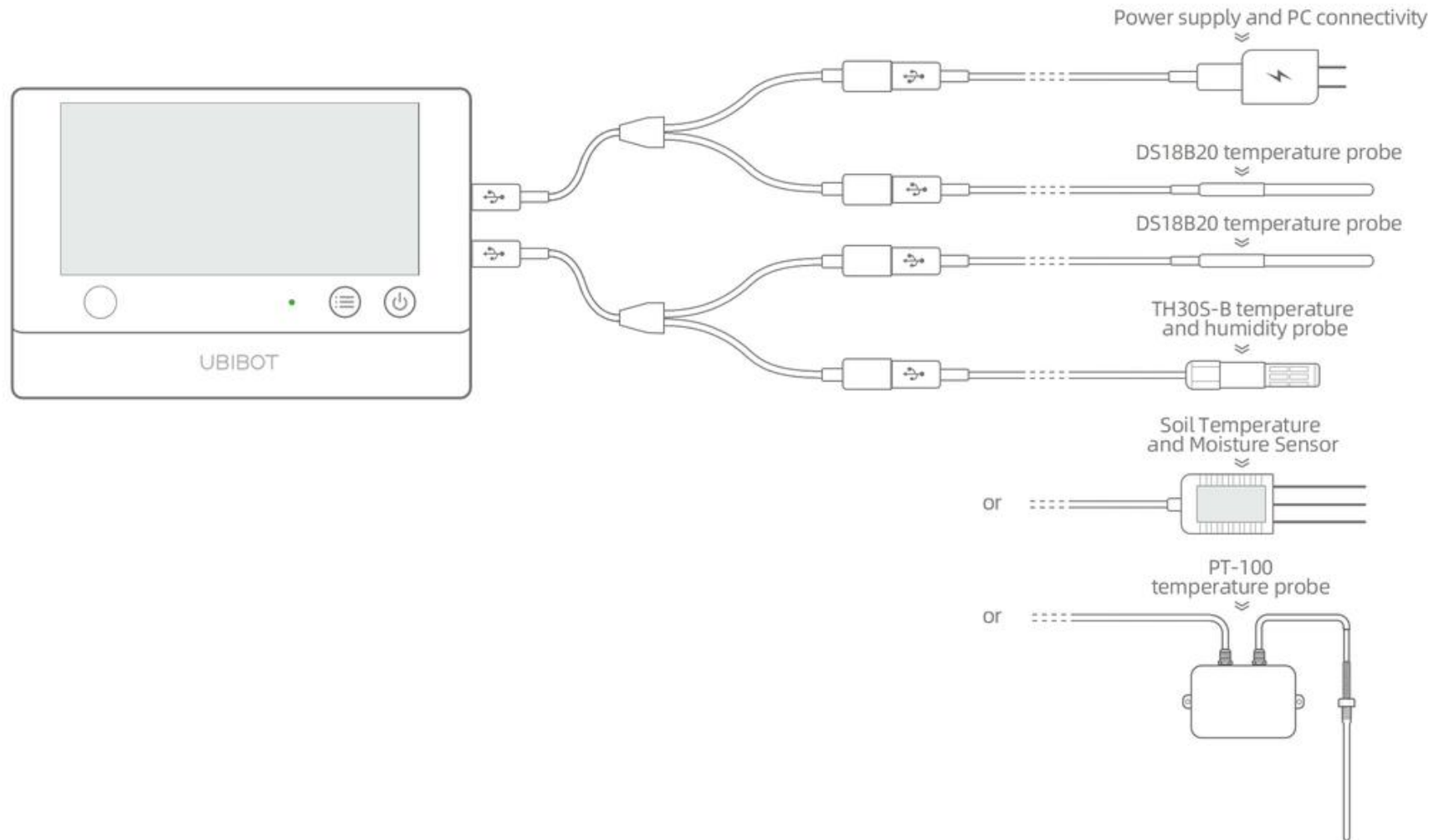
- Precision:  $\pm 2\%$
- Range:  $0.01 \sim 83\text{K lux}$



## External Sensor

- DS18B20 Temperature Probe
- TH30S-B Temperature & Humidity Probe
- PT 100 Industrial-grade Temperature Probe
- Soil Temperature & Moisture Sensor

# Wireless Environmental Monitoring WS1 Pro



# Industrial-grade Multi-Sensor Environmental Monitoring GS1

The UbiBot GS1 is specially designed for industrial usage and includes 4 models.

- large capacity lithium battery
- integrate external antenna for stable network connection
- embed the device with RS485 interface for multiple types of external probes.



Size: 115mm \* 90mm \* 55mm



Weight: (436 ~ 528) ± 3g



Screen: 4" LCD with backlight



Power Supply: 2900 mAh lithium battery/Type-C 5V / DC 5V~12V/Ethernet cable\*



Network: WiFi, GPRS / 3G / 4G\*, RJ45 Ethernet Cable\*



Ports: 1 Type-C, 1 DC Interface, 1 Audio Interface(RS485)\*, 1 Cable Interface \*



Alarm: APP, Wechat, Email, SMS Text, Voice Call, HTTP Interaction



Waterproofing Grade: IP65

# Industrial-grade Multi-Sensor Environmental Monitoring GS1

## Support Multiple Probes

With built-in RS485 interface, GS1 series supports multiple probes that can be used in various industry fields.  
(GS1-A excluded)



### Build-in Sensors

- Temperature: -20~60°C, ±0.3°C
- Humidity: 10~90%, ±3%RH,
- Ambient Light\*: 0.01—83K lux, 2%
- GNSS\*: GPS+GLONASS, ZSS < 2.5m (CEP-50 Autonomous@opensky)



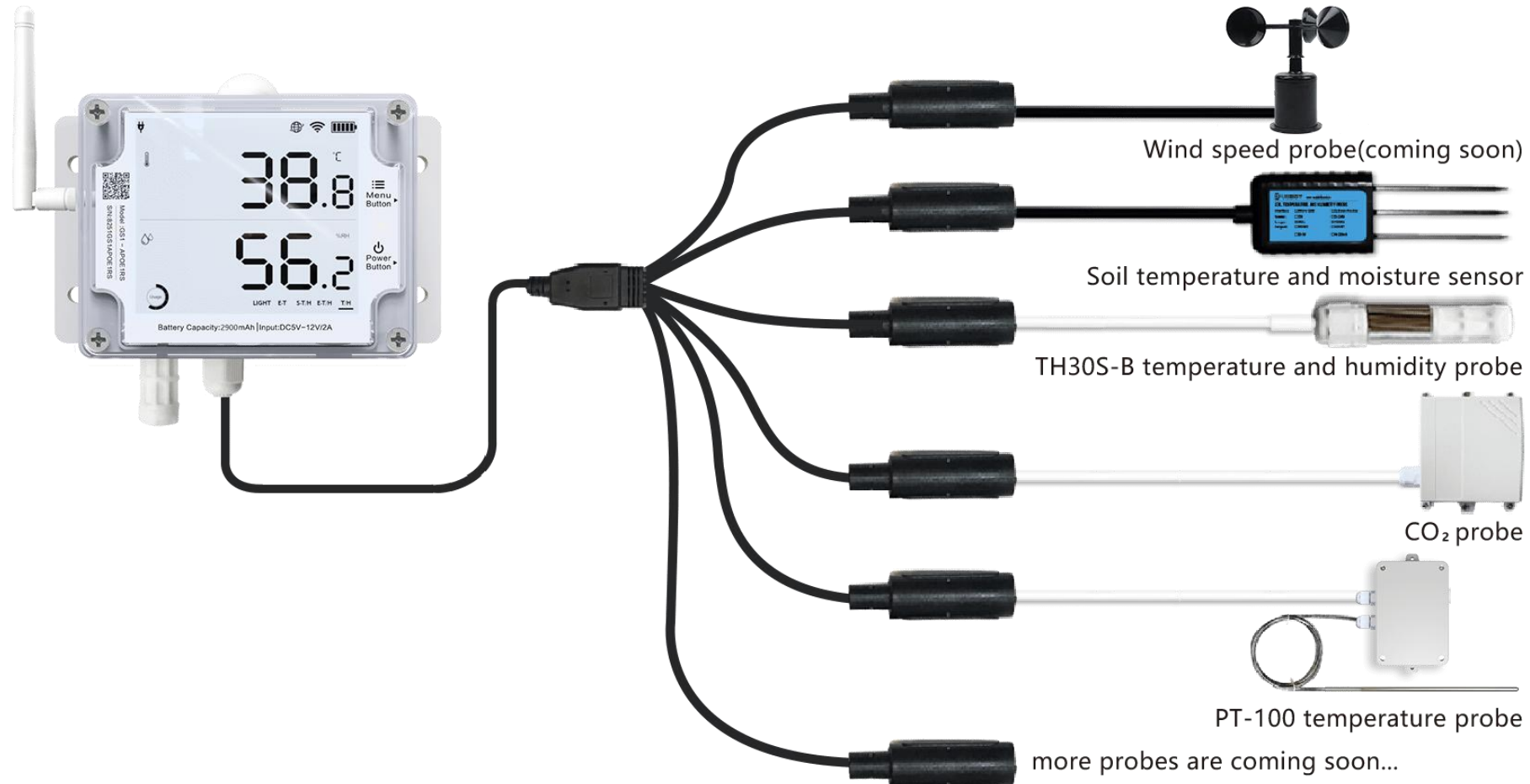
### External Sensors\*

- **TH30S-B Temperature & Humidity Probe:** -40°C~80°C, ±0.5°C; 0~100%RH, ±2%RH,
- **PT100 Industrial-grade Temp Probe:** -200~400°C, ±(1°C + 2%)
- **Soil Temperature & Moisture Probe:** -40°C~85°C, ±0.5°C; 0-100%, ±3% (0-50%) & ±5% (>50%)
- **External CO2 Probe:** 0~10000ppm, ±(30ppm + 3% F.S)
- **Wind Speed Sensor:** 0-30m/s, ± (0.3+0.03v) m/s
- **Ambient Light Sensor:** 0-200klx, ±5%
- **Strobe Light & Siren Alarm:** bulb; 110db



# Industrial-grade Multi-Sensor Environmental Monitoring GS1

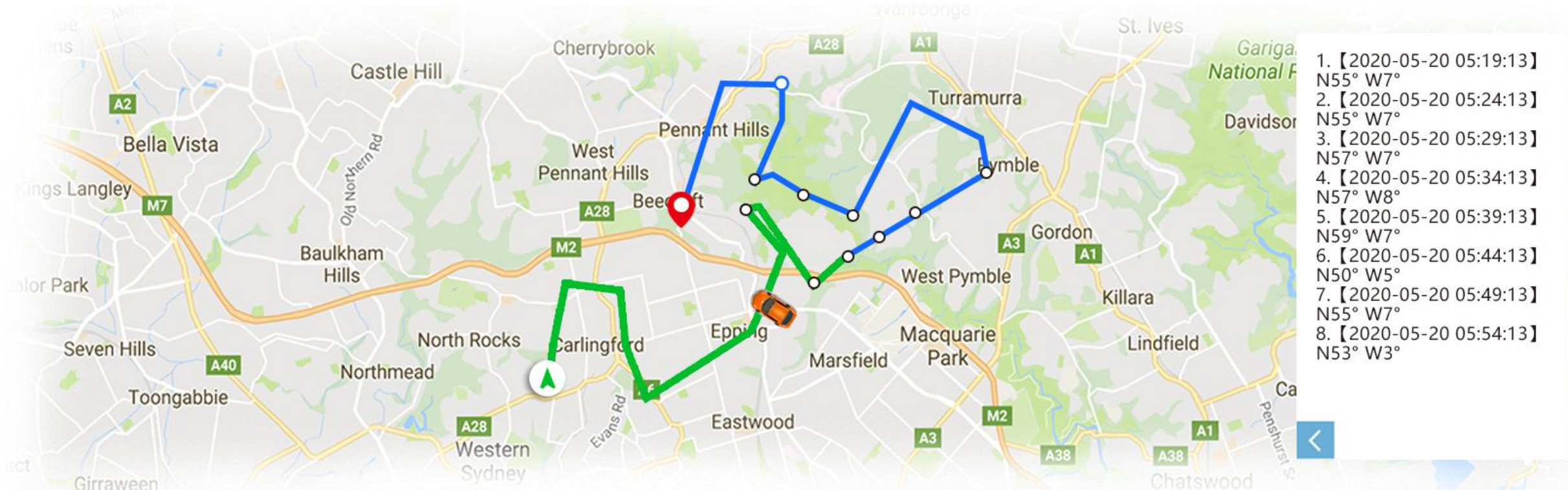
Multipal probes can be connected, only one of each type can be connected at a time.



# Industrial-grade Multi-Sensor Environmental Monitoring GS1

## Location Tracking feature is available on GS1-PL4G1RS.


With GS1-PL4G1RS device, you will be able to monitor the moving refrigerated vehicles not only the temperature but also its physical location. Wherever it goes to, the route can be recorded and sent to the platform via mobile data network.



# Industrial-grade Wireless EC/PH Monitoring GS2

Ubiotot GS2 series is an EC & PH value monitoring device, specially designed for the agricultural hydroponic industry. It also has temperature and ambient light sensors.




 Size: 115mm \* 90mm \* 55mm

 Weight: 440 ± 3g

 Screen: 4" LCD with backlight

 Power Supply: 2900 mAh lithium battery/Type-C 5V / DC 5V~12V/

 Network: WiFi, 4G\*

 Ports: 1 Type-C, 1 DC Interface, 1 Audio Interface(DS18B20), 1 EC, 1PH

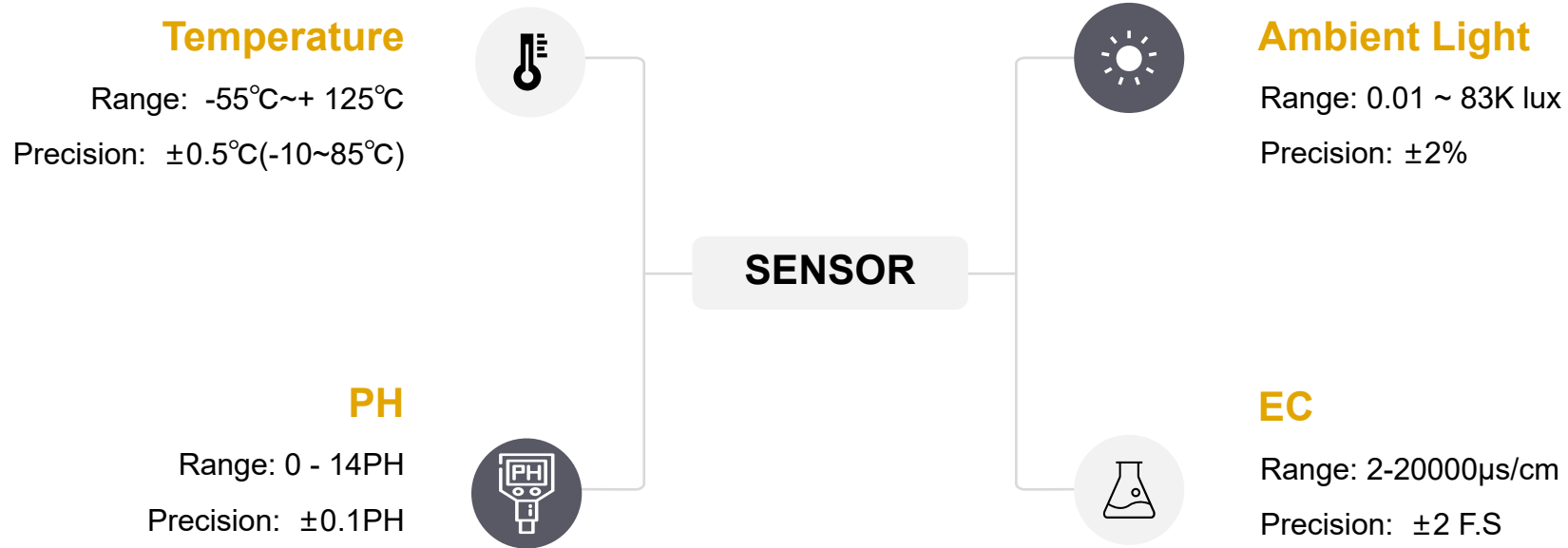
 Alarm: APP, Wechat, Email, SMS Text, Voice Call, HTTP Interaction

 Waterproofing Grade: IP65



# Industrial-grade Wireless EC/PH Monitoring GS2

By connecting the external EC/PH probes (included with the package), the readings can be monitored and displayed on the large LCD screen for instant view. After configuring with network, the readings can be synced to our platform for storage, online data analysis, alert triggering, etc. There are on-board knobs that allow you to calibrate the EC/PH probe accuracy.



# Wireless Smart Plug SP1

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Smart Plug SP1 supports WiFi and Sim network connection. It synchronizes the data to the UbiBot cloud platform, which you can log in to check the device status and remote control other devices connected with it at any time and anywhere with the UbiBot APP or web. It supports custom alerts which allows users to monitor the status of the environment.



Size: 117mm \* 64mm \* 35mm



Weight: 50 ± 3g



Working Voltage: 110V - 240VAC



Maximum Current: 16A



Maximum Power: 3.5kW



Network: WiFi (2.4G), 4G\*



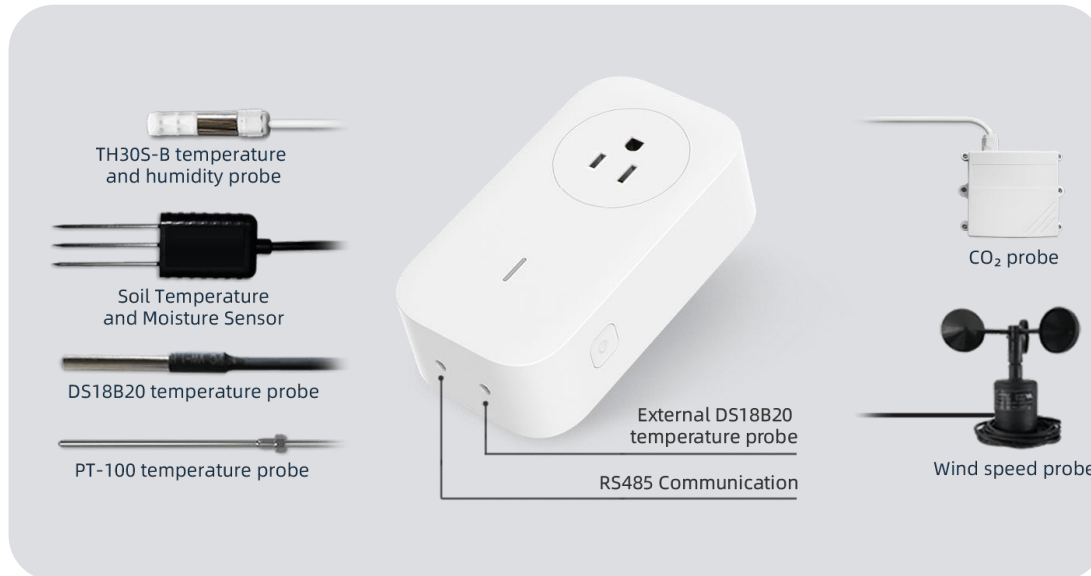
Ports: 2 Audio Interface



Alarm: APP, Wechat, Email, SMS Text, Voice Call, HTTP Interaction

# Wireless Smart Plug SP1

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External probes help you realize **more possibilities.**

SP1 comes with two external probe interfaces (RS485 and DS18B20 communication protocols) to support external probes connection. It can monitor the environmental conditions and sync the data to the cloud. With the automation rules you set, it can power on/off the appliances automatically without any onsite operations. It can also trigger alerts for extreme conditions, such as over heating.

# Wireless Motion Sensor MS1

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The Ubibot wireless Motion Sensor is a compact motion sensor that allows you to detect occupancy as well as movement. The product includes an infrared motion sensor which can monitor the real-time mild dynamics of human body or animals.

Embedded with WiFi, it detects environmental data all day round and automatically syncs all the data to the UbiBot® IoT Platform.



Size: 80mm \* 80mm \* 48mm



Detection distance: 12 meters



Detection angle: Vertical 40 degrees, horizontal 105 degrees



Power supply: Micro USB / POE power supply \* / AC power supply \*

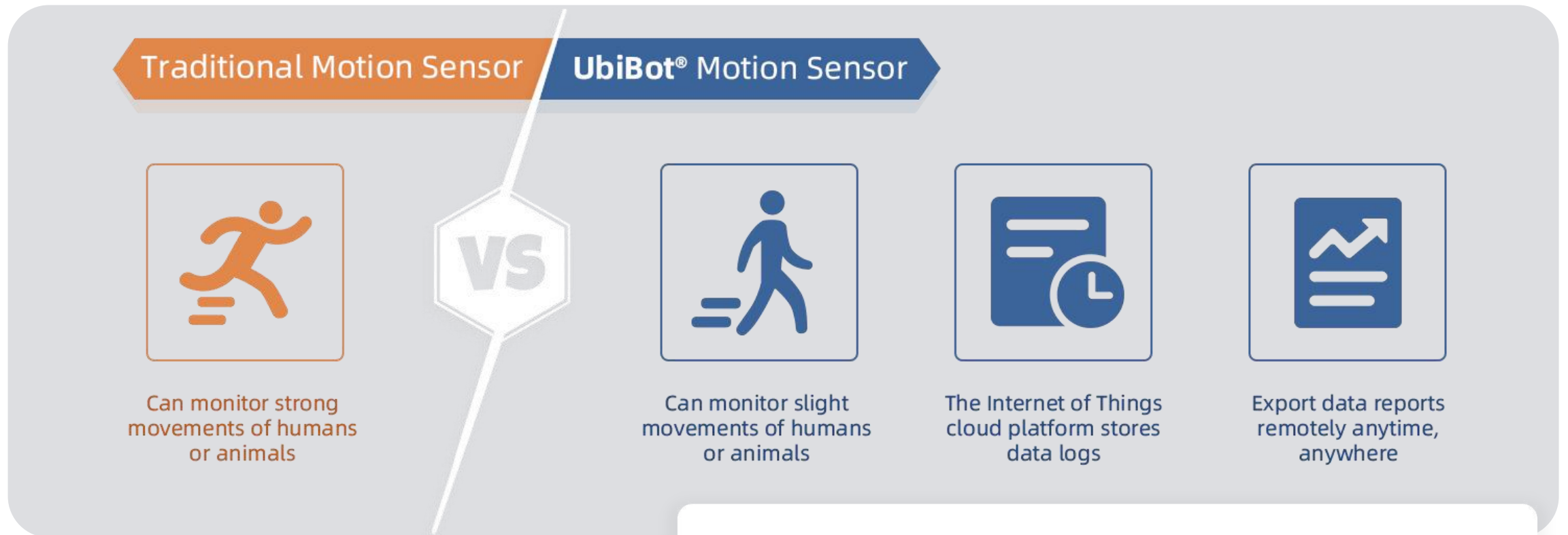


Network: 2.4GHz Wi-Fi / RJ45 Ethernet \*



Alarm: APP, Wechat, Email, SMS Text, Voice Call, HTTP Interaction

# Wireless Motion Sensor MS1



**Innovative technology,  
Striving for perfect**

- supports WiFi and RJ45 Ethernet cable connection
- accurately sense the slight movement of people or animals
- trigger log is recorded on UbiBot® cloud platform, which allows you to download anytime and anywhere.



# /03

**UbiBot IoT Platform**

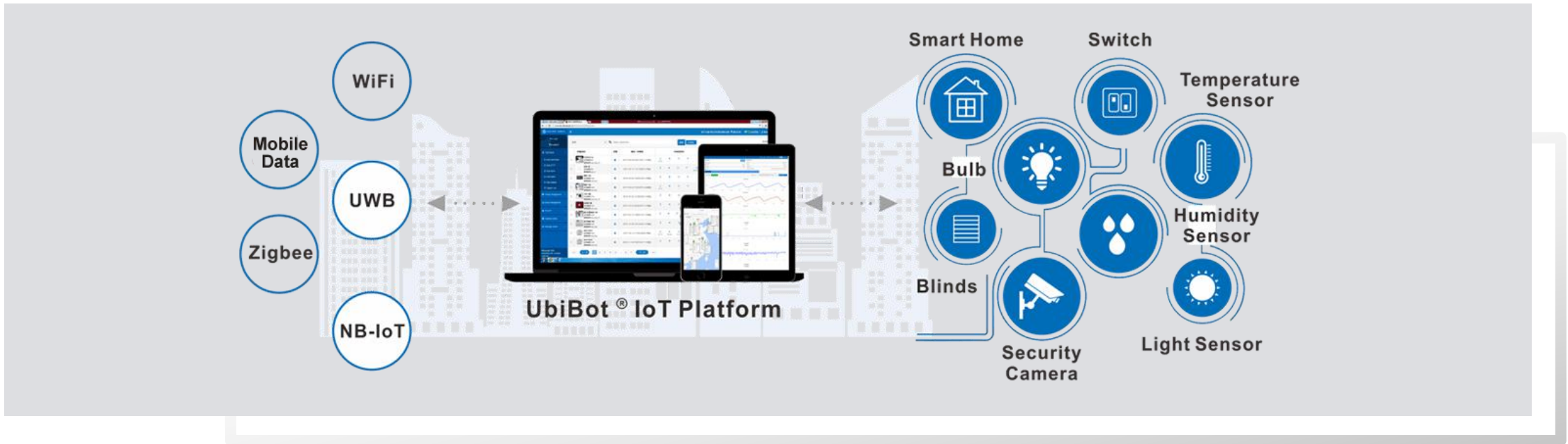
# Features of the UbiBot IoT Platform

## Cloud-Based IoT Platform

The UbiBot® IoT platform is a one-stop solution for all your IoT needs.

Manage all your devices from one location.

Advanced analytics & visualisation, custom alerts and secure historical data storage.



# Features of the UbiBot IoT Platform

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## How can the UbiBot® IoT Platform unlock the value of your business?



### Data Management

Manage all your IoT device in one location, extract clear insights and maximise its value. You always retain full control over your data.



### Storage of All Historical Data

Unlimited cloud-based storage ensures you will never run out of space. This allows you to view all your historical data via the app or browser.



### Data Forwarding Service

The Channel Data Forwarding service will forward a copy of the original feed data from any UbiBot device to the given URL endpoint.



### Analysis & Visualisation

Use powerful analysis and visualisation tools to get the most out of your data. Spot trends and make direct comparisons.



### Real-time Alerts

Our fully customisable alerts system will notify you by app notifications, emails, phone call/SMS, HTTP as soon as any metrics cross the thresholds you set.



### Highly Secure Platform

Our platform is designed to keep all your data secure so you never have to worry about hackers or other security breaches.



# Features of the UbiBot IoT Platform

Management Console 0.00 Credits 12 Space Pricing API Docs Blue English lxj\*\*\*@hotmail.com

Welcome! lxj\*\*\*@hotmail.com

Data Warehouse Total Used Space: 28.8 MB

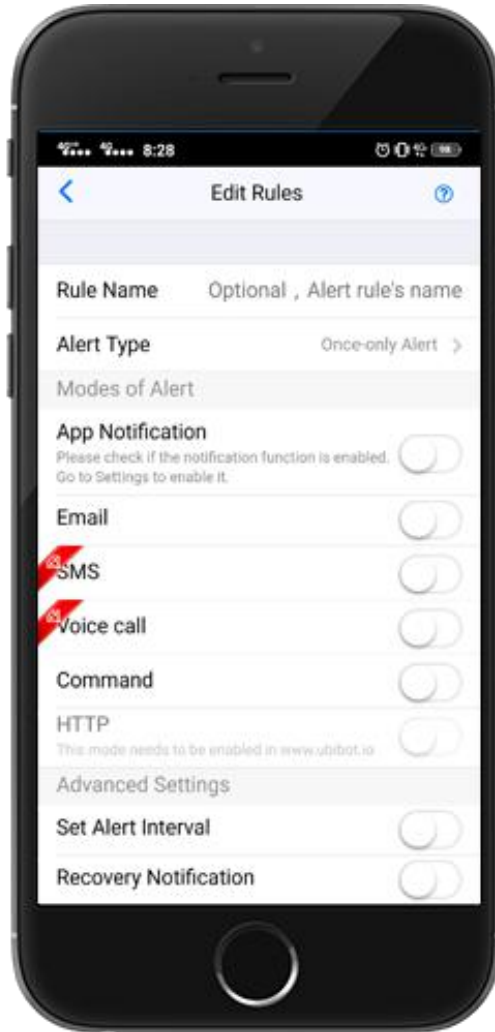
Search  [Share](#) [Display in Map](#) [°C/°F](#) [Serial Number](#) [Autoplay](#) [Export Device List](#) [PDF batch file export](#)

	Channel ID	Channel	Status	Permission	Latest Updated	Sensor Readings	Resource Usage	Network	Device Model	Created At
<input type="checkbox"/>	24869 <a href="#">View</a>	<b>GS1-AETH1RS</b> SN: 2383***KGS1	Online		10 minutes ago	29.3 59 4.1 -80 177.8 555.6 25.8 656.7 0 31.3	ubibot_free 12.9 MB/200.0 MB 7.8 MB/1.0 GB			08/02/2021 17:22:40
<input type="checkbox"/>	25733 <a href="#">View</a>	<b>WS1</b> SN: 98S***WS1	Online		a few seconds ago	30 56 167.4 5 -61 2.7 1	ubibot_free 9.3 MB/200.0 MB 217.0 kB/1.0 GB			26/02/2021 09:16:36
<input type="checkbox"/>	28151 <a href="#">View</a>	<b>C-28151</b> SN: RC0S***NWS1P	Online		a few seconds ago	29 61 123 4.8 -49 25.8 23.1 26.6 0	ubibot_free 6.9 MB/200.0 MB 2.7 MB/1.0 GB			16/04/2021 15:45:51
<input type="checkbox"/>	31890 <a href="#">View</a>	<b>C-31890</b> SN: C8Q8***8GS1	Offline		N/A		ubibot_free -/200.0 MB -/1.0 GB			01/07/2021 17:22:17

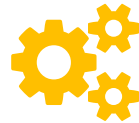
Per page  [<Previous](#) [1](#) [Next>](#) Total 1 pages, Go  page

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# Features of UbiBot App



## Multi-channel Configurable Alerts



### Advanced Alert Options

Like a good night's sleep? Choose the times an alert is active so you aren't disturbed.



### A Virtual Guardian

Our alert service monitors your devices remotely. Receive alerts if any metric goes outside the range you set.



### Multiple Channels

UbiBot® offers multiple channels to receive alerts. From email and voice to in-app notifications and SMS messages.



### Online Monitoring

We alert you as soon as any device goes offline. Remember that our devices still record data when offline, so you won't lose any readings.

# Features of UbiBot App

## Data Sharing



### Share Monitoring Data

Share your devices with colleagues, friends or family. Let others help monitor what's happening.



### Share Alerts

When sharing your device with another person you can also choose to add them to any alerts you have set up. Ideal for on-call team members.



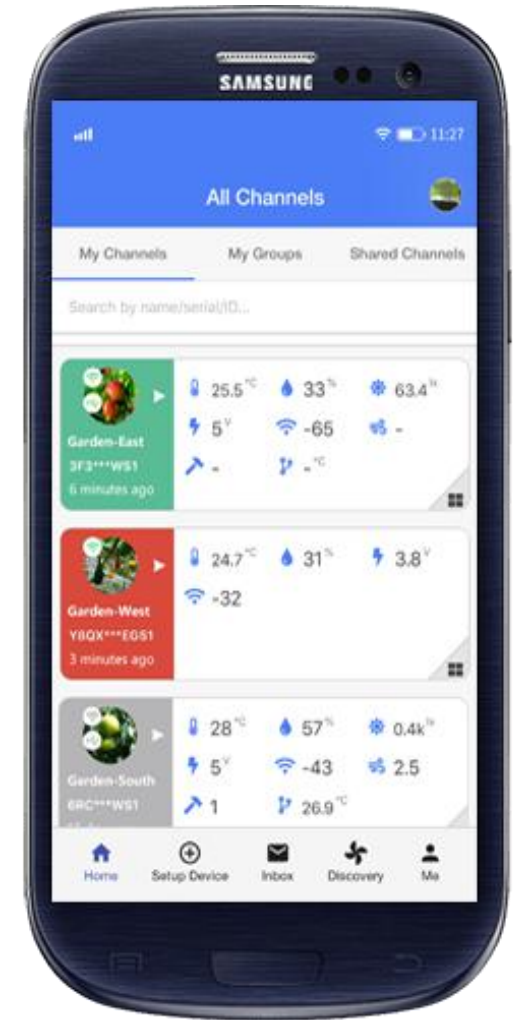
### Real-time Observations

Use the App to view the real-time conditions. Choose who to share the measurements with.



### Manage Data in One Place

The UbiBot ® App gives you a single place to manage data sharing and gives you a view of who previously had access to the data.



# Features of UbiBot App

The screenshot displays the UbiBot App interface, divided into four main sections:

- All Channels:** A list of channels with their respective status and data. Channels shown include GS1-AETH1RS, WS1, C-28151, and C-31890. Each channel card displays various metrics like temperature, humidity, voltage, and signal strength.
- GS1-AETH1RS Charts:** Three line graphs showing historical data for Temperature (°C), Humidity (%), and Voltage (V) from 03/07/2021 16:01:45 to 04/07/2021 15:15:13 (Asia/Shanghai).
  - Temperature °C:** Max.: 29.33 °C, Min.: 25.96 °C, Avg. 26.79 °C.
  - Humidity %:** Max.: 67 %, Min.: 59 %, Avg. 63.28 %.
  - Voltage V:** Max.: 4.12 V, Min.: 4.12 V, Avg. 4.12 V.
- New Rule:** Configuration screen for a new rule.
  - Rule Name:** Test
  - Field:** Temperature
  - Criteria:** greater than (>)
  - Value:** 10 °C
  - Alert Type:** Once-Only Alert
  - Alert Options:** APP Push, Email, SMS, Voice Call, Command, HTTP (all disabled).
  - Advanced Options:** Alert Interval, Recovery Notification (both disabled).
- Bottom Navigation:** Home, Setup, Inbox (12), Discovery, Settings.



# /04

**Use Cases**

# Freezers, Fridges and Cold Storage

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The UbiBot is professional on monitoring the temperature of freezers, fridges, cold chain storage in the fields of medical, food, supermarket, restaurant, etc., in case those devices are powered off due to any accident, to avoid any losses. UbiBot will send you alerts via email, phone calls/SMS, HTTP when the temperature goes over the range you have set.



# Laboratory

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The UbiBot gives you real-time monitoring of the environment in your laboratory without the need for a separate hub. Using the optional external probe you can monitor conditions inside your specimen storage fridges and freezers. Access the data live from anywhere in the world using our App.



# Greenhouse

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Temperature and humidity directly influence the health and yield of your crops. By using the multi-sensor devices, you can track the history of the growing environment and correlate this with crop yields.





# Warehouse

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UbiBot ® provides you with real-time wireless monitoring of storage conditions in your warehouse. Monitor conditions remotely, or out of hours, and give yourself peace of mind that all's well.



# Animals Breeding

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Maintaining the correct temperature is vital for breeding livestock. UbiBot ® allows you to monitor this in real-time from anywhere in the world.



# Horticulture

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UbiBot<sup>®</sup> gives you confidence that your plants are thriving by providing wireless real-time temperature, humidity and light data.



# Server Room

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UbiBot's 24/7 temperature monitoring and advanced real-time alerts can warn you about problems in your server room before they become critical.





/05

**About Us**

# About Us

We first began the research and development work on IoT products in 2009.

Our products have been sold all over the world now, we have more than 30 distributors around the world.

We have a very powerful technical team, both in hardware and software.

Our boss Mr. Lee got his doctor's degree at Imperial College London.

Several of our consultants are also professors from Imperial College.

We have our own assembly factory with powerful production capacity.

Our products have been trusted by many famous universities and organizations, such as University of California, the University of Sheffield, University of Rochester, Johns Hopkins University Applied Physics Laboratory, Michigan State University, Los Alamos National Labs, Metropolitan Transportation Authority, and many others.

# About Us

Our products get Certificates of compliance CE, RoSH, FCC, RCM, TELEC, and compatible with FDA CFR 21, EN 12830.



# Thanks



[www.ubibot.com](http://www.ubibot.com)

