User Manual

98198PTHIA_WIFI

Wireless Ammonia, Heat Stress, Temperature & Humidity Probe



Index

Section	What this section contains	Page
Features & Specifications	Product features, package contents, technical specifications.	**2**
Product Parts & Power Adapter	Name and function of each part, installation notes, power adapter information.	**3**
Wi-Fi Setup	Why the probe needs Wi-Fi, and how to connect it to your network with a smartphone.	**4**
Cloud Overview & Computer Login	What the cloud is for, computer vs. phone, logging in on a computer and the device list.	**5**
Computer – Device Settings & Alarms	Device label, time zone, e-mail alarm, high/low alarm values.	**6–7**
Computer – Data, Curves & Excel	View curves and data tables, export data to Excel.	**7**
Phone – Mobile Cloud	Use the cloud in a phone browser: readings, data, curves, alarm settings.	**8–9**
Phone – Alarm App	Download the app, receive alarm and disconnect notifications.	**10–11**
Troubleshooting & Warranty	Common questions and solutions, warranty terms.	**12**

Features & Specifications

98198PTHIA_WIFI Wireless Ammonia, Heat Stress, Temperature & Humidity Probe

Thank you for purchasing the probe-type ammonia, heat stress, temperature, and humidity detector. It is equipped with a built-in fan that quickly draws in air, ensuring fast response and accurate readings.

Features:

- ✓ Cost-effective, smart and easy to use for monitoring the air in poultry and livestock houses.
- ✓ Easy to install in poultry houses, pig farms, cattle barns and other animal housing.
- ✓ Built-in suction fan for fast acquisition of gas or pollutant concentration readings.
- ✓ Uniquely designed probe with nut mount, compatible with tripods for long-term recording or monitoring.
- ✓ All sensors are factory calibrated before shipment, with a two-year warranty and long service life.



!!Caution!!

If the sensor probe is disassembled without authorization (the device has a tamper-evident warranty seal), the warranty will be considered void.

Standard Package Includes:

1. Probe ×1 2. 6V Power Adapter 3. User Manual 4. White Box

Optional accessory: Stand base (angle-adjustable stand, sold separately)

Specifications

Model	**98198PTHIA_WIFI**	
Display Parameters	Ammonia (NH3), Heat Stress (THI), Temperature, Humidity	
Measurement Range	Ammonia (NH3): 0–50ppm	
	Temperature: 0.0 ~ 50.0℃	Humidity: 0.0 ~ 99.9%
	Heat Stress (THI): calculated from Temperature & Humidity	
Resolution	**NH3: 0.1ppm**	
	Temp.: 0.1℃	**RH%: 0.1%RH**
Sensor Type	**Ammonia: Electrochemical Type**	**Temp. RH: Capacitive Type**
	Heat Stress: calculated from Temp. & RH sensor	
Accuracy	**Ammonia: ± 5% F.S**	
	Temp.: ±1℃, RH%: ±5%RH (at 25℃)	
Operating Temp. and Humidity Range	-10~40℃ (14~104℉), 15%~90% RH%	
Power	**Output: DC 6V ; Input: AC 100–240V ~50/60Hz 0.5A**	

Product Parts & Power Adapter

Parts Description



No.	Part	Description
1	**Ventilation slots**	Keep the slots clear and do not cover them.
2	**Air flow ports (IN / OUT)**	Air enters the probe through the **IN** port and leaves through the **OUT** port (marked on the housing). Remove the green protective plugs before use.
3	**Probe housing & MAC sticker**	The ammonia (NH3) sensor is inside the probe housing. Do not open the housing – it has a tamper-evident warranty seal. The MAC sticker on the housing (above the status LEDs) shows the device MAC ID. **Do not tear off the MAC sticker.**
4	**Status LED (green)**	Shows the operating and Wi-Fi connection status of the probe.
5	**Temperature & humidity sensor / power cable**	The temperature & humidity sensor is outside the probe housing, on the power cable inside the spiral wrap, so it measures the surrounding air directly. The power cable connects to the supplied DC 6V adapter.
6	**Angle-adjustable joint (optional stand)**	Part of the optional stand. Tilt the probe to the required angle for installation.
7	**Stand base (optional)**	Optional accessory. Place it on a flat surface, or fix it to a wall or ceiling with screws through the mounting holes. Without the stand, the probe's nut mount fits a standard tripod.

IMPORTANT – Installation

- When installing, it is recommended to mount the probe with the head (air flow IN / OUT ports) facing **downward**.
- Do not tear off the MAC sticker above the status (Wi-Fi) LED. The MAC ID is needed to identify the device.
- Remove the green protective plugs from the IN / OUT ports before use.
- Install away from foggers, sprinklers, drinkers and places where water drips or condensation forms. Damage from water or condensation is not covered by the warranty.



IN / OUT


Remove green plugs

Power Adapter

Input	AC 100–240V ~ 50/60Hz, 0.5A
Output	DC 6V
Included	1 × 6V power adapter (standard package)

- Connect the probe's power cable to the adapter, then plug the adapter into an AC outlet (100–240V).
- Use only the supplied DC 6V adapter. An adapter with a different output voltage may damage the probe.
- For indoor use only. Keep the adapter dry and away from water, condensation and heat sources.
- If the readings become erratic, unplug the adapter and plug it in again.

Smartphone Wi-Fi Setup

Why set up Wi-Fi? The probe sends its readings to the cloud through your Wi-Fi network. Once it is connected, you can:

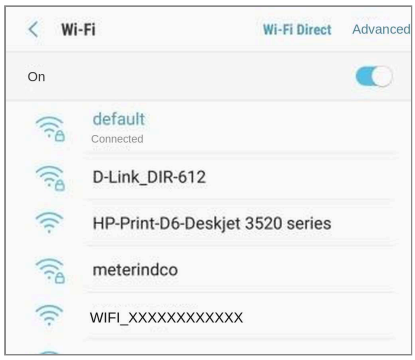
- Monitor ammonia, heat stress, temperature and humidity 24 hours a day from a computer or phone, anywhere.
- Record data automatically and view history curves, or download the data to Excel.
- Receive alarm notifications (Alarm App, e-mail) when a value is too high or too low, or when the probe is disconnected.

Wi-Fi setup is needed only once, or again when you change the router or its password.

Video guide
Scan to watch the Wi-Fi setup video
youtu.be/jnVAlfa4In4

a. Press and hold the button on the probe, then plug in the power adapter. Keep holding the button until the green LED starts blinking, then release it. When the green LED flashes rapidly, you can proceed with the following steps to set up the Wi-Fi connection.

b. Turn Wi-Fi ON on your phone, scan the list of available networks and select **"WIFI_XXXXXXXXXXXX"**. XXXXXXXXXXXX is the MAC number printed on the MAC sticker of your probe.

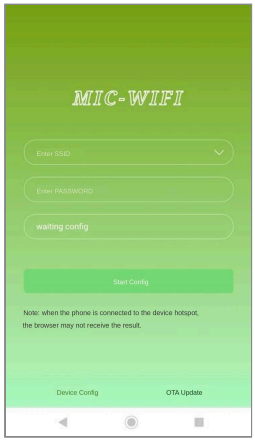


Android Apple

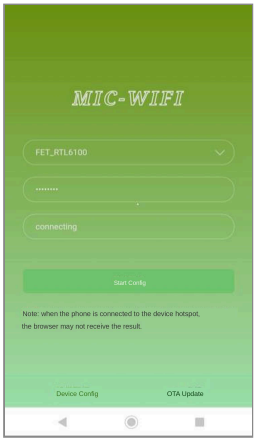
c. Next, open any web browser on your phone (e.g. Chrome or Safari), and enter **192.168.4.1** in the address bar to access the MIC-WIFI configuration page.
Note: *"WIFI_XXXXXXXXXXXX" is the probe's own Wi-Fi network and has no internet. If the phone shows "no internet" or asks to switch networks, stay connected to it until the setup is finished.*

d. Enter the network AP (SSID) or select the AP name from the dropdown menu, then enter the password. After entering the information, it will display "connecting." Next, tap "Start Config." Once it shows "Pairing Successful," the screen will change, indicating that the Wi-Fi connection is complete.

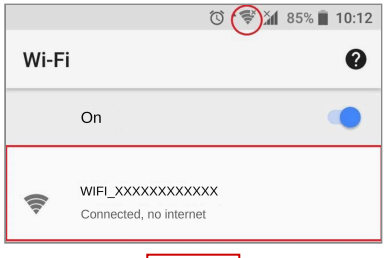
e. After the configuration is complete, when the green LED starts blinking, the Wi-Fi setup was successful and you can now view the data on the cloud and the Alarm App.



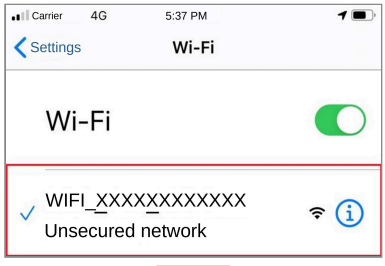
Configuration page



Connecting



Android



Apple

Cloud Overview

The cloud platform receives and stores the data uploaded by the probe, so you can check your site from anywhere without being next to the probe. Use the cloud to:

- View the latest readings of all your devices.
- View history data as curves or tables (up to 1 year of data on a computer).
- Set high/low alarm values and how alarms are sent (Alarm App, e-mail).
- Download the recorded data to Excel.

	Computer (PC)	Phone
How to open	Web browser https://www.mic-meter.com/Micc/Home/Login	Phone browser (Mobile Cloud) and the Alarm App
Best for	Full settings: device label, time zone, e-mail alarms; view up to 1 year of data and curves; Excel export.	Quick checking on site: latest readings, data and curves (up to 3 months per query), alarm values; push notifications.
Pages	P5 – P7	P8 – P11

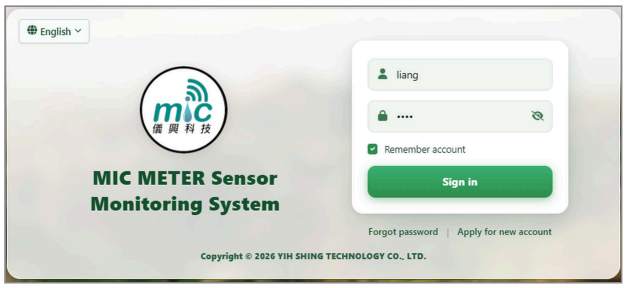
The same User ID and Password are used on the computer, the Mobile Cloud and the Alarm App.

Computer – Log in & Device List

LOG IN CLOUD:

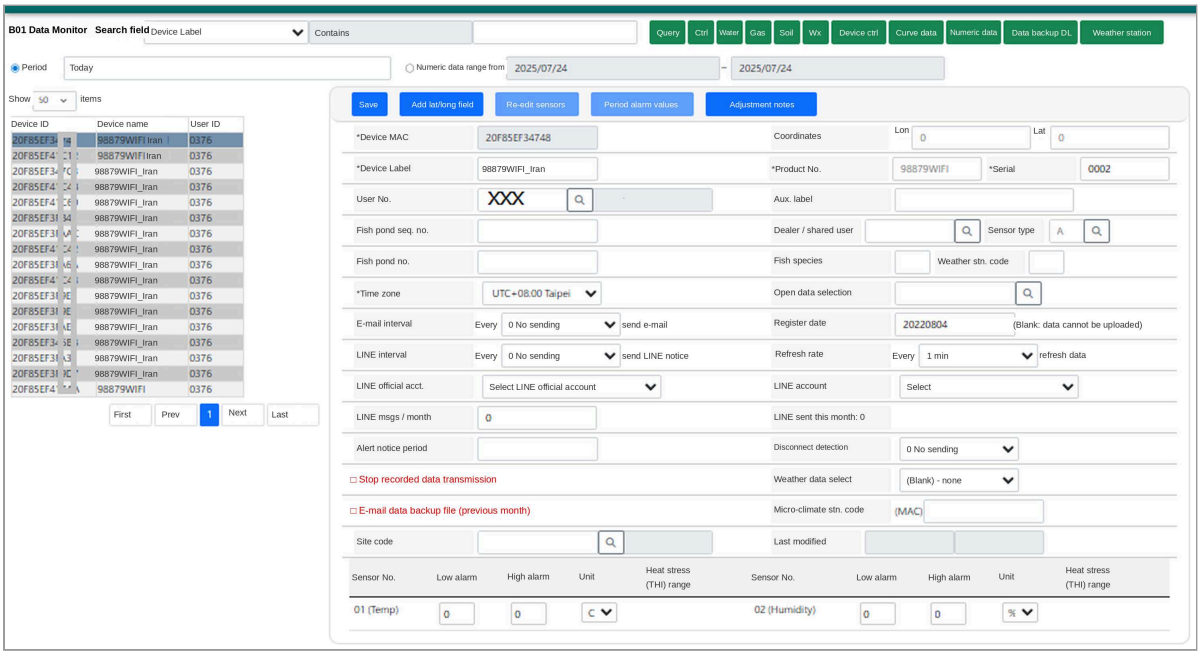
1. Select language: select the language from the language menu on the login page.

2. Log in to the cloud: MIC registers an account for the customer before shipment. Please go to the cloud website: https://www.mic-meter.com/Micc/Home/Login
Enter the User ID and Password provided, and press **Sign in** to log in.



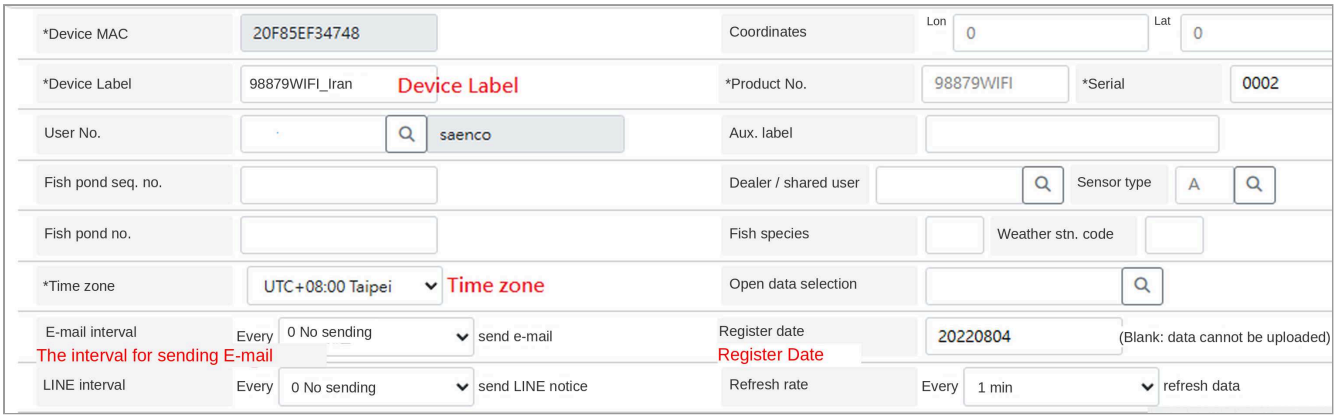
Computer login page

After logging in, the **B01 Data Monitor** page opens. The left side shows all the equipment names, and the right side is for editing equipment details.

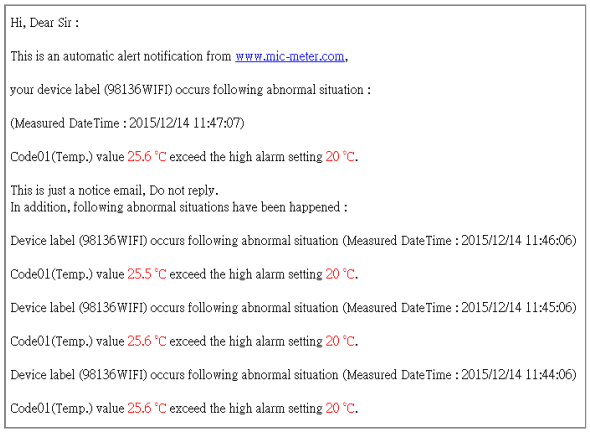


Computer – Device Settings & Alarms

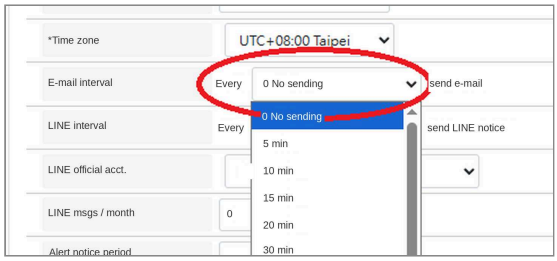
Edit Data: click a device in the list on the left to edit its data.



- **Device Label:** User can edit the location of the device.
- **Time zone:** Select the time zone from the pull-down menu.
  NOTE: If the time zone is changed, the record time will change immediately.
- **Register Date:** The register date of the meter.
- **Time interval for sending E-mail:** Pull down the menu and select the time interval for sending alert messages by e-mail.
  ※If the value keeps exceeding or falling below the alarm value, the system will keep sending alarm messages by e-mail. To turn off the e-mail alarm, go to Device → Edit Data → E-mail interval → 0 No sending → press Save to save the setting.

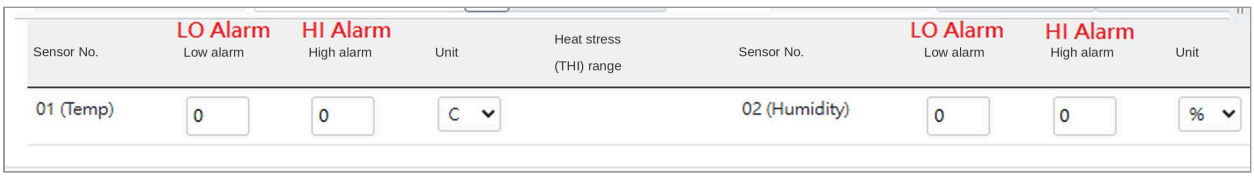


Warning e-mail



Turn off e-mail alarm

- **High/Low alarm setting:** Enter the High/Low alarm values for each parameter.



- **Sensor setting range** (refer to the specification of the meter):

Product number	Sensor	Range
98198PTHIA_WiFi	Temperature	0.0 ~ 50.0°C
	Humidity	0.0 ~ 99.9%
	Ammonia	0 ~ 50ppm
	Heat Stress	Calculated

- **High/Low alarm selection** (V: available, X: not available):

Sensor	High alarm setting	Low alarm setting
Temperature	V	V
Humidity	V	V
Ammonia	V	V
Heat Stress (THI)	V	V

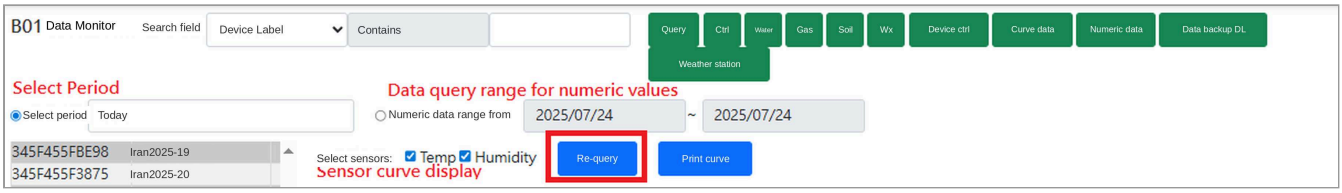
- **Unit:**

Parameters	Unit	
Temperature	(°C)	(°F)
Humidity	%	
Ammonia	ppm	
Heat Stress (THI)	Index (no unit)	

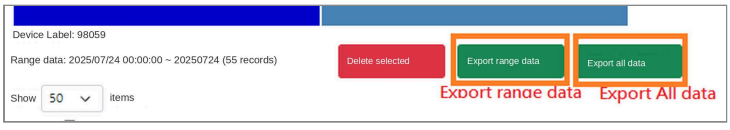
※ Remember to press Save after editing is completed.

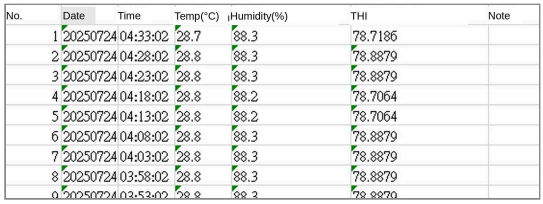
Data Monitor

In B01 Data Monitor, press Curve data to view the curve.



1. **Select period:** Select the uploaded data within a period of time (up to 1 year).
2. **Data query range for numeric values:** Select the exact start and end date to view the data and curve.
3. **Sensor curve display:** It shows at most four parameters in the curve. If the meter has multiple functions, select the required sensors to show in the graph.
4. **Show curve:** Select the device and period, check the sensors to be displayed, and then press Re-query. The curve shows automatically.
   - Move the mouse over the curve and the sensor value at that date and time will show on the screen.
     ※It only shows the previous sensor reading at the cross point of the graph. The display shows at most 4 curves; if the meter has multiple monitoring functions, select the required sensors by checking the sensor curve display boxes.
5. **Show data:** Click Numeric data to get the data table. User can choose to download all data or interval data.
6. **Download Excel:** Click **Export range data** or **Export all data** to download the data as a compressed Zip file. Unzip the file and open the Excel file to check the recorded data (refer to the picture below).





No.	Date	Time	Temp(°C)	Humidity(%)	THI	Note
1	20250724	04:33:02	28.7	88.3	78.7186	
2	20250724	04:28:02	28.8	88.3	78.8879	
3	20250724	04:23:02	28.8	88.3	78.8879	
4	20250724	04:18:02	28.8	88.2	78.7064	
5	20250724	04:13:02	28.8	88.2	78.7064	
6	20250724	04:08:02	28.8	88.3	78.8879	
7	20250724	04:03:02	28.8	88.3	78.8879	
8	20250724	03:58:02	28.8	88.3	78.8879	

※Excel will show the data from the beginning to the date you press the download button.
NOTE: On a computer you can view up to 1 year of uploaded data. Remember to download the data regularly if you need to keep it longer.

7. **Logout:** Press "Logout" in the upper right corner.

Mobile Cloud

The MIC cloud platform can be opened directly in the web browser of your smartphone (Chrome, Safari, etc.). No app installation is required.

Mobile Cloud

1. Log in

- Open the cloud website or scan the QR code: https://www.mic-meter.com/Micc/Home/Login?ui=d
- Select the language from the menu at the top right.
- Enter the User ID and Password provided by MIC (MIC registers the account before shipment).
- Tick **Remember account** if you want the User ID to be kept, then tap **Sign in**.

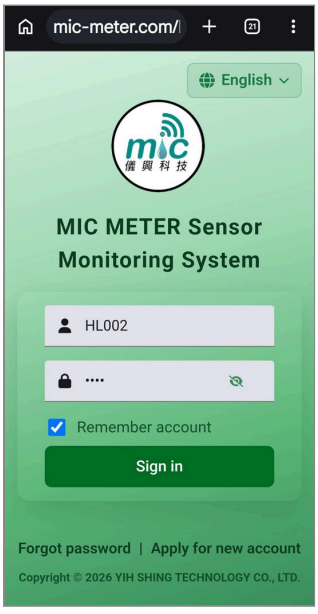
2. B01 Data Monitor

After logging in, the B01 Data Monitor page lists every device on the account. The account name and software version are shown at the top. Each device card shows:

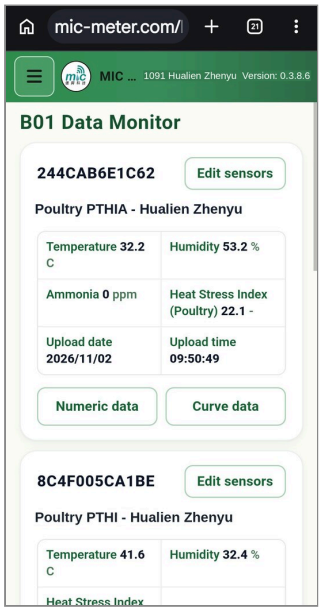
- Device ID (MAC) and device name. The device name is the farm or location name of the device – e.g. "Poultry PTHIA - Hualien Zhenyu" in the screenshots is an example farm/location name. The name can be changed in Device Label (see P6).
- Latest readings: Temperature, Humidity, Ammonia and Heat Stress Index (Poultry).
- Upload date and upload time of the latest reading.
- Buttons: **Edit sensors**, **Numeric data** and **Curve data**.

3. Numeric data

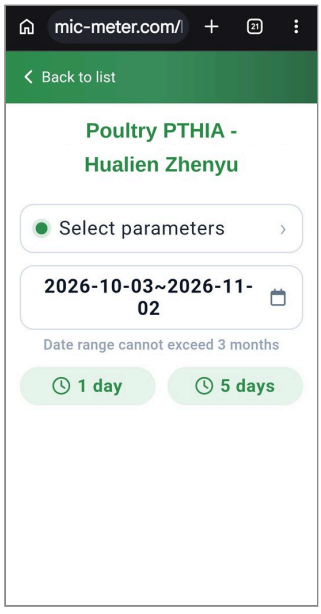
- Tap **Numeric data**, then tap **Select parameters** to choose the parameters to display.
- Tap the date field to choose the start and end date. The date range cannot exceed 3 months. Tap **1 day** or **5 days** for a quick range.
- The data table lists the readings with the newest first. Swipe left on the table to see the other parameters.



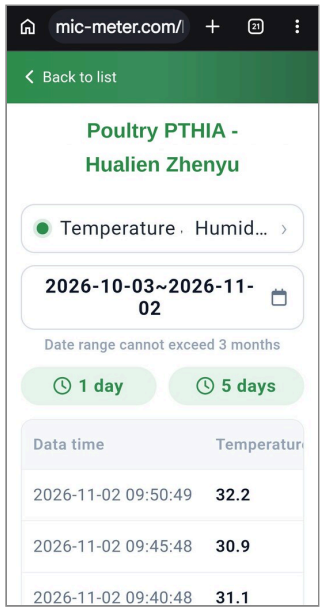
Login



B01 Data Monitor



Select parameters / date



Numeric data

Mobile Cloud – continued

4. Curve data

- Tap **Curve data** on the device card. Select the parameters and the date range in the same way as Numeric data (maximum 3 months, or tap **1 day** / **5 days**).
- The selected parameters are drawn in one chart with a colour legend at the top. The left and right axes show the scales of the different parameters.

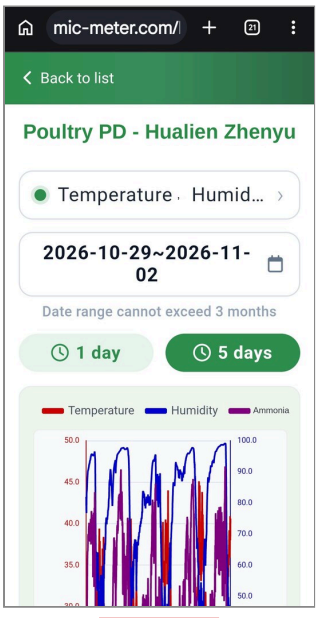
5. Edit sensors

Tap **Edit sensors** on the device card to open the device settings. The device name (farm or location name, e.g. "Poultry PD - Hualien Zhenyu") and device ID are shown at the top.

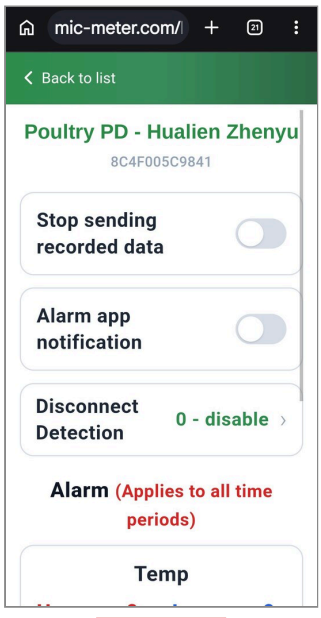
- **Stop sending recorded data**: switch on to stop sending the recorded data.
- **Alarm app notification**: switch on to send alarm notifications of this device to the Alarm App (see P10–P11).
- **Disconnect Detection**: tap to select the disconnect detection setting. Select **0 – disable** to turn off disconnect alerts (for example, when the device is intentionally switched off).
- **Alarm (applies to all time periods)**: enter the **Upper** and **Lower** alarm values for each parameter.
- Tap **Save** to save the settings.

6. Menu, language and logout

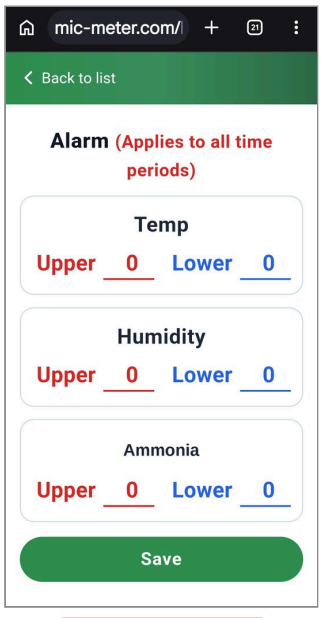
- Tap the ☰ menu icon at the top left of the B01 Data Monitor page. The menu shows the account name (e.g. "1091 Hualien Zhenyu") and software version.
- Under **ACCOUNT & LANGUAGE**, select the display language or tap **Logout** to log out.
- Tap **< Back to list** on any device page to return to the device list.



Curve data



Edit sensors



Alarm values / Save



Menu / Logout

Alarm App

The Alarm App (Yi Hsing Sensing and Monitoring System) receives alarm and disconnect notifications from your devices and lets you check device data on your phone.

1. Free download

Search the Google Play or App Store, or scan the QR code below to download the free app:

Android – Google Play
https://play.google.com/store/apps/details?id=com.meterindco.miccapp

iPhone – App Store
https://apps.apple.com/app/id6748759798

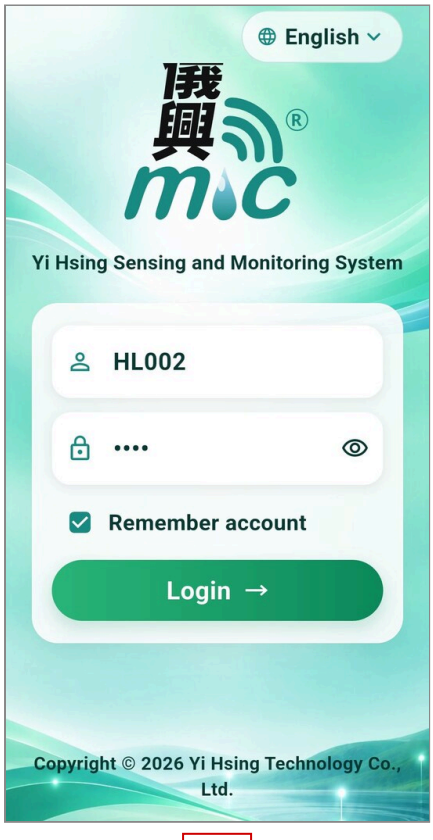
2. Log in

- Open the app and select the language at the top right.
- Enter the same User ID and Password used for the cloud. Tap the eye icon to show or hide the password.
- Tick **Remember account** if required, then tap **Login →**.

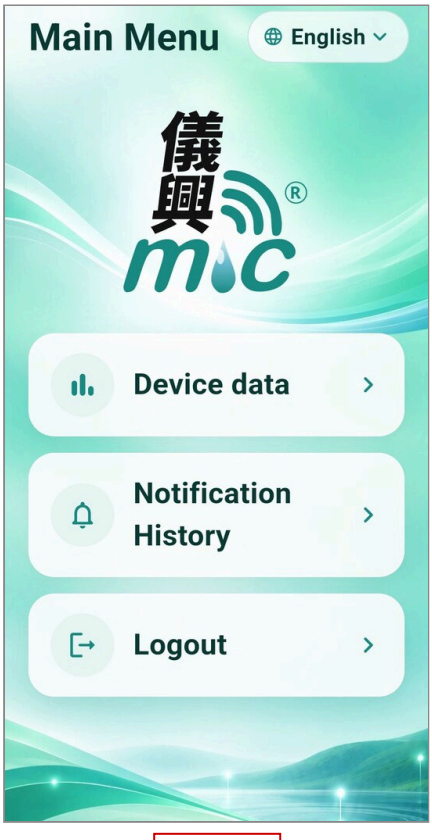
3. Main Menu

- **Device data**: view the list of devices and their data.
- **Notification History**: view the alarm and disconnect notifications received.
- **Logout**: log out of the app.
- The language can be changed at any time from the language menu at the top right.

Note: To receive notifications on your phone, allow notifications for the app on your phone, and switch on **Alarm app notification** for the device in Mobile Cloud → Edit sensors (see P9).



Login



Main Menu



Select Device

Alarm App – continued

4. Device data

- Tap **Device data** in the Main Menu to open **Select Device**. Each device is listed with its number, device name (farm or location name), device ID and **Last updated** date and time.
- Tap a device to view its data. Tap ← to return to the Main Menu.

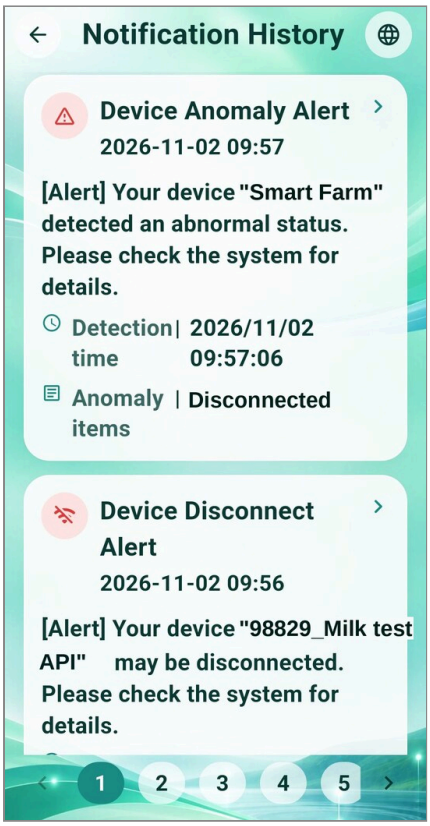
5. Notification History

- **Device Anomaly Alert**: the device detected an abnormal status. Shows the detection time and the anomaly items.
- **Device Disconnect Alert**: the device may be disconnected. Shows the detection time and how long the device has been offline.
- Tap a notification to view the details. Use the page numbers at the bottom to see older notifications. Tap the globe icon at the top right to change the language.

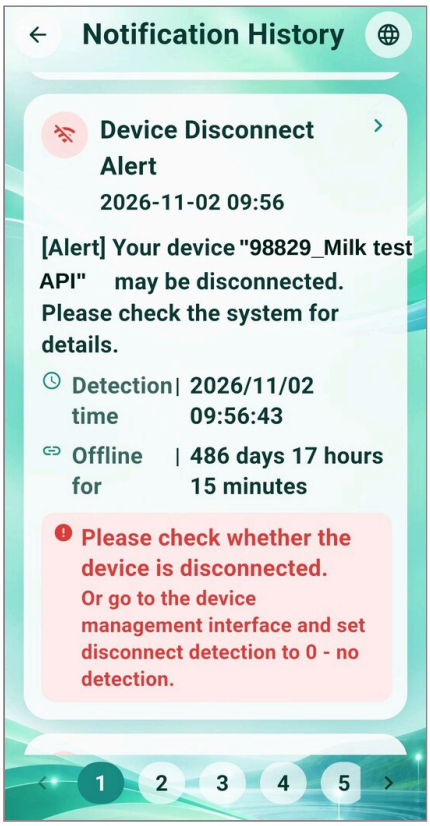
Note: If you receive a Device Disconnect Alert, check whether the device is powered and connected to the network. If the device is intentionally offline, set **Disconnect Detection** to **0 – disable** in Mobile Cloud → Edit sensors (see P9).

6. Logout

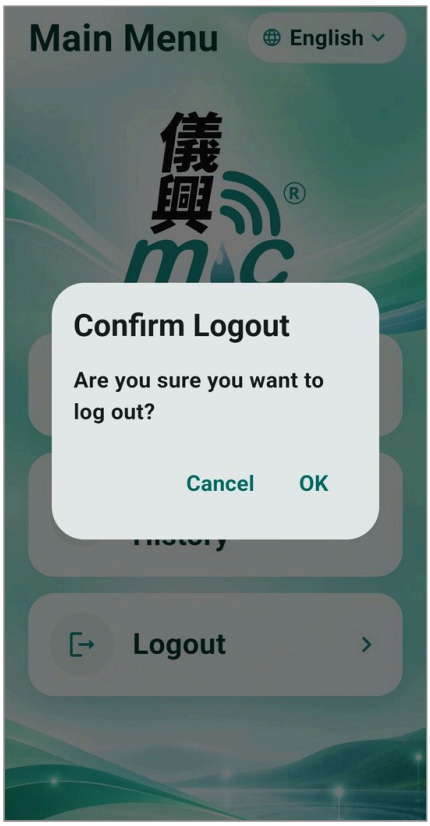
- Tap **Logout** in the Main Menu, then tap **OK** to confirm (or **Cancel** to stay logged in).



Notification History



Disconnect Alert detail



Confirm Logout

Troubleshooting

Q: No data shows in the cloud or the Alarm App?
A: Check that the adapter is plugged in and the green LED is on, and that your Wi-Fi router is working. If the router or its password was changed, set up Wi-Fi again (see P4).

Q: I received a Device Disconnect Alert?
A: Check the power and the Wi-Fi connection of the probe. If the probe is switched off on purpose, set Disconnect Detection to 0 – disable (see P6).

Q: How far can the probe be from the router?
A: Around 100 meters with no obstacles or interference, depending on the router. Walls, metal structures and long farm buildings shorten the distance; add a Wi-Fi extender if the signal is weak.

Q: Readings look wrong or unstable?
A: Make sure the green protective plugs have been removed and the IN / OUT ports are not blocked by dust or water. Unplug the adapter and plug it in again. If the problem continues, contact your dealer – the sensor may need service.

Q: A value shows out of range?
A: The reading is outside the measuring range of the sensor (see Specifications, P2).

WARRANTY

This instrument is warranted for two years from the date of purchase (one limited warranty applies to cables). A Return Authorization letter must be issued before returning for any reason. This warranty does not apply to defects resulting from action of the user such as misuse, abuse, alteration, neglect, improper wiring, improper maintenance or repair, or unauthorized modification, damage resulting from leaking batteries, or operation outside of specification. During the warranty period the manufacturer reserves the right to decide either to repair or replace the product. The meters are to be returned with good packing to prevent any damage in shipment and insured against possible damage or loss.

The two years' warranty doesn't apply to:

- Accessories and batteries (not covered by warranty).
- Claims are not acceptable for improper use (including adaptation to particular applications not foreseen in the instruction manual) or improper combination with incompatible accessories or equipment, or by previous attempts at repair carried out by unskilled or unauthorized personnel.
- Sensor damaged by user's improper use (watering, burning, condensation...).

Service & Support
MIC Meter Industrial Co. 儀興科技股份有限公司
No. 115-117, Longzhen 2nd St., Nantun Dist., Taichung 408, Taiwan
Tel: +886-4-23751881 · E-mail: mic@meterindco.com.tw · www.meterindco.com.tw