

AISSENS 100AW



Advancing condition monitoring vibration sensor with Wi-Fi connectivity and full-scale data precision.

User Manual – English V1.5

Google Play QR Code



iOS APP Store QR Code



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I. Safety instructions

To ensure the safe operation of this product, please read and follow the instructions carefully. These guidelines are designed to provide safe operating procedures and prevent any danger to the user and others.

1. **Product Placement:** Keep this product out of reach of children.

- Swallowing sensor components, including accessories, or batteries may cause serious hazards. If accidental ingestion occurs, seek medical assistance immediately.

2. **NON-Rechargeable battery usage:**

- During transportation, NON-Rechargeable batteries are classified as hazardous materials (also known as dangerous goods) and must be strictly controlled in accordance with relevant regulations and safety requirements.
- Improper use may result in fire, explosion, or leakage, handle with caution.
- Keep both new and used batteries out of reach of children.
- When replacing the battery, use only the same type provided by the manufacturer. **Specific Battery type: EVE Energy CO., Ltd/ ER14505, provide two batteries in parallel.**

3. **Health Caution:** If any skin irritation or inflammation occurs during or after using this product, stop using it immediately and seek medical assistance.

4. **Operational Restrictions:**

- Do not modify this product or touch any exposed internal components to avoid injury.
- If the product emits smoke or an unusual odor, stop using it immediately.

- Ensure the product casing is properly installed to maintain its waterproof function. Do not expose the product to foreign objects or liquids before it is securely assembled to prevent damage to the internal circuitry.
- The magnetic base has a strong attraction force; avoid placing it near iron objects to prevent pinching injuries.

5. Environment Request:

- Do not use this product in environments containing flammable or explosive gases.
- Do not operate this product at temperatures below -20°C or above 80°C, as it may cause damage.
- Do not place this product in environments with strong acids or strong alkalis.

6. Prohibited Places: If entering areas where usage restrictions apply, turn off this product as required by regulations.

II. Data visualization and condition monitoring

Thank you for choosing the ASUS Wi-Fi Vibration & Temperature Sensor AISSENS 100AW.

In factory operations, the stable performance of equipment is crucial for production efficiency and minimizing unplanned downtime. Even the slightest vibration changes in rotating machinery can be early indicators of potential failures. Through precise vibration monitoring, minor defects and anomalies can be detected in advance, allowing trend predictions before issues such as reduced energy efficiency, increased noise, or abnormal temperature rises occur.

As equipment operations become increasingly complex, accurate monitoring of rotational speed variations and load responses is essential. Traditional preventive maintenance is gradually evolving into data-driven intelligent monitoring, where stable remote monitoring and comprehensive data analysis are key to ensuring the reliability of industrial operations.

To address these industrial challenges, AISSENS 100AW (hereafter referred to as "the sensor") offers stable performance and efficient data collection capabilities. Below are its core features:

- **High bandwidth and high resolution**

Support 6KHz bandwidth, 26.6K high sampling rate, and 0.1Hz resolution to accurately capture small vibration changes and reflect equipment conditions.

- **Wi-Fi vibration data reporting**

Enables comprehensive vibration data tracking and provides a

real-time monitoring map of everything from early signs to potential problems.

- **Industrial-grade durability**

IP68 waterproof and dustproof standards, with 1-meter drop protection for harsh industrial environments.

- **Powerful software support**

Supports raw data collection, OA, and FFT transformations, offering precise time-domain and frequency-domain analysis.

- **Battery Consumption**

Features a flexible sampling mode to optimize power consumption, ensuring long-term, stable monitoring.

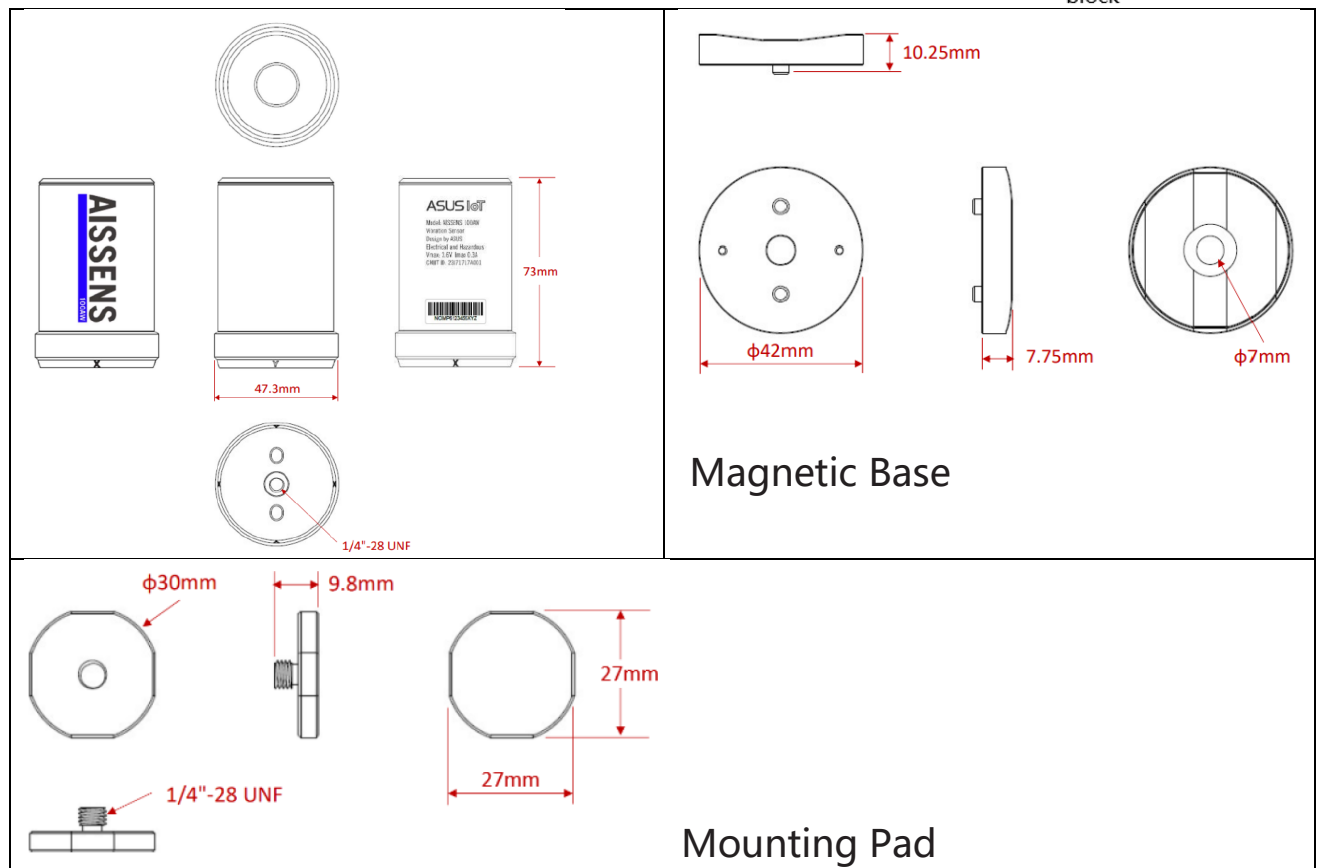
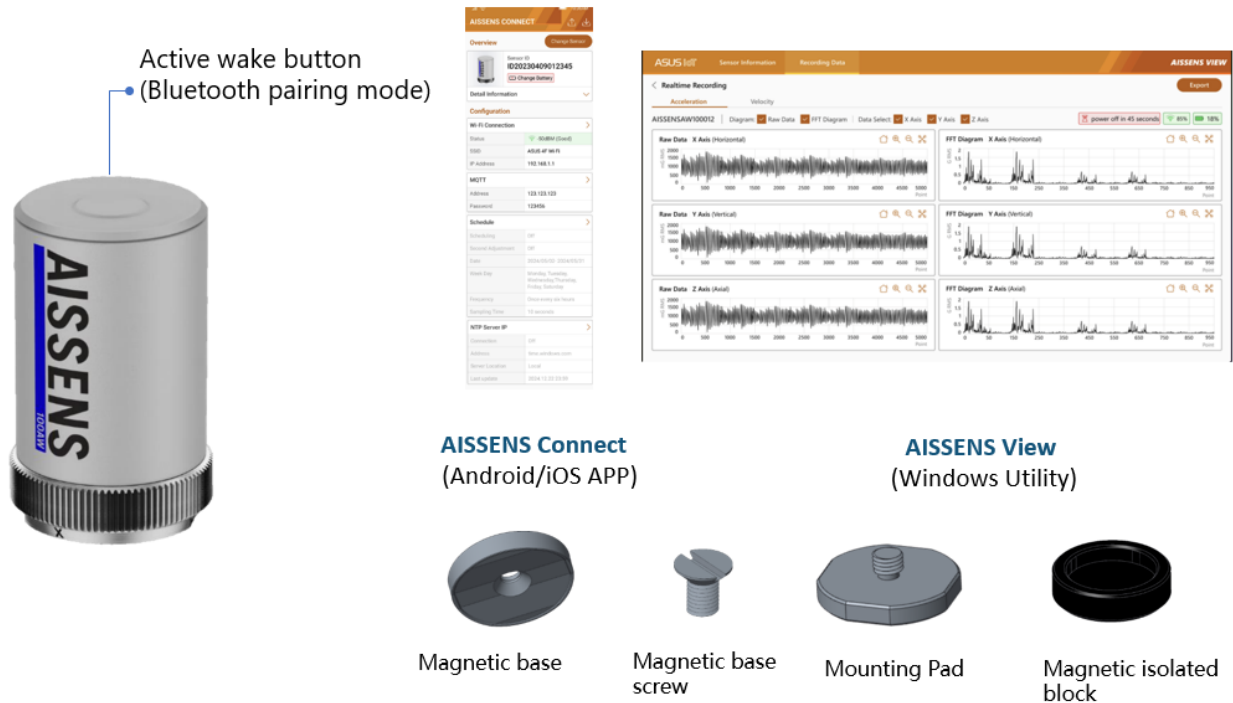
- **Standard MQTT protocol supports**

Support MQTT communication protocol, facilitating secondary development and seamless system integration across various application scenarios.

Sensors are integral to intelligent monitoring systems, enhancing the stability and efficiency of equipment operation. They provide comprehensive data support and a solid foundation for informed decision-making in operation and maintenance strategies.

III. Introduction of AISSENS sensors

1. Accessories & Supporting Software



2. Setup preparation

- A. Open the white casing and top cover of the sensor, then connect the battery.
- B. Download **AISSENS View** software to a PC computer. For Android devices, download **AISSENS Connect** from **Google Play** or the **ASUS official website**, or manually install the APK.
- C. Identify a mounting location close to where the bearing is located on the equipment.
- D. Use “AISSENS View” or the mobile app to connect and configure the sensor.

Comparison of AISSENS View and AISSENS Connect features (2025.8)

	AISSENS VIEW	AISSENS CONNECT
SUPPORT PLATFORMS	● Windows 10/11 ● Windows 2016 Server or later	● Android 10 or above ● Huawei HarmonyOS v4.2 based on Android or AOSP version ● iOS 15 or above
BLE BLUETOOTH DEVICE SCANNING	√	√
SET UP A WI-FI CONNECTION	√	√
SET A DATA CAPTURE SCHEDULE	√	√
CORRECTION TIME	√	√
READ THE VIBRATION SPECTRUM DATA	√	RAW DATA
OVER-THE-AIR FIRMWARE UPDATES	√	√

MQTT BROKER ROLE	✓	
MAIN USES	● MQTT server role ● Vibration & Temperature transmission settings ● Firmware updates	After completing the AISSENS View setup, proceed with on-site quick Bluetooth (BLE) configuration.

3. Factory reset AISSENS sensor

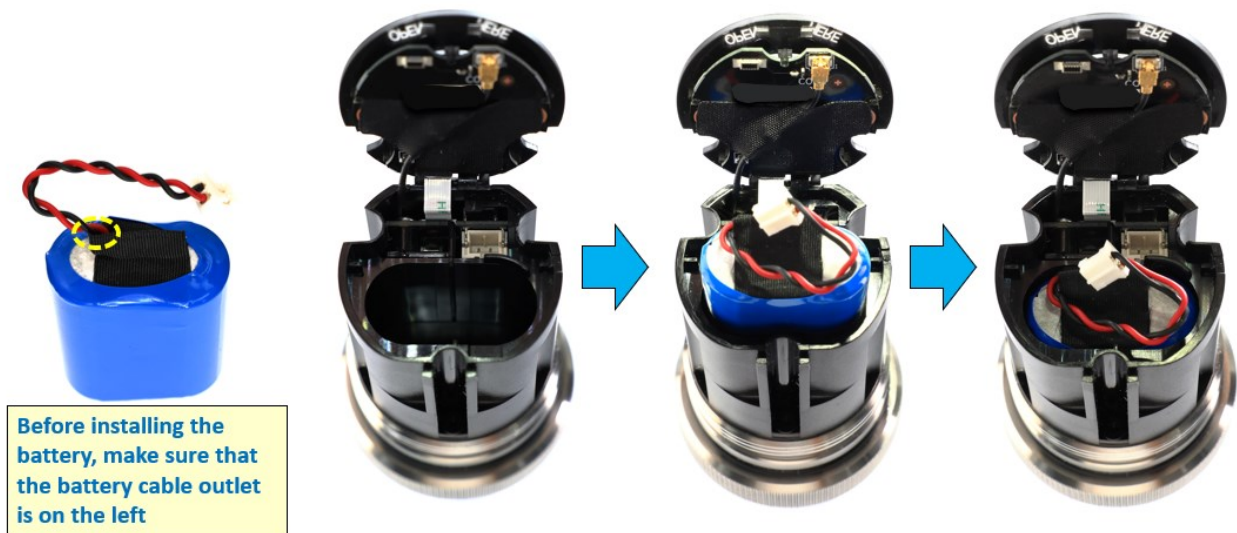
To restore the sensor to its factory default settings, ensure the sensor is powered on and operational. Then, press and hold the wake button for 15 seconds. The sensor will light up with a red indicator for 2 seconds, signaling that the settings have been successfully reset to factory defaults. This operation will only clear configuration information (such as Wi-Fi, MQTT broker, and recording schedule settings) without affecting the firmware version.

IV. NON-Rechargeable Battery

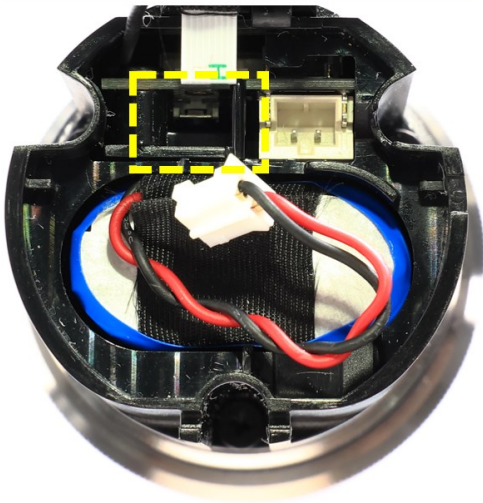
1. Power Connection – Confirm Battery Placement and Cable Management

To ensure stable monitoring performance, particularly for wide-temperature environments and high-energy-consuming Wi-Fi transmission, the sensor is equipped with a specially designed high-energy requirements in a wide range of temperatures battery pack, which is built into the device. For first-time use, simply plug the power cable into the power port to activate the device.

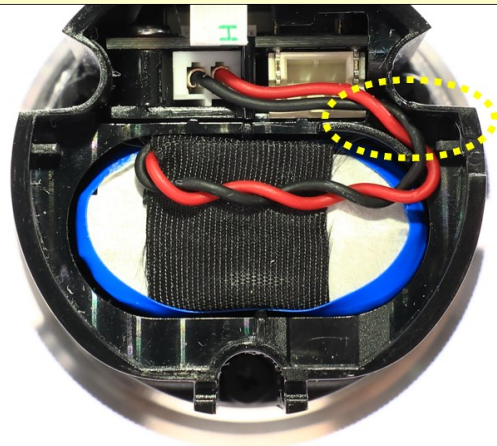
By default, the sensor will automatically enter sleep mode after three minutes of inactivity. Although the battery has an extremely low self-discharge rate, to extend battery life, it is recommended to unplug the power cable when the sensor is not in use for an extended period and store it in the designated compartment on the left side.



This hole is the connector storage area

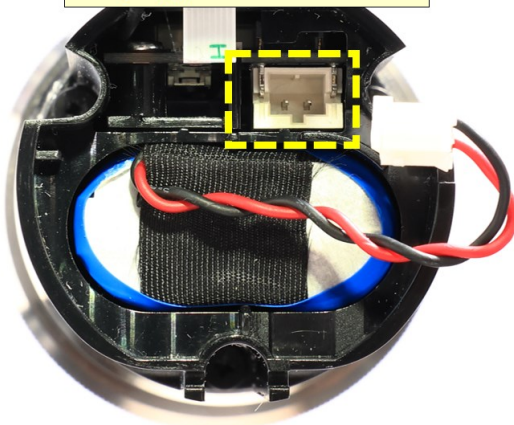


Place the cable inside the groove, ensuring it does not protrude. This prevents the cable from being pinched or the cover from lifting when the cover is closed.

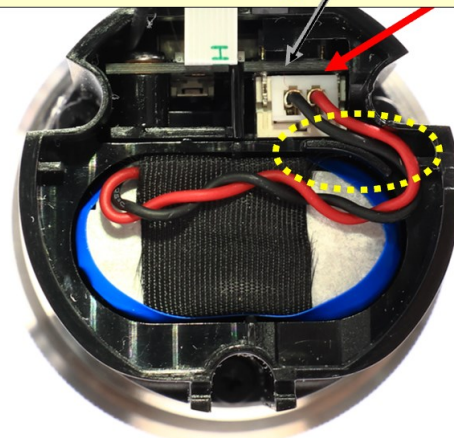


Power Disconnection and Cable Storage Method During Storage

The battery connector is plugged into an outlet



Confirm the battery connector, "black line on left, red line on right"



Place the cable inside the groove, ensuring it does not protrude. This prevents the cable from being pinched or the cover from lifting when the cover is closed.

Cable Storage Method When Powering On

Note:

- Please wear gloves and grip the bottom vertically threaded outer ring before twisting open the white outer casing.

2. Battery Consumption Estimates

The sensor's battery life depends on the environmental temperature, recording duration, frequency resolution (in seconds), and Wi-Fi signal strength. The recording time length is related to the frequency resolution, especially after performing the Fourier Transform (FFT) on the results.

- The longer the recording time, the higher the frequency resolution (the smaller the interval between frequency points).
- The shorter the recording time, the lower the frequency resolution (the larger the interval between frequency points).

Recording for a longer duration provides higher frequency resolution because the distinguishable frequency points become more detailed, making it suitable for capturing small frequency variations. On the other hand, recording data for a shorter time allows FFT to be completed faster, but the spectral resolution is lower, making it more suitable for situations where quicker results are needed, though it may not capture subtle frequency changes.

The sensor's battery life varies depending on the selected resolution and monitoring frequency. The following power consumption estimates are based on an environment with an ambient temperature of 30°C and Wi-Fi signal strength better than -50dBm. If the operating temperature reaches 60°C, due to the characteristics of lithium batteries, the battery life may be reduced by up to half; please pay attention to the operating duration in high-temperature applications. In addition, the recommended sampling frequency is one

measurement every 3 hours, with each measurement lasting 5 seconds.

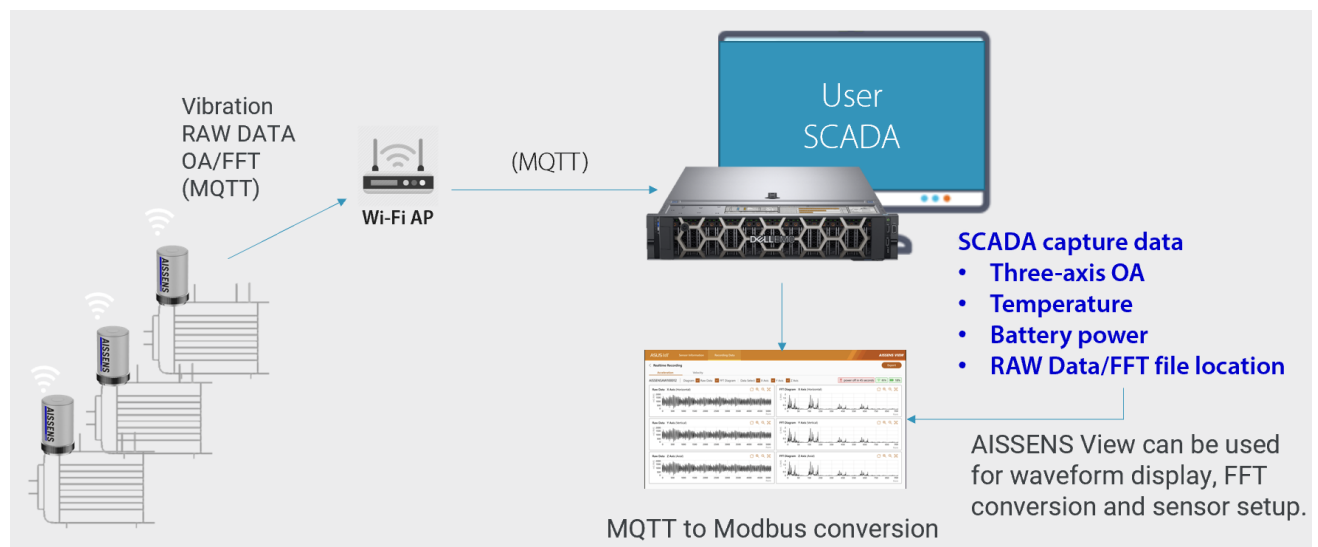
Time per recording		Frequency resolution	The total number of reports	Record every 3 hours	Record every 1 hour	File size (Raw data)	File size (CSV)
2 seconds (RAW)		1Hz	15,199	5 years	1.7 years	0.4MB	1.9MB
3 seconds (RAW)		0.5Hz	14,855	5 years	1.7 years	0.5MB	2.8MB
5 seconds (RAW)		0.25Hz	10,728	3.6 years	1.2 years	0.9MB	4.7MB
6 seconds (RAW)		0.2Hz	10,291	3.4 years	1.1 years	1MB	5.6MB
11 seconds (RAW)		0.1Hz	6,659	2.2 years	9 months	2MB	10MB
AISSENS LOCAL COMPUTING	2 sec OA	N/A	10,139	3.4 years	1.1 years	82(bytes)	NA
	3 seconds OA	N/A	5,885	2 years	8 months	82(bytes)	N/A
	3 seconds OA+FFT	0.5Hz	5,721	1.9 years	8 months	1.5MB	N/A

AISSENS products use ER14505 high-density lithium batteries. Due to the low self-discharge characteristics of this type of battery, a passivation effect may occur during initial use, causing slightly lower output voltage and possibly triggering a red light indicator. This is a normal phenomenon and does not indicate a battery fault. After 1–2 WiFi transmissions, the internal chemical reactions of the battery will be activated, and the voltage will return to normal levels. AISSENS has fully considered this characteristic in its design, so please use with confidence.

V. AISSENS View Introduction

AISSENS View is the core of the sensor data transmission system, responsible for sensor configuration, spectrum reading and conversion, firmware OTA, and other functions. If the computer's computing power and network bandwidth are sufficient, a single AISSENS View can support multiple sensors, performing sampling settings, data acquisition, and conversion. AISSENS View communicates with sensors based on the MQTT open transmission format, allowing third-party services to quickly interface with the core data of the sensors, thus accelerating the OT (Operational Technology) integration efficiency.

1. Basic Connection Architecture



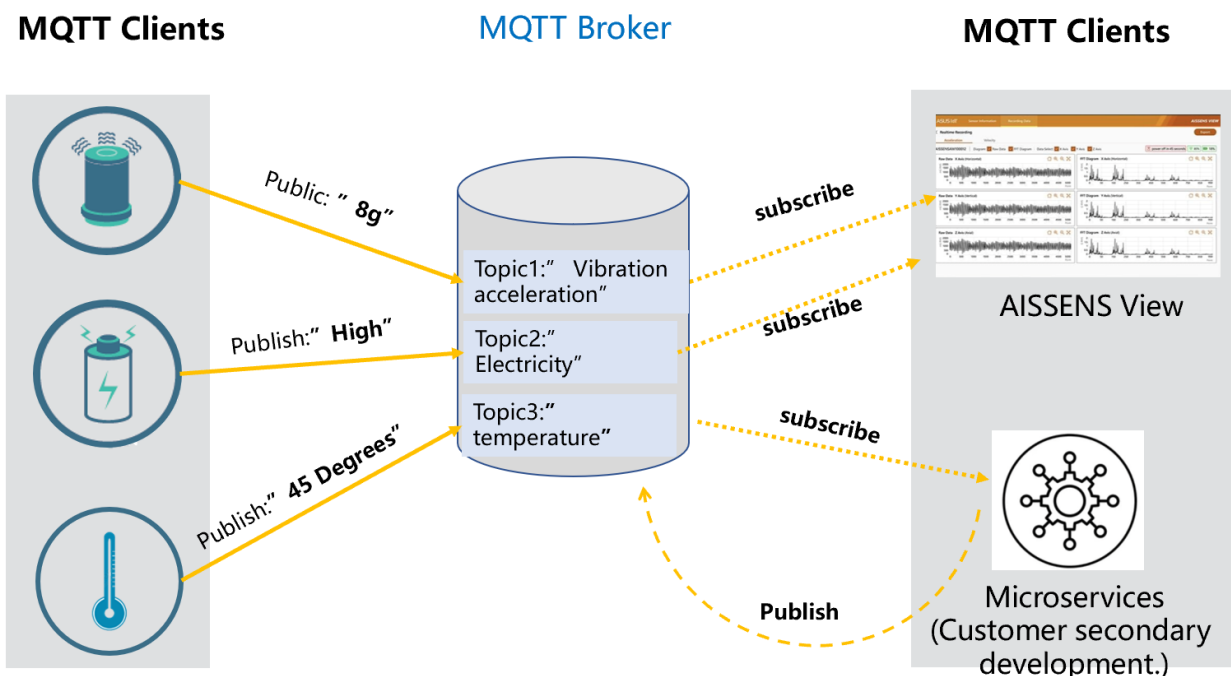
- A. Visit ASUS support site to download and install the latest AISSENS View program.
https://www.asus.com/us/supportonly/aissens%20100aw/helpdesk_manual/
- B. Make sure your PC is Wi-Fi and Bluetooth turned on.

- C. Confirm the SSID and password of the 2.4GHz Wi-Fi AP.
- D. Set the schedule (including recording time, recording interval and data type) in AISSENS View.

Note:

- The sensor only supports 2.4 GHz WPA2 connections.
- As an MQTT broker, it is recommended to use a fixed IP address for PC.

2. MQTT



MQTT (Message Queuing Telemetry Transport) is a lightweight communication protocol commonly used for data transmission between Internet of Things (IoT) devices. It is based on the publish/subscribe model and is suitable for scenarios with limited network bandwidth. The MQTT architecture consists of three parts: Publisher, Broker, and Subscriber.

MQTT Workflow:

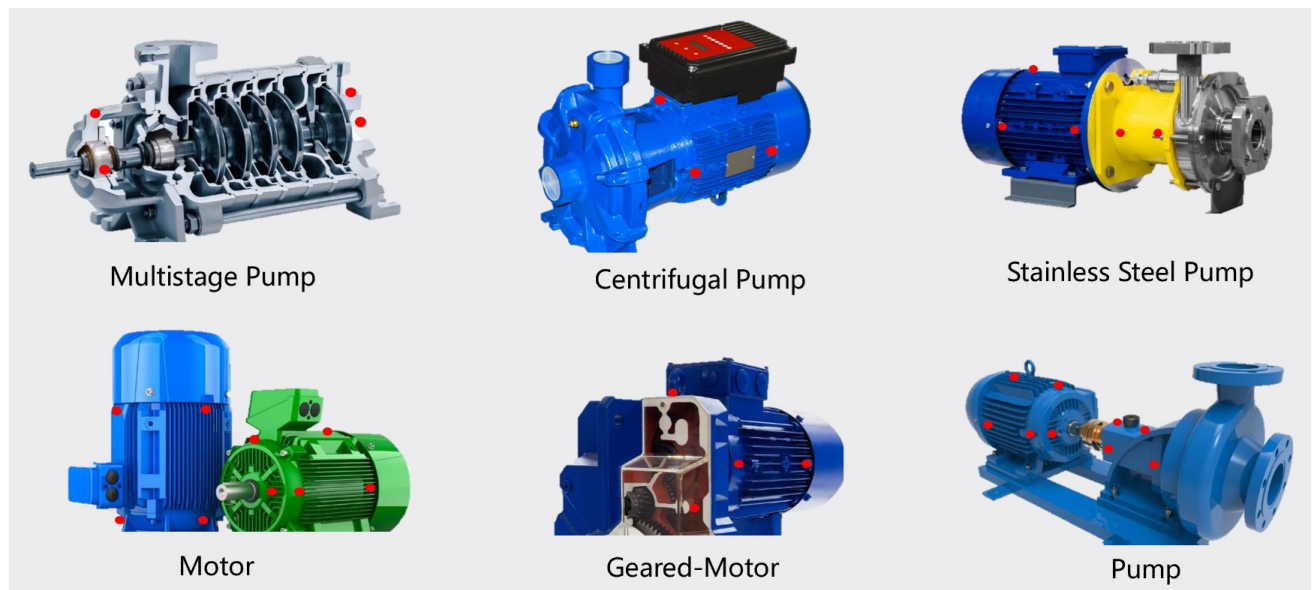
- A. **Publisher:** Devices or sensors send (publish) data and categorize it under specific topics. The diagram shows multiple sensor data points and topics, such as a vibration accelerometer (publishing data "8g" to the "vibration acceleration" topic), a temperature sensor (publishing "45 degrees" to the "temperature" topic), and a battery sensor (publishing "High" to the "battery" topic).
- B. **Broker:** The MQTT broker is the core of the system, responsible for receiving data from various publishers and forwarding it to subscribers of the corresponding topics. Whether it's **AISSENS View** (the data visualization platform) or other microservice systems, these subscribers can receive and process the data.
- C. **Subscribers:** Subscribers register their interest in a particular topic, and when the MQTT broker receives data from that topic, it automatically pushes the data to the subscriber. The AISSENS View in the diagram is subscribed to the topics "Vibration Acceleration" and "Temperature" to monitor and analyze vibration data as well as temperature data. In addition, other microservices such as Modbus transformations can also be subscribed to a topic for further processing of topic information.

The sensor reports data through standard MQTT messages, allowing customers to easily use their existing MQTT brokers and communication infrastructure to obtain measurement data. This eliminates the need for additional gateway devices for protocol conversion — a common requirement with other wireless sensors — providing significant convenience.

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VI. Ideal Sensor Placement

With a reliable sensor in place, the next step is identifying the optimal measurement locations. Since the installation method directly impacts measurement accuracy, below provides examples of common equipment types, highlighting suitable installation points with red dots for clarity.



Installation Tips:

- A. Measurement locations selection: The sensor features a three-axis vibration sensing capability, but variations in physical movement vectors (left-right, up-down, front-back) at different measurement locations may still cause measurement errors. Generally, for horizontal equipment, horizontal movement is greater than vertical movement due to greater flexibility in the horizontal direction. Therefore, when possible, prioritize selecting the side of the equipment (horizontal direction) as the detection point rather than the top (vertical direction).
- B. If no good test point is available in the horizontal direction, the sensor

can be mounted in a downward-facing horizontal test point.

- C. For vertical installed equipment, the outlet pipe direction should align vertically.
- D. Optimal Mounting Position: The test point should be as close as possible to the outer edge of the equipment 's bearing. Usually, data can be collected from one direction on the bearing, while the other two directions may not provide good test points. A three-axis vibration sensor can provide data collection in three directions from a single point, enhancing efficiency and accuracy.
- E. Avoid Interference: Do not mount the sensor on structures subject to equipment vibrations, such as the equipment 's outer cover, motor cooling fan guard, fan housing, coupling guard, motor heat sink, or any structure prone to resonance interference. These locations can compromise data quality.
- F. Repeatability: Ensure the test point aligns with the sensor's axial orientation. For long-term monitoring, mark the test point' s location and orientation with a sticker. It can be quickly returned to its original test point after the sensor battery is replaced or the machine is repaired.
- G. Mounting Options: The sensor can be quickly mounted using the magnetic base included. If magnetic attachment is not feasible, use a 2-part steel-reinforced epoxy to mount the target pad on the test point, then mount the sensor on the target pad.

Note:

- The magnetic base has a very strong magnetic force. Avoid placing it near iron objects to prevent pinch injuries. When carrying the sensor, use the packaging box or a magnetic isolation block to reduce interference.

- Wear gloves before proceeding with the mounting work.
-

VII. AISSENS indicator lights

1. Button description

A. Press the button on the sensor. The sensor will flash green, indicating it's waiting for pairing or connection. If connected to the MQTT broker, the green light will remain solid.

B. Enter Sleep Mode (all settings are retained, but the sensor will not automatically wake up):

Press and hold the button for 5 seconds  → Orange light turns solid  → Release the button  → Enter Sleep Mode 

C. Wake-up after entering Sleep Mode (prevent accidental wake-up):

Sleep state  → Press the button once  → Orange light flashes for 4 seconds  ✨ → Press the button again  → Sensor wakes up 

D. Reset to factory settings

Press and hold the button for 15 seconds  → The light will turn solid orange from 5 to 14 seconds  → The light will turn solid red from 15 seconds  → Reset 

This indicates the sensor has completed the reset, clearing Wi-Fi information and recording schedule settings.

2. LED Indicator Explanation

A. **No light:** The sensor is in **Sleep Mode**, and no operations can be performed. You can wake up the sensor by pressing the wake-up button.

B. **Red light flashing continuously:** The sensor is in a **Low Battery** state. It is recommended to replace the sensor's battery as soon as possible.

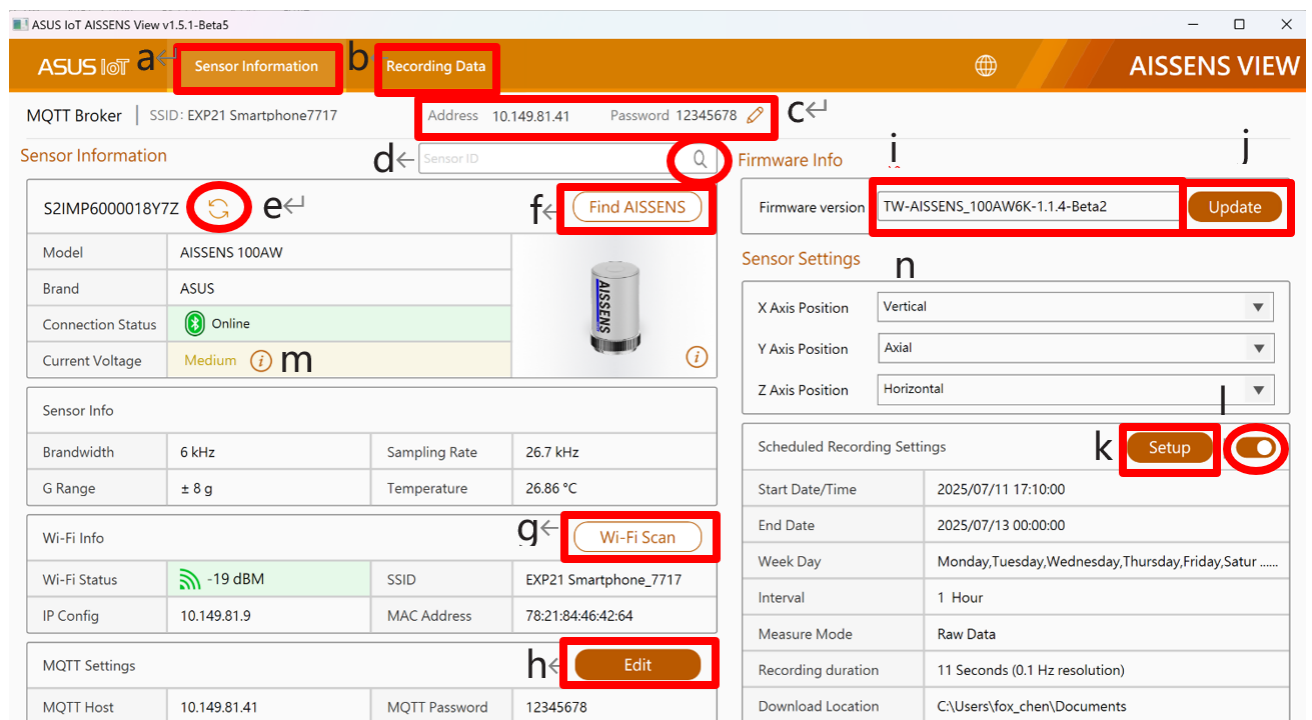
C. **Solid green light:** The sensor is in a **Connected** state, meaning it has

successfully connected to Bluetooth and the MQTT Broker. You can now operate the sensor, such as modifying its settings.

- D. **Slow flashing green flashing (1 Hz):** The sensor is either in **Recording Mode** or **Pairing Mode**. This means the sensor is processing a recording action (e.g., scheduled recording) or attempting to establish a connection (e.g., searching for Bluetooth or an MQTT Broker when activated).
- E. **Rapid flashing green light (3 Hz):** The sensor is in **Data Transmission Mode**, indicating it is currently transmitting data (e.g., uploading recorded data after completing a scheduled recording). If the transmission fails for any reason (e.g., weak Wi-Fi signal), the sensor will display a **solid red light for 2 seconds** before entering sleep mode.

VIII. AISSENS View Software Interface

Function Introduction



- Sensor Settings Page: Displays sensor information and setting schedules.
- Data Reading Page: Reads the recorded data file and displays them in graphical format.
- Edit: Change the password of MQTT broker.
- Sensor ID: Displays a list of sensors for selection. Only sensors connected to the MQTT Broker will appear in the list.
- Reload Page Button: Refresh the sensor information page.
- Bluetooth pairing page: Pairing sensor and setting connection information.
- Set a Wi-Fi connection for sensor
- Set MQTT for sensor
- Firmware Version: Displays the current firmware version of the sensor.
- Firmware update: Update Firmware.

- k. Recording Schedule Settings Menu: Setting the recording schedule details for the sensor.
- l. Recording Schedule Toggle: Enables or disables the sensor recording function.
- m. Battery voltage display: Displays the battery voltage of the sensor, categorized into three levels:
 - (1) Battery high (indicated in green): $\geq 3.3V$
 - (2) Battery Medium (indicated in yellow): $3.15V \sim 3.3V$
 - (3) Battery Low (indicated in red): $< 3.15V$ (Battery is nearly depleted; replace it soon)
- n. Set the direction of the sensor's three axes

IX. Software installation

1. Install AISSENS View & Connect

A. Install AISSENS View on your PC

To use ASUS IoT AISSENS View, follow the installation steps below. Once installed, you can open and use it from your desktop.

- a. Execute the program and click Next to install it.
- b. Select the installation directory and click Next.
- c. Click Next to confirm the installation.
- d. During the installation process, Windows may prompt you whether to allow the APP to change your sensor, at this time, please click Yes.
- e. Click Close to complete the installation.

B. Install AISSENS Connect on a Mobile Device

Please search for "AISSENS Connect" in Google Play or Apple APP Store, download it, and complete the installation on your mobile device.

Note:

- To install AISSENS View on your PC for the first time, you need to install VC_redist.x64.exe first.
 - Windows Server 2016 environments require additional .NET Framework v4.7.2 to be installed.
 - Go to Network and Internet>Wi-Fi> Network Configuration File Types and choose Private Network.
 - After the installation is complete, you can find the ASUS IoT AISSENS View icon on the desktop of PC to open it directly.
-

2. Wake up the sensor

- a. Press the button above the sensor.



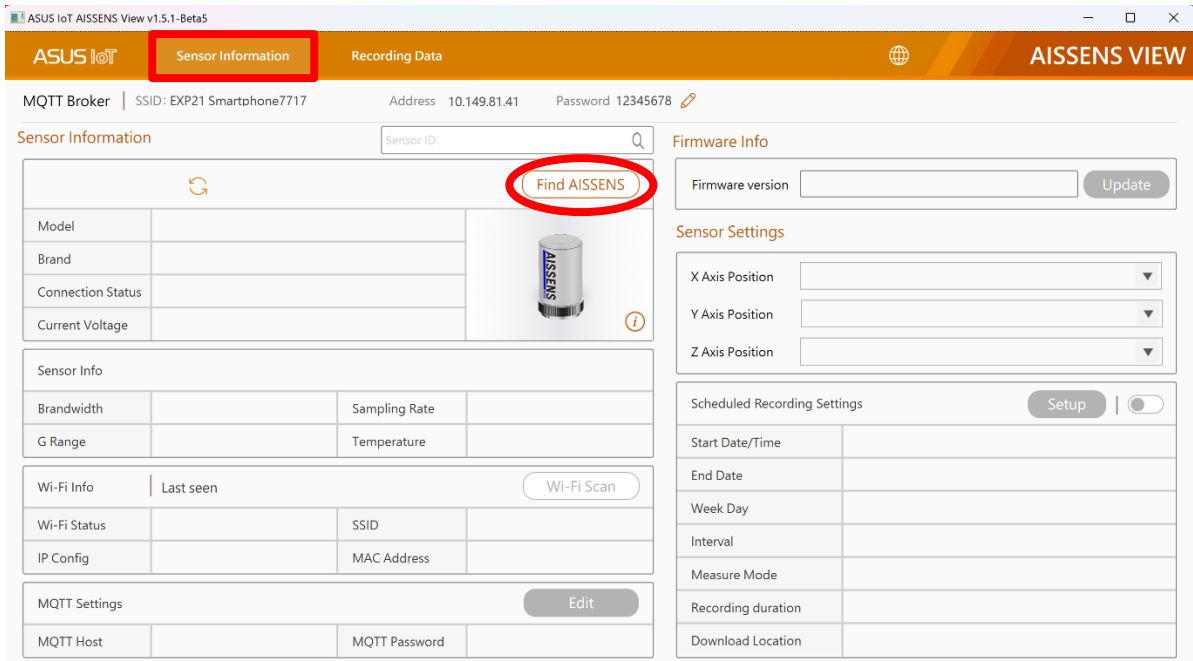
- b. When successfully turned on, the sensor will start flashing green.



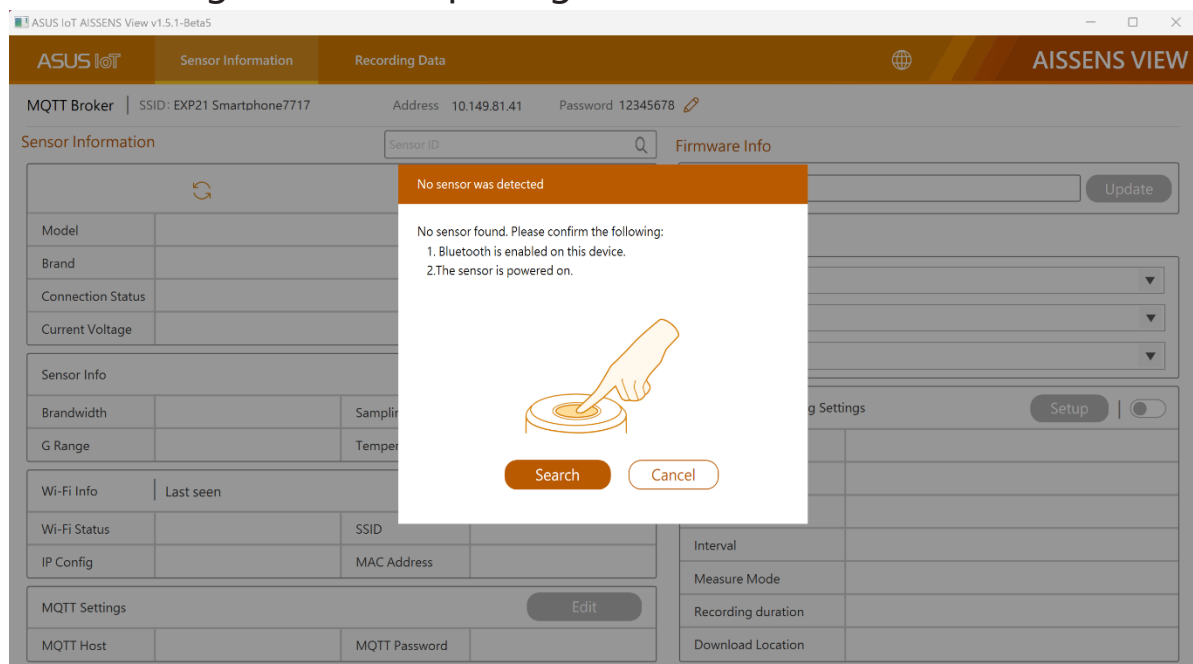
3. Pair the sensor via Bluetooth

A. PC (AISSENS View):

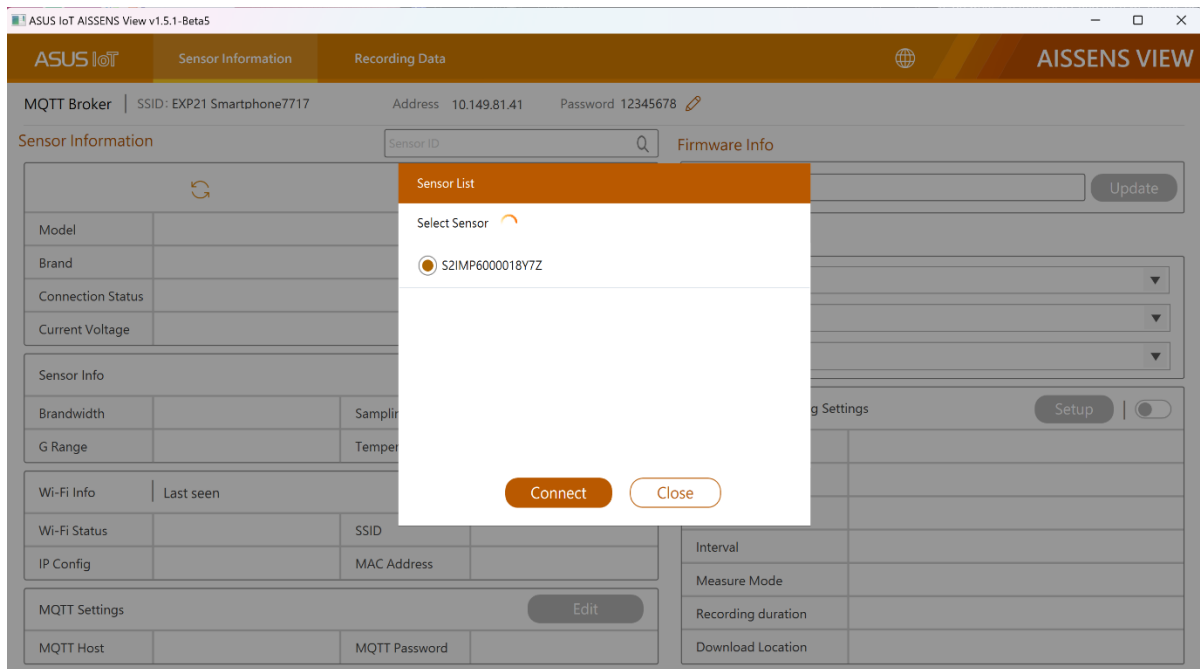
- a. Open ASUS IoT AISSENS View and go to Sensor Information page, where the system will automatically start Bluetooth pairing.



- b. If No ASUS Sensor Paired is displayed, please make sure that the Bluetooth function and sensor are turned on. Once confirmed, click **"Search"** again to enter pairing mode.

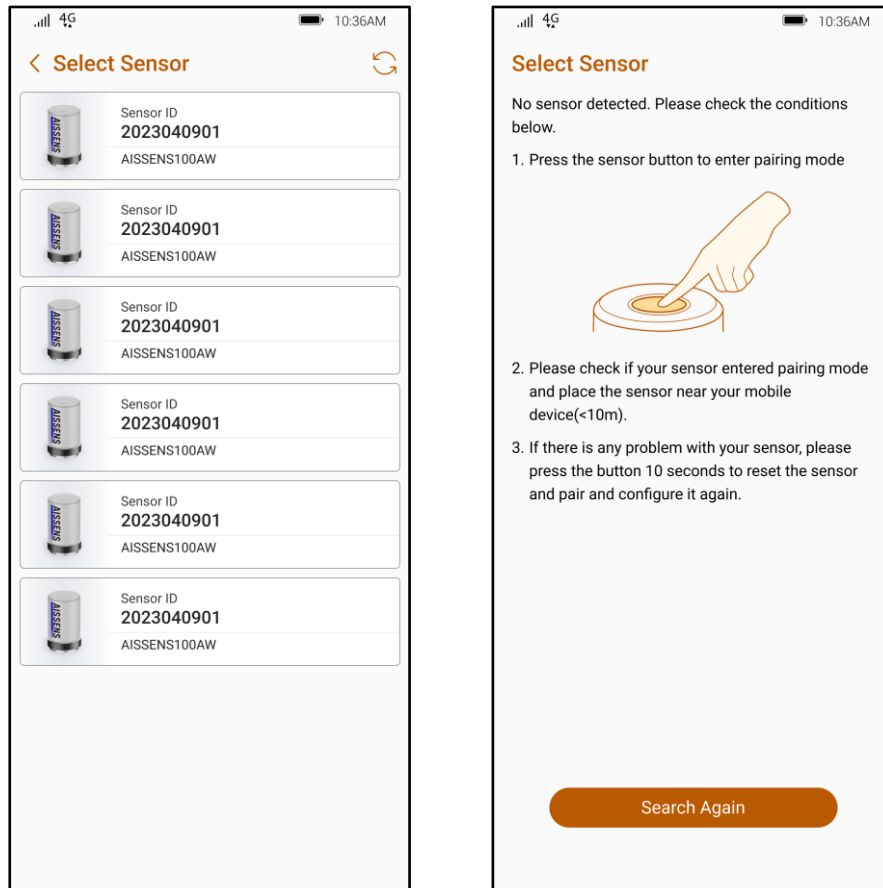


- c. Once the system detects the sensor, it will be displayed in the **Sensor List**. Select the desired sensor to complete the pairing process.



B. Mobile (AISSENS Connect):

Open AISSENS Connect and the system will automatically start Bluetooth pairing. On the Select Sensor page, select the specified sensor to complete the pairing process. If the sensor is not found, click the Refresh button in the top right corner to search for Bluetooth again.



If the system displays "No sensor found", please make sure that the Bluetooth function of your computer and the sensor are turned on. After confirming that everything is normal, please click Search again to let the system enter the pairing mode.

Note:

- Before pairing, ensure that Bluetooth is enabled on both devices.
- **PC:** In the settings > select Bluetooth & other devices > Bluetooth, and then turn on the Bluetooth function.
- **Mobile:** In Settings, tap Connect, then enable Bluetooth.

- When AISSENS Connect is opened for the first time, it will ask for location and Bluetooth permissions, please make sure both are authorized.
-

4. Set the Wi-Fi information for AISSENS

A. PC (AISSENS View):

In the Wi-Fi Info section, select Wi-Fi Scan and select the same domain as AISSENS View in the Wi-Fi List.

ASUS IoT AISSENS View v1.5.1-Beta5

ASUS IoT | Sensor Information | Recording Data | AISSENS VIEW

MQTT Broker | SSID: EXP21 Smartphone7717 | Address 10.149.81.41 | Password 12345678

Sensor Information

Sensor ID

S2IMP6000018Y7Z		
Model	AISSENS100AW	
Brand	ASUS	
Connection Status	Online	
Current Voltage	Medium	

Sensor Info

Bandwidth	6 kHz	Sampling Rate	26.7 kHz
G Range	± 8 g	Temperature	

Wi-Fi Info

Wi-Fi Status	-26 dBm	SSID	EXP21 Smartphone_7717
IP Config	DHCP	MAC Address	78:21:84:46:42:64

MQTT Settings

MQTT Host	192.168.90.41	MQTT Password	12345678
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Firmware Info

Firmware version

Sensor Settings

X Axis Position

Y Axis Position

Z Axis Position

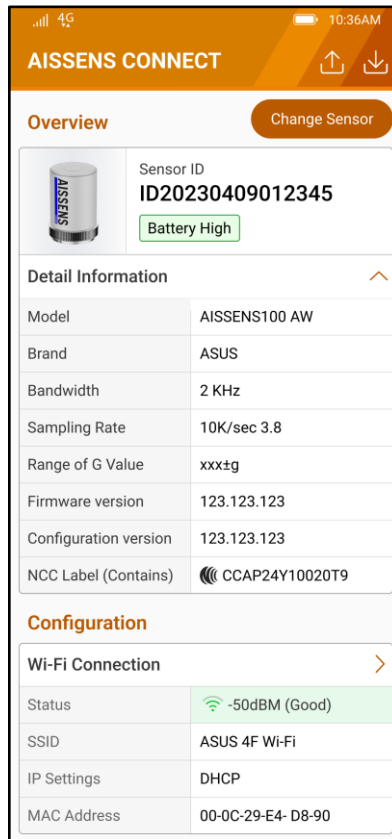
Scheduled Recording Settings

☐

Start Date/Time	
End Date	
Week Day	
Interval	
Measure Mode	
Recording duration	
Download Location	

B. Mobile (AISSENS Connect):

In the Configuration section, click on Wi-Fi Connection and select the same domain as AISSENS View in the Wi-Fi List.



Note:

- The sensor needs to be in the same network domain as AISSENS View.
- If the Wi-Fi AP is hidden, please enter the SSID and Password.
- Make sure that your PC's firewall does not block AISSENS View MQTT Broker.
- The sensor can only be connected to 2.4GHz Wi-Fi AP.
- When using an iPhone Wi-Fi hotspot, open Settings > Personal Hotspot > Maximize Compatibility to ensure you get a 2.4GHz hotspot.

5. Set the MQTT information for AISSENS

A. AISSENS View (Windows):

In the MQTT Settings section, click Edit, set the MQTT Address and Password, and confirm that they match the MQTT Broker information.

ASUS IoT AISSENS View v1.5.1-Beta5

MQTT Broker | SSID: EXP21 Smartphone7717 | Address 10.149.81.41 | Password 12345678

Sensor Information

Sensor ID: S2IMP6000018Y7Z [Find AISSENS](#)

Model	AISSENS 100AW		
Brand	ASUS		
Connection Status	Online		
Current Voltage	Medium		

Sensor Info

Bandwidth	6 kHz	Sampling Rate	26.7 kHz
G Range	± 8 g	Temperature	27.5 °C

Wi-Fi Info [Wi-Fi Scan](#)

Wi-Fi Status	-23 dBm	SSID	EXP21 Smartphone_7717
IP Config	10.149.81.9	MAC Address	78:21:84:46:42:64

MQTT Settings [Edit](#)

MQTT Host	10.149.81.41	MQTT Password	12345678
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Firmware Info

Firmware version: TW-AISSENS_100AW6K-1.1.4-Beta2 [Update](#)

Sensor Settings

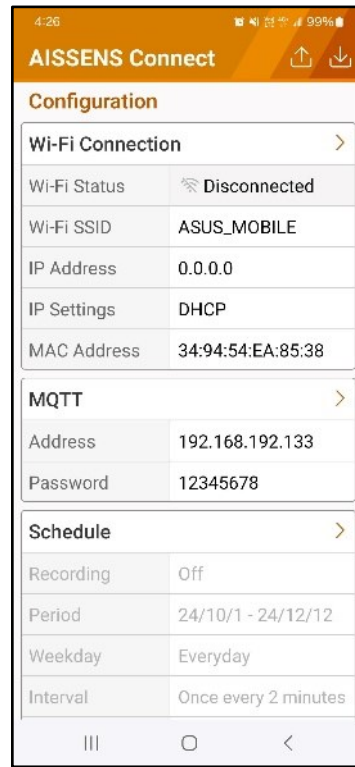
X Axis Position:
Y Axis Position:
Z Axis Position:

Scheduled Recording Settings [Setup](#) ☒

Start Date/Time	2025/07/11 17:10:00
End Date	2025/07/13 00:00:00
Week Day	Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday
Interval	1 Hour
Measure Mode	Raw Data
Recording duration	11 Seconds (0.1 Hz resolution)
Download Location	C:\Users\fox_chen\Documents

B. AISSENS Connect(Mobile):

In the Configuration section, click on MQTT, set the MQTT Address and Password, and confirm that they match the MQTT Broker information.

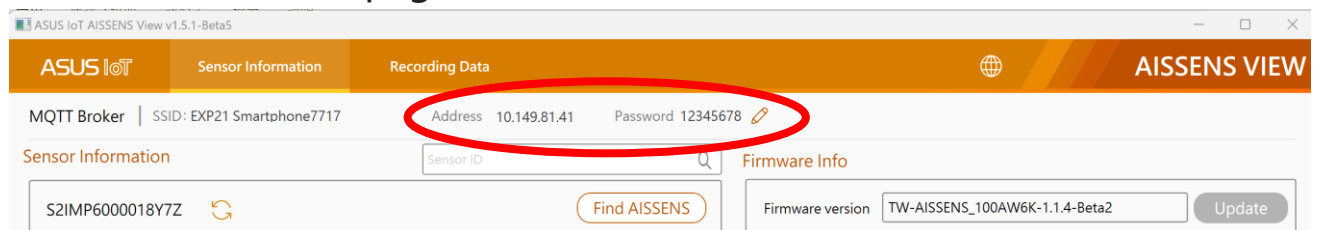


The screenshot shows the AISSENS Connect mobile app interface. At the top, the status bar displays the time 4:26, signal strength, Wi-Fi, and battery level at 99%. The app title 'AISSENS Connect' is in an orange header. Below it is a 'Configuration' section with three expandable cards: 'Wi-Fi Connection', 'MQTT', and 'Schedule'. The 'MQTT' card is currently expanded, showing fields for 'Address' (192.168.192.133) and 'Password' (12345678). The 'Wi-Fi Connection' card shows 'Wi-Fi Status' as 'Disconnected', 'Wi-Fi SSID' as 'ASUS_MOBILE', 'IP Address' as '0.0.0.0', 'IP Settings' as 'DHCP', and 'MAC Address' as '34:94:54:EA:85:38'. The 'Schedule' card shows 'Recording' as 'Off', 'Period' as '24/10/1 - 24/12/12', 'Weekday' as 'Everyday', and 'Interval' as 'Once every 2 minutes'. At the bottom is an Android-style navigation bar with three icons: a menu icon, a home icon, and a back icon.

Configuration	
Wi-Fi Connection	
Wi-Fi Status	Disconnected
Wi-Fi SSID	ASUS_MOBILE
IP Address	0.0.0.0
IP Settings	DHCP
MAC Address	34:94:54:EA:85:38
MQTT	
Address	192.168.192.133
Password	12345678
Schedule	
Recording	Off
Period	24/10/1 - 24/12/12
Weekday	Everyday
Interval	Once every 2 minutes

Note:

MQTT Broker information is displayed at the top of the AISSENS View Sensor Information page.



The screenshot shows the AISSENS View web interface in a browser window titled 'ASUS IoT AISSENS View v1.5.1-Beta5'. The interface has an orange header with 'ASUS IoT' and 'AISSENS VIEW' on the right. Below the header is a navigation bar with 'Sensor Information' and 'Recording Data' tabs. The 'Sensor Information' tab is active, showing 'MQTT Broker | SSID: EXP21 Smartphone7717'. Below this, there's a red circle highlighting the 'Address' field (10.149.81.41) and the 'Password' field (12345678). To the left of the red circle is a 'Sensor ID' field with the value 'S2IMP6000018Y7Z' and a 'Find AISSENS' button. To the right is a 'Firmware Info' section with a 'Firmware version' field showing 'TW-AISSENS_100AW6K-1.1.4-Beta2' and an 'Update' button.

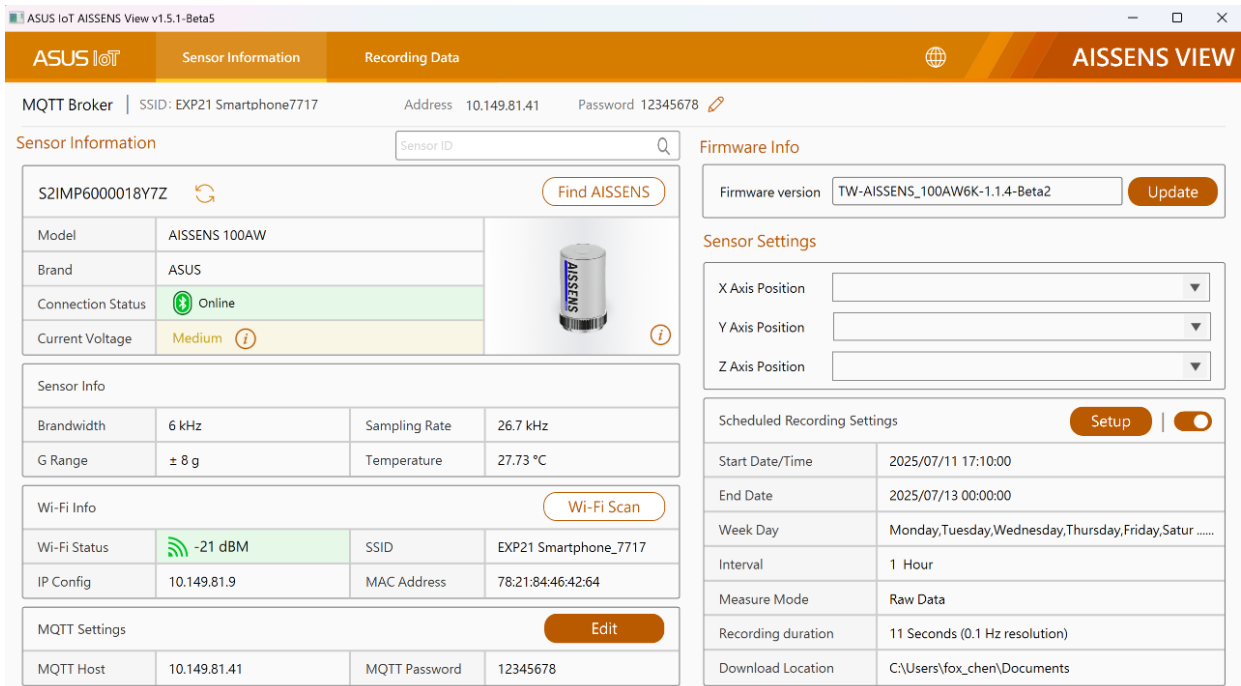
MQTT Broker SSID: EXP21 Smartphone7717	
Address	10.149.81.41
Password	12345678

Sensor Information	
Sensor ID	S2IMP6000018Y7Z
Find AISSENS	

Firmware Info	
Firmware version	TW-AISSENS_100AW6K-1.1.4-Beta2
Update	

6. Complete sensor configuration

Once both Wi-Fi and MQTT settings are successfully configured and connected, go to the Sensor Information page in AISSENS View. Click the refresh button , and the sensor information should display correctly.



ASUS IoT AISSENS View v1.5.1-Beta5

ASUS IoT | Sensor Information | Recording Data | AISSENS VIEW

MQTT Broker | SSID: EXP21 Smartphone7717 | Address 10.149.81.41 | Password 12345678

Sensor Information

Sensor ID

Model	AISSENS 100AW		
Brand	ASUS		
Connection Status	Online		
Current Voltage	Medium		



Sensor Info

Bandwidth	6 kHz	Sampling Rate	26.7 kHz
G Range	± 8 g	Temperature	27.73 °C

Wi-Fi Info

Wi-Fi Status	-21 dBM	SSID	EXP21 Smartphone_7717
IP Config	10.149.81.9	MAC Address	78:21:84:46:42:64

MQTT Settings

MQTT Host	10.149.81.41	MQTT Password	12345678
-----------	--------------	---------------	----------

Firmware Info

Firmware version TW-AISSENS_100AW6K-1.1.4-Beta2

Sensor Settings

X Axis Position

Y Axis Position

Z Axis Position

Scheduled Recording Settings ☐

Start Date/Time	2025/07/11 17:10:00
End Date	2025/07/13 00:00:00
Week Day	Monday,Tuesday,Wednesday,Thursday,Friday,Satur
Interval	1 Hour
Measure Mode	Raw Data
Recording duration	11 Seconds (0.1 Hz resolution)
Download Location	C:\Users\fox_chen\Documents

X. AISSENS View feature description

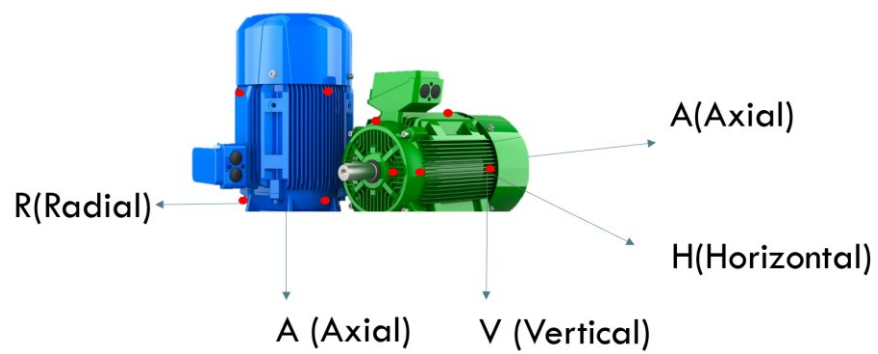
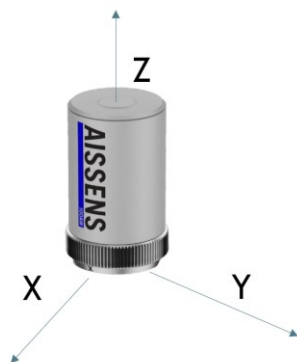
1. Set the sensor three-axis orientation information

The sensor can measure three directions, depending on the user's installation method, the direction of X, Y, and Z will change, and it is not a fixed value, for example, the X axis may correspond to the vertical, horizontal, or axial direction. Therefore, the 3-axis orientation function can be set through AISSENS View, which allows the user to accurately mark the direction of the sensor to ensure the correctness of subsequent data collection and application.

The screenshot displays the AISSENS View web interface. The top navigation bar includes the ASUS IoT logo, 'Sensor Information', 'Recording Data', and a globe icon. The main content area is divided into several sections:

- Sensor Information:** Displays the sensor ID (S2IMP6000018Y7Z), model (AISSENS 100AW), brand (ASUS), connection status (Online), and current voltage (Medium). It also includes a 'Find AISSENS' button and a sensor icon.
- Firmware Info:** Shows the firmware version (TW-AISSENS_100AW6K-1.1.4-Beta2) and an 'Update' button.
- Sensor Settings:** A section highlighted with a red box, containing three dropdown menus for axis positions: X Axis Position (Vertical), Y Axis Position (Axial), and Z Axis Position (Horizontal).
- Scheduled Recording Settings:** Includes a 'Setup' button and a toggle switch. Below it, a table lists recording parameters: Start Date/Time (2025/07/11 17:10:00), End Date (2025/07/13 00:00:00), Week Day (Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday), Interval (1 Hour), Measure Mode (Raw Data), Recording duration (11 Seconds (0.1 Hz resolution)), and Download Location (C:\Users\fox_chen\Documents).
- Wi-Fi Info:** Shows Wi-Fi status (-19 dBM), SSID (EXP21 Smartphone_7717), IP Config (10.149.81.9), and MAC Address (78:21:84:46:42:64). It includes a 'Wi-Fi Scan' button.
- MQTT Settings:** Displays MQTT Host (10.149.81.41) and MQTT Password (12345678) with an 'Edit' button.

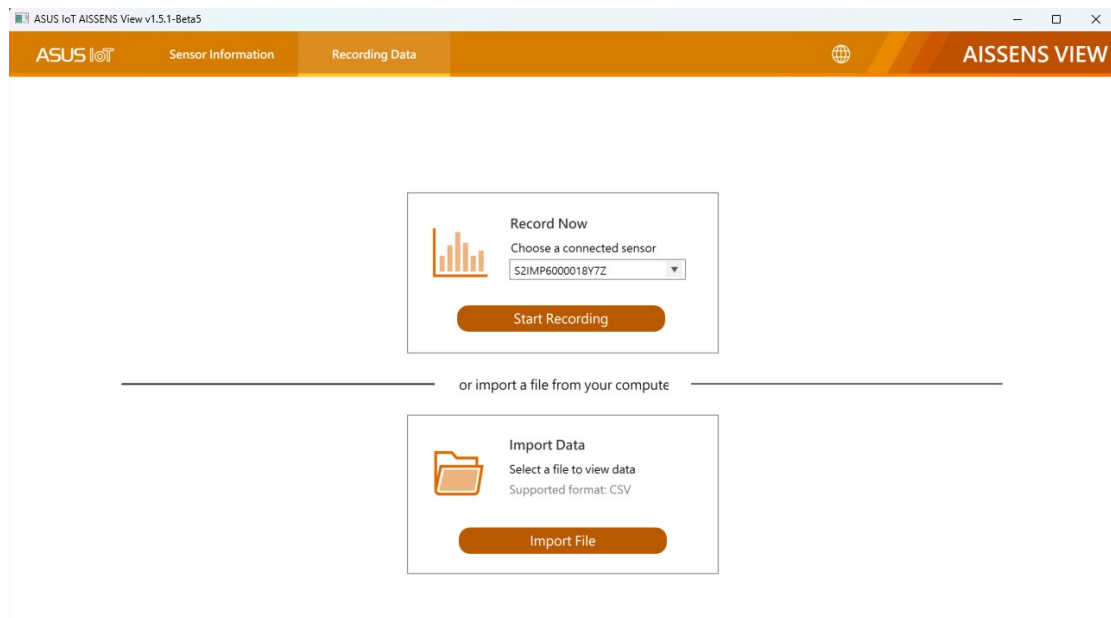
Note: The X, Y, and Z axis directions must not be duplicated.



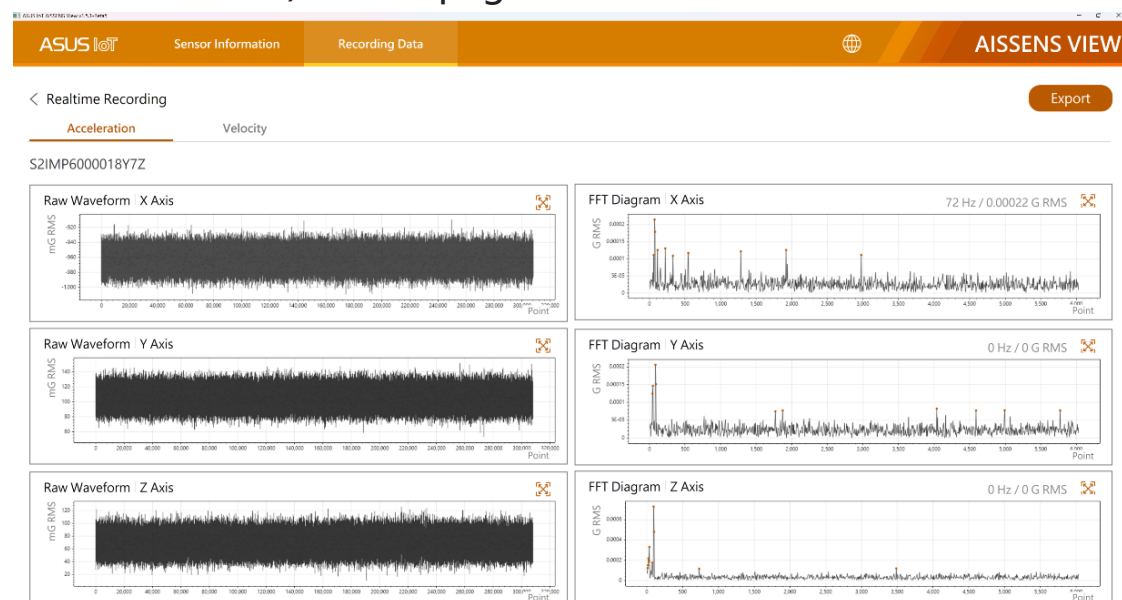
2. Recording Data

Follow the steps below to make a Record Now:

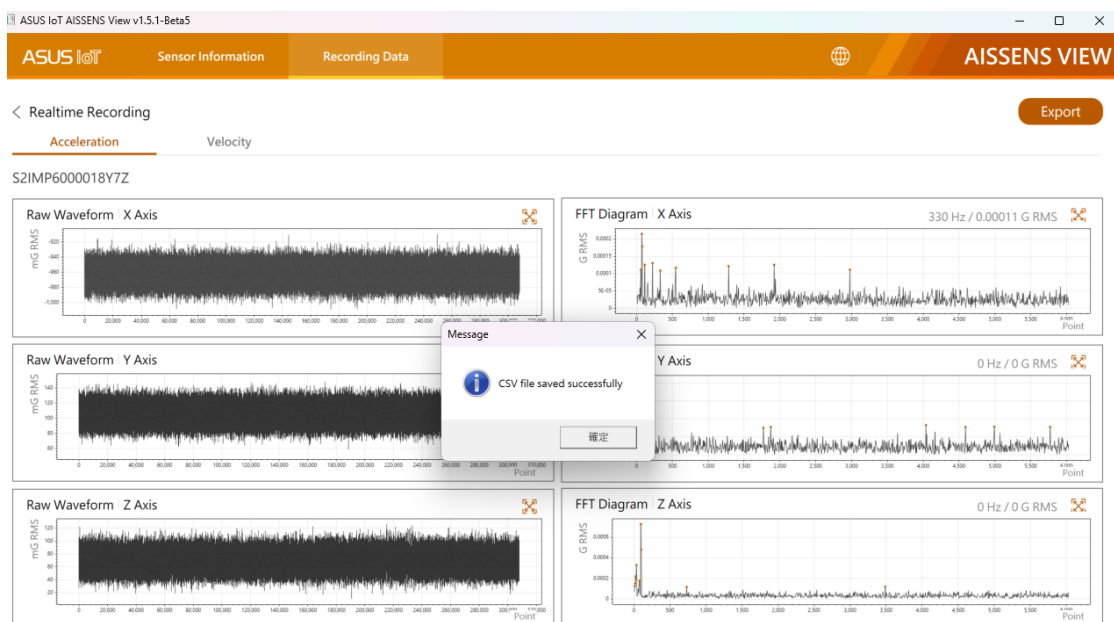
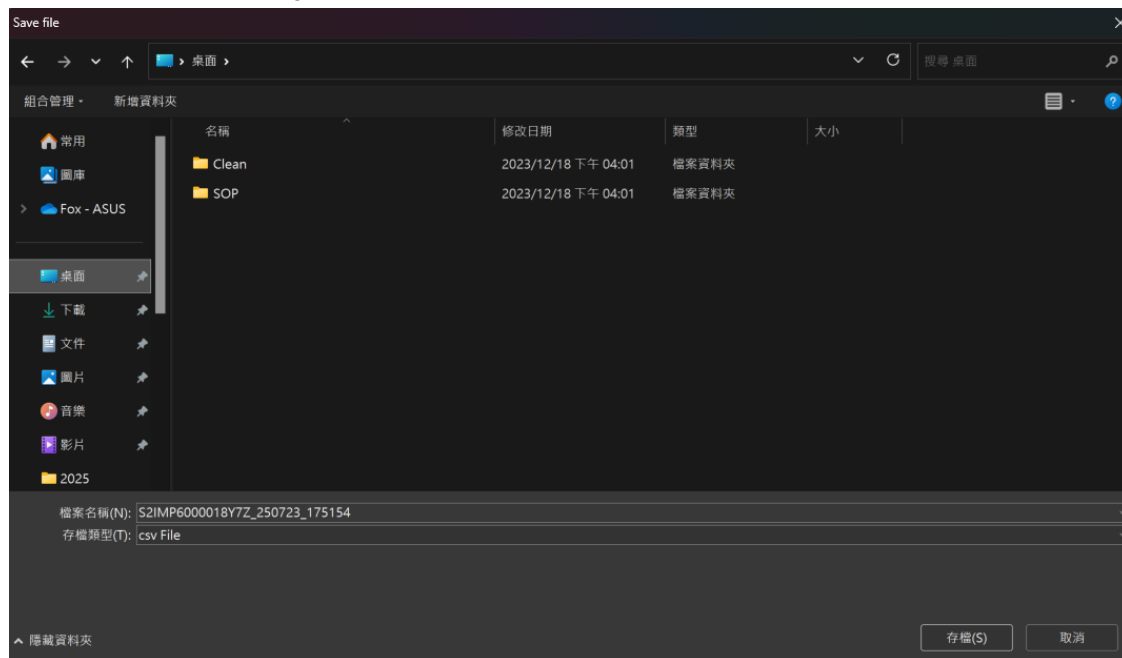
- Click the Recording Data page, select the sensor, click the Start Recording button, and then select the data format and number of seconds.



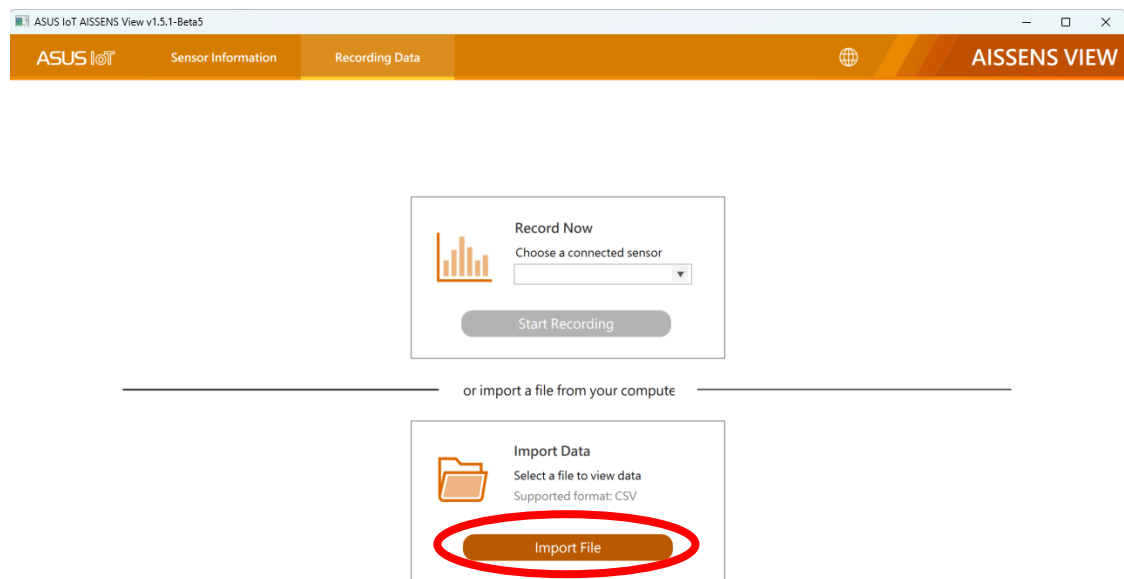
- After the recording is completed, you can view the result (Raw Data / OA / FFT) on the page.



- c. Click the Export button in the top right corner, select the storage location, and export the CSV file.



- d. Click Import File on the Import Data area to reload a exported files.



3. Schedule Recording Settings

Follow the steps below to perform the Schedule Recording function:

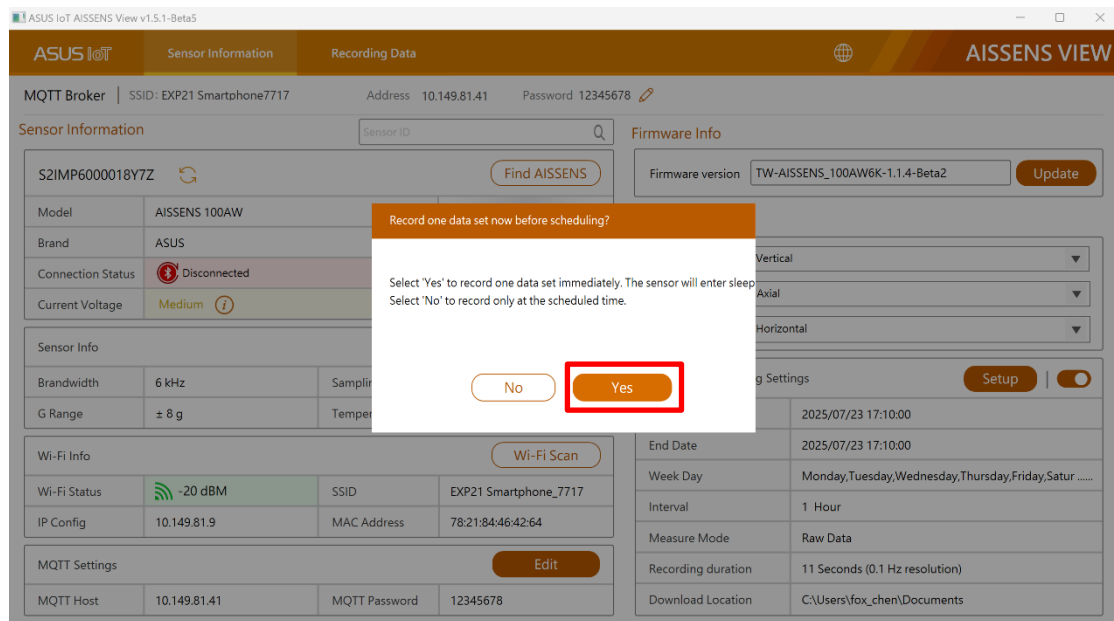
- Click the Setup button to set the Schedule Recording.
- Scheduling: Schedule recording switch, controls whether the schedule recording function is enabled or disabled.

The top screenshot shows the ASUS IoT AISENS View v1.5.1-Beta5 interface. The 'Recording Data' tab is selected. The 'Sensor Information' section shows details for sensor S2IMP6000018Y7Z, which is online. The 'Firmware Info' section shows the current firmware version is TW-AISENS_100AW6K-1.1.4-Beta2. The 'Sensor Settings' section includes fields for X, Y, and Z Axis Position. The 'Scheduled Recording Settings' section is visible, and the 'Setup' button is circled in red. The 'Schedule recording' switch is also circled in red.

The bottom screenshot shows the same interface but with the 'Scheduled Recording Settings' dialog box open. The dialog box contains fields for Start Date/Time, End Date, Week Day, Interval, Measure Mode, Recording Time, and Download Location. The 'Save' button is circled in red.

- Start Date/Time: Sets the start time for scheduled recording.
- End Date/Time: Sets the end time for scheduled recording.
- Weekday: Specifies the days for recording. For example, if Monday and Tuesday are selected, recordings will occur only on these days within the specified start and end dates.
- Interval: Defines the time interval between recordings. For example: If set to 8 hours, recordings occur every 8 hours.
- Measurement Mode: Select the type of data to record:
 - Raw Data
 - OA+FFT
 - OA OnlyChoose the mode that suits your requirements.
- Recording time: Specifies the duration of each recording.
- Download Location: Specifies the storage path for recording data. You can set a custom path as needed.

After completing the settings, press Save, and a prompt will appear asking whether to begin recording immediately. If Yes is selected, the sensor will record a data entry immediately and follow the scheduling plan. If No is selected, you can make additional changes. The sensor will enter a scheduled mode after being idle for three minutes and start recording the next time it wakes up.



4. Firmware Update

Follow these steps to update firmware:

After clicking **Update**, the browser for the update process will pop up.

ASUS IoT AISSENS View v1.5.1-Beta5

ASUS IoT | Sensor Information | Recording Data | AISSENS VIEW

MQTT Broker | SSID: EXP21 Smartphone7717 | Address: 10.149.81.41 | Password: 12345678

Sensor Information

Sensor ID: Find AISSENS

Model: AISSENS 100AW

Brand: ASUS

Connection Status: ✖ Disconnected

Current Voltage: Medium ⓘ

Sensor Info

Bandwidth	6 kHz	Sampling Rate	26.7 kHz
G Range	± 8 g	Temperature	26.87 °C

Wi-Fi Info

Wi-Fi Status: 📶 -22 dBm

SSID: EXP21 Smartphone_7717

IP Config: 10.149.81.9

MAC Address: 78:21:84:46:42:64

MQTT Settings

MQTT Host: 10.149.81.41

MQTT Password: 12345678

Firmware Info

Firmware version: TW-AISSENS_100AW6K-1.1.4-Beta2 **Update**

Sensor Settings

X Axis Position: Vertical

Y Axis Position: Axial

Z Axis Position: Horizontal

Scheduled Recording Settings

Start Date/Time: 2025/07/23 17:10:00

End Date: 2025/07/24 17:10:00

Week Day: Monday, Tuesday, Wednesday, Thursday, Friday, Satur

Interval: 1 Hour

Measure Mode: Raw Data

Recording duration: 11 Seconds (0.1 Hz resolution)

Download Location: C:\Users\fox_chen\Documents

Note: Do not perform any other operations during the firmware update to avoid update failure.

5. Offline firmware and schedule updates

For sensors that have already been scheduled and are offline, you can update the firmware and schedule offline.

- Click the Search button and select the sensor serial number you want to configure.

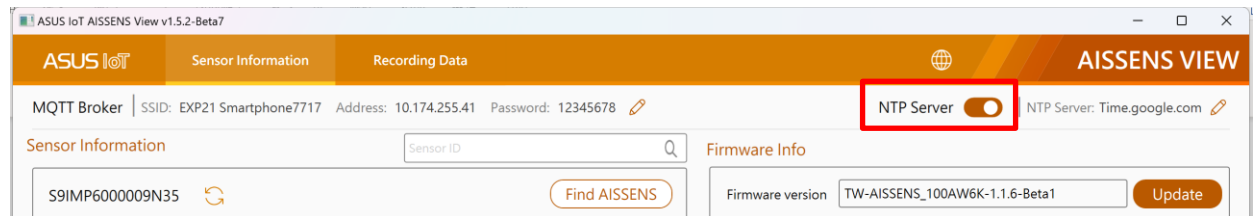
The screenshot shows the ASUS IoT AISENS VIEW interface. The top navigation bar includes 'ASUS IoT', 'Sensor Information', 'Recording Data', and 'AISENS VIEW'. Below the navigation bar, the MQTT Broker settings are displayed: SSID: EXP21 Smartphone7717, Address: 10.149.81.41, Password: 12345678. The 'Sensor Information' tab is active, showing details for sensor S2IMP6000018Y7Z. The sensor is marked as 'Disconnected' with a red icon. The 'Find AISENS' button is circled in red. The 'Firmware Info' section shows the current firmware version as TW-AISENS_100AW6K-1.1.4-Beta2. The 'Sensor Settings' section includes X Axis Position (Vertical), Y Axis Position (Axial), and Z Axis Position (Horizontal). The 'Scheduled Recording Settings' section shows a start date of 2025/07/23 17:10:00 and an end date of 2025/07/24 17:10:00. The 'MQTT Settings' section shows the MQTT Host as 10.149.81.41 and the MQTT Password as 12345678.

- After setting the new Firmware and Schedule, it will be displayed in red and will automatically update when the sensor wakes up next time.

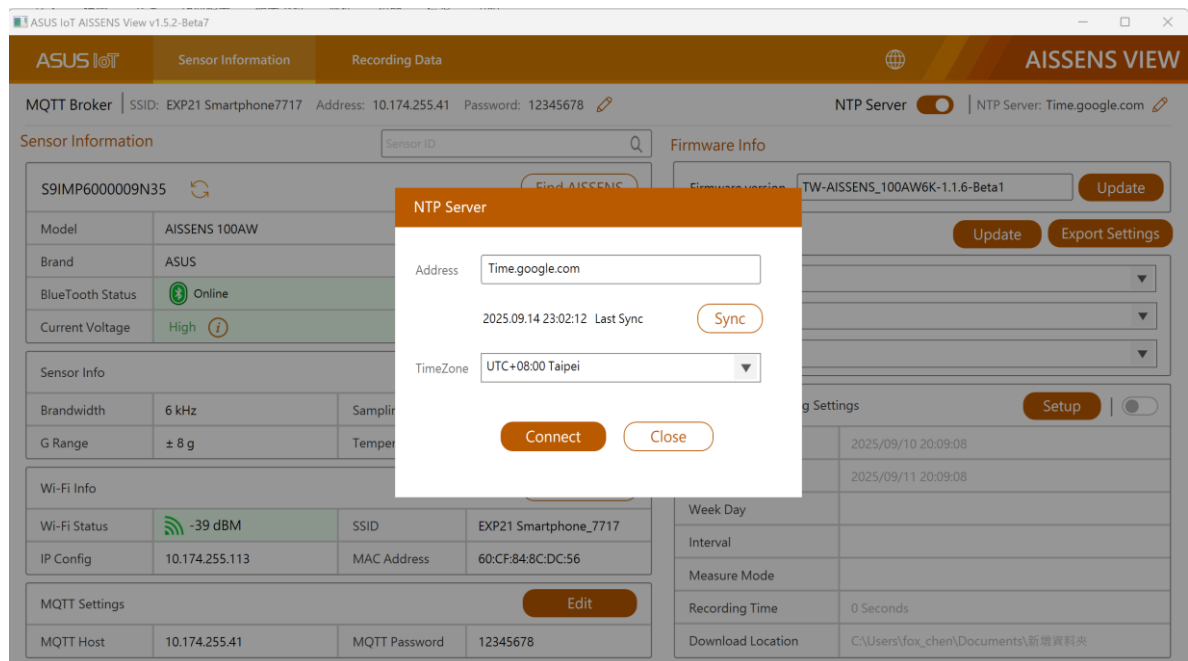
The screenshot shows the ASUS IoT AISENS VIEW interface after the firmware and schedule updates. The 'Firmware Info' section now shows the updated firmware version as TW-AISENS_100AW6K-1.0.0, which is highlighted in red. The 'Scheduled Recording Settings' section shows the updated start date of 2025/07/24 17:10:00 and the updated end date of 2025/07/25 17:10:00, both highlighted in red. The sensor remains 'Disconnected'. The 'Find AISENS' button is still present. The 'Sensor Settings' and 'MQTT Settings' sections remain unchanged from the previous screenshot.

6. NTP server configuration

- a. Click on the NTP Server IP section to set the NTP server settings.
 - NTP Server Switch: When enabled, the sensor will automatically sync time during its first wake-up each day.



- b. Set the NTP Server IP.



- Address: the address of the NTP server.
- Sync: Displays the most recent time synchronization. Tap Sync to manually sync.
- Time Zone: Set the time zone.

XI. AISSENS Connect – Mobile APP

1. Setup Schedule Recording

Follow the steps below to perform the Schedule Recording function:

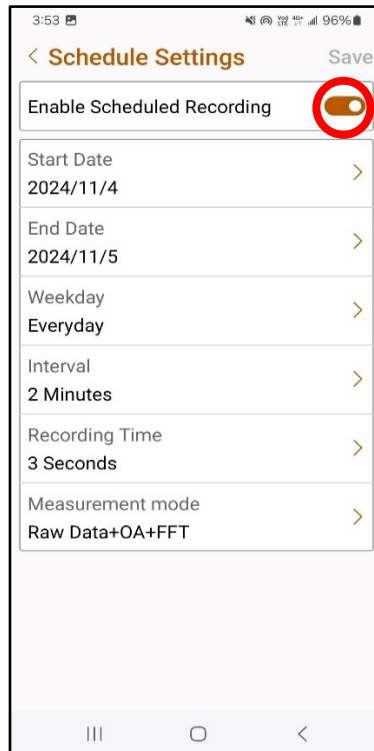
- a. Click on the Schedule section to set the Schedule Recording.

The screenshot shows the AISSENS Connect mobile app interface. At the top, the status bar displays the time 3:53, signal strength, and battery level at 96%. The app title 'AISSENS Connect' is in the orange header bar, with upload and download icons to its right. Below the header, there are two rows: 'Address' with the value '192.168.0.133' and 'Password' with the value '12345678'. A red rectangular box highlights the 'Schedule' section, which has a right-pointing chevron icon. Below this, the 'Recording' status is 'On'. The 'Period' is set to '24/11/4 - 24/11/5', 'Weekday' is 'Everyday', 'Interval' is 'Once every 2 minutes', 'Recording Time' is '3 Seconds', and 'Measurement mode' is 'Raw Data+OA+FFT'. Below these settings is the 'NTP Server IP' section, also with a right-pointing chevron. It includes 'Auto Sync' (On), 'Address' (--), 'Time Zone' (--), and 'Last Update' (--). At the bottom, the version 'v1.0.0' is displayed above a navigation bar with three icons: a menu icon (three vertical bars), a home icon (a circle), and a back icon (a left-pointing chevron).

AISSENS Connect	
Address	192.168.0.133
Password	12345678
Schedule	>
Recording	On
Period	24/11/4 - 24/11/5
Weekday	Everyday
Interval	Once every 2 minutes
Recording Time	3 Seconds
Measurement mode	Raw Data+OA+FFT
NTP Server IP	>
Auto Sync	On
Address	--
Time Zone	--
Last Update	--

v1.0.0

b. Set the Schedule Settings.



- Start Date/Time: Sets the start time for scheduled recording.
 - End Date/Time: Sets the end time for scheduled recording.
 - Weekday: Specifies the days for recording. For example, if Monday and Tuesday are selected, recordings will occur only on these days within the specified start and end dates.
 - Interval: Defines the time interval between recordings. For example: If set to 8 hours, recordings occur every 8 hours.
 - Measurement Mode: Select the type of data to record:
 - Raw Data
 - OA+FFT
 - OA OnlyChoose the mode that suits your requirements.
 - Recording time: Specifies the duration of each recording.
- After setting the information, enable recording.

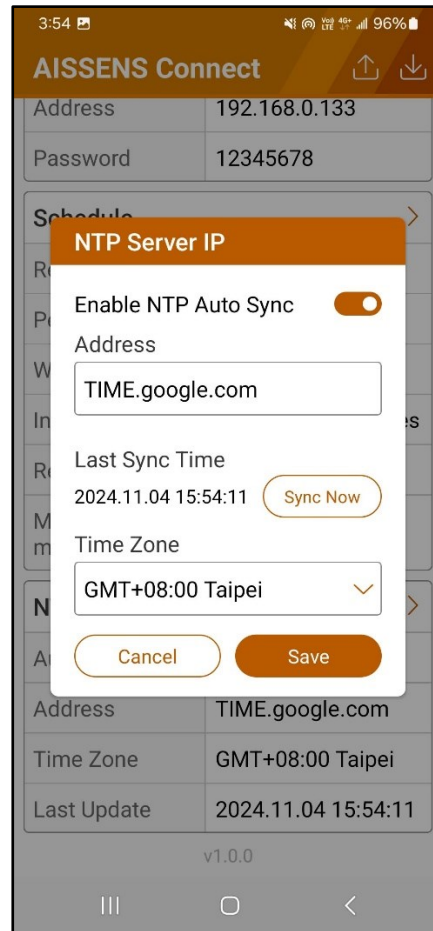
2. NTP server configuration

- a. Click on the NTP Server IP section to set the NTP server settings.

The screenshot shows the AISSENS Connect mobile application interface. At the top, the status bar displays the time 3:53, signal strength, and battery level at 96%. The app header is orange with the title 'AISSENS Connect' and two icons (upload and download). Below the header, there are two input fields: 'Address' with the value '192.168.0.133' and 'Password' with the value '12345678'. A section titled 'Schedule' with a right arrow contains several settings: 'Recording' (On), 'Period' (24/11/4 - 24/11/5), 'Weekday' (Everyday), 'Interval' (Once every 2 minutes), 'Recording Time' (3 Seconds), and 'Measurement mode' (Raw Data+OA+FFT). Below the 'Schedule' section, the 'NTP Server IP' section is highlighted with a red rectangular box. This section has a right arrow and contains the following settings: 'Auto Sync' (On), 'Address' (--), 'Time Zone' (--), and 'Last Update' (--). At the bottom of the screen, the version 'v1.0.0' is displayed above a navigation bar with three icons: a menu icon (three vertical lines), a home icon (a circle), and a back icon (a left arrow).

AISSENS Connect	
Address	192.168.0.133
Password	12345678
Schedule >	
Recording	On
Period	24/11/4 - 24/11/5
Weekday	Everyday
Interval	Once every 2 minutes
Recording Time	3 Seconds
Measurement mode	Raw Data+OA+FFT
NTP Server IP >	
Auto Sync	On
Address	--
Time Zone	--
Last Update	--
v1.0.0	

b. Set the NTP Server IP.

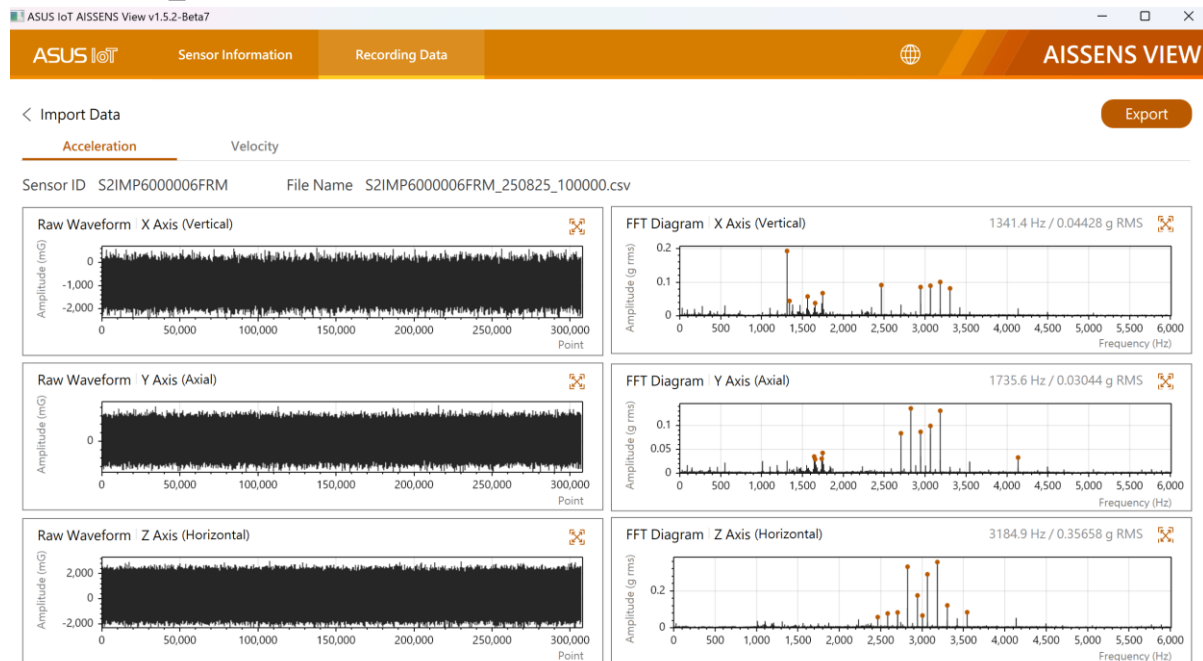


- Enable NTP Auto Sync: When enabled, the sensor will automatically sync time during its first wake-up each day.
- Address: the address of the NTP server.
- Last Sync Time: Displays the most recent time synchronization. Tap Sync Now to manually sync.
- Time Zone: Set the time zone.

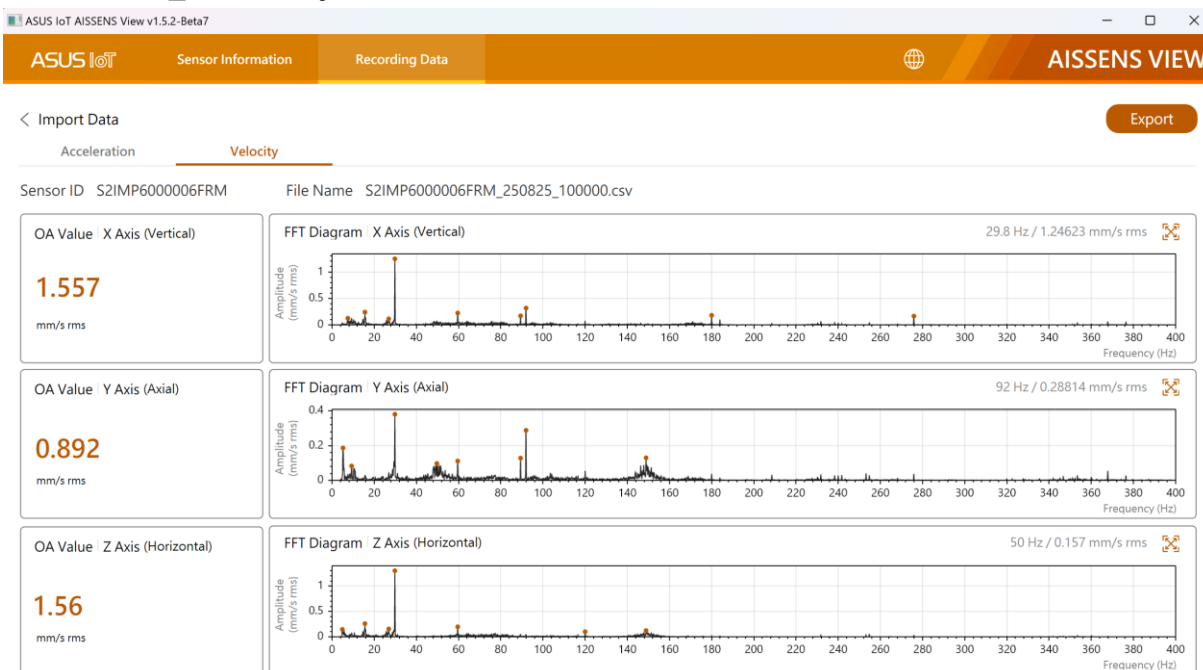
XII. Spectrum interpretation

1. Raw data Spectrum

Raw Data _Acceleration



Raw Data _Velocity



A. Information obtainable from raw data

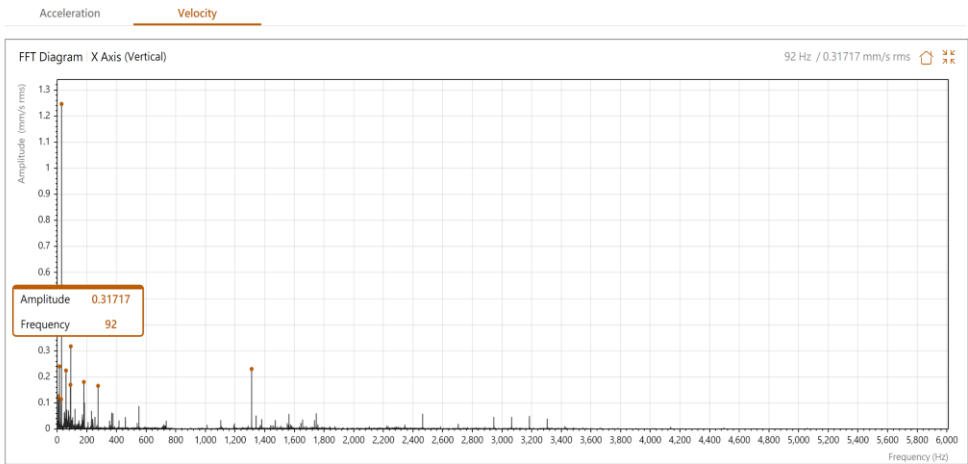
- **Complete Data Recording:** Provides unfiltered and uncompressed raw data, supporting further customized processing and analysis, enhancing data flexibility.
- **Waveform Feature Identification:** Captures transient vibration peaks and impact events, aiding in the identification of short-term or intermittent faults.
- **High-frequency vibration monitoring:** Acceleration data is sensitive to high-frequency vibrations, making it suitable for fault analysis of components such as bearings and gears.
- **Impact and Transient Event Detection:** Acceleration data captures instantaneous impact events, helping to detect potential issues such as bearing degradation, misalignment, or looseness.

B. Information obtainable from raw data– Velocity

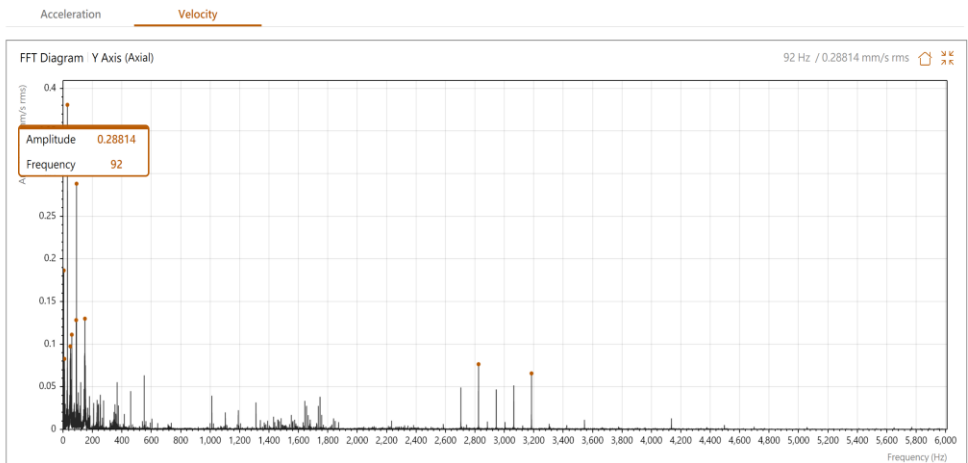
- **Vibration severity assessment:** The RMS (Root Mean Square) value of velocity can be used to measure overall vibration intensity, reflecting equipment health status and allowing comparison with standards such as ISO 10816.
- **Operational Stability Evaluation:** Variations in velocity reflect the operational stability of the equipment and can be used for trend analysis.

2. Velocity FFT spectrum

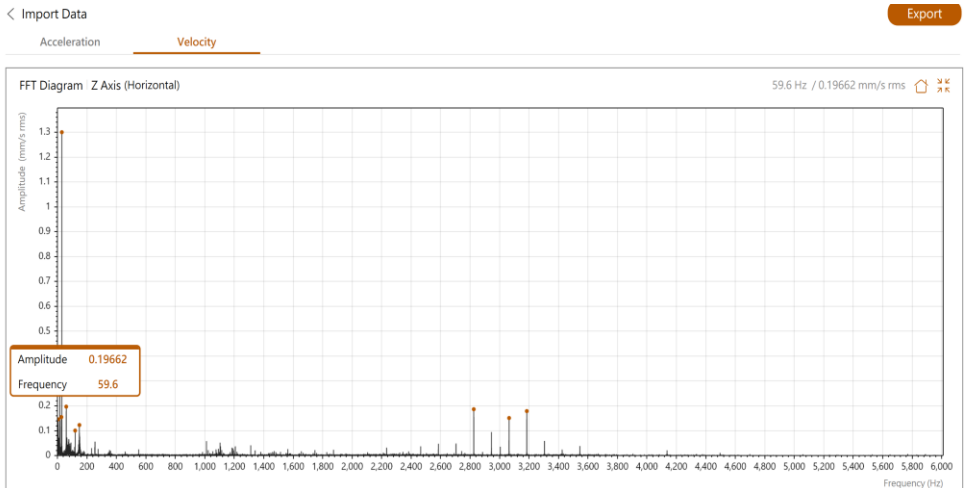
Raw Data_Velocity_X axis FFT



Raw Data_Velocity_Y-axis FFT



Raw Data_Velocity_Z-axis FFT



A. Information obtainable from the velocity FFT

- **Vibration spectrum across axes:** The vibration spectra of the X, Y, and Z axes can be analyzed to identify different frequency components on each axis and understand the vibration behavior of the equipment in all directions.
- **Fault diagnosis:** The characteristic frequencies of each axis reveal potential mechanical faults. Different types of faults, such as imbalance, misalignment, or bearing wear, generate significant vibration signals within specific frequency ranges.
- **Amplitude analysis:** The amplitude in the spectrogram helps assess the distribution of vibration energy on each axis. Higher amplitudes indicate strong vibrations at specific frequencies, aiding in prioritizing potential fault sources.
- **Resonance Identification:** FFT can detect resonance at specific frequencies (or their harmonics), which often amplifies vibration amplitudes and may lead to equipment damage.
- **Overall health assessment:** By comparing spectral characteristics across different axes, the overall health of the machine can be evaluated, helping determine whether the machine's operation is balanced and assessing its operational stability.
- **Fault progress monitoring:** Regular velocity FFT analysis can track changes in equipment condition. An increase in amplitude at certain frequencies over time may indicate the progression of a potential failure.

3. ISO 10816-3 standard

Vibration speed: 10-1000 Hz r > 600 rpm, 2-1000 Hz r > 120 rpm					
Machine type		Medium-sized equipment 15 kW < P ≤ 300 kW		Large equipment 300 kW < P < 50 MW	
		motor 160 mm ≤ H < 315 mm		motor 315 mm ≤ H	
basis		rigid	Flexible	rigid	Flexible
Inch/s rms	mm/s rms				
0.03	0.71	A			
0.06	1.4				
0.09	2.3	B			
0.11	2.8				
0.14	3.5	C			
0.18	4.5				
0.28	7.1	D			
0.43	11				

A: New machine status

B: Allows long-term unlimited operation

C: Allows short-term operation

D: Damage caused by vibrations

XIII. Appendix

1. Product Precautions

A. Environmental Protection Service Life



B. Certification Label

- **NCC:**

Model : AISSENS 100AW

Contains  CCAP24Y10020T9

Low-Power Radio Frequency Equipment Warning:

For low-power RF equipment that has obtained the certification of approval, the company, the firm or the user shall not change the frequency, increase the power or change the characteristics and functions of the original design without approval.

The use of low-power radio frequency equipment shall not affect flight safety and interfere with legitimate communications; if interference is detected, usage must be stopped immediately until the issue is resolved. Legal communications refer to radio communications operated in accordance with telecommunications regulations. Low-power RF equipment must tolerate interference from legal communications or industrial, scientific, and medical (ISM) radio emissions.

- **VCCI:**



この装置は、現在設置されている場所で妨害波の測定がされた情報技術装置です。この場所以外で使用する場合は、その場所で、再び妨害波の測定が必要となります。

Translation:

This is a product for which interference was measured and confirmed to comply at the present installation site. When this equipment is used at any other location, interference must be measured at the new location for compliance.

- **FCC:**

FCC ID: MSQ-AISSENS-100AW

Federal Communications Commission Statement

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment causes harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by doing one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC RF Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.

● MIC:



● EU:



EU RF Output Power Table

Function	Frequency	Maximum Output Power EIRP(mW)
Wi-Fi	2.4 – 2.4835 GHz	< 100
Bluetooth	2.4 – 2.4835 GHz	< 100

Simplified EU Declaration of Conformity

ASUSTek Computer Inc. hereby declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. Full text of EU declaration of conformity is available at <https://www.asus.com/support/>.



Note: To avoid injury, death or damage to the instrument, the operator must refer to the instructions in this manual.

indoor or outdoor use,	Outdoor use
altitude,	2000m
wet location, if applicable,	Applicable
pollution degree of the intended environment	pollution degree 4

● Thailand

เครื่องโทรคมนาคมและอุปกรณ์นี้ มีความสอดคล้องตามมาตรฐานหรือข้อกำหนดทางเทคนิคของ กสทช.

Translation: "This telecommunications equipment and device complies with the technical standards or requirements of the NBTC (National Broadcasting and Telecommunications Commission of Thailand)."

Cleaning: Turn off this equipment before cleaning. Use a damp cloth to clean the equipment. Do not use liquid or spray detergents.

Maintenance:

- If a malfunction or damage occurs, the user must send the instrument to our company or a designated location for repair.
- Regular annual calibration is required to ensure the instrument's effectiveness and accuracy.

Electronic Label Viewing Instructions:

AISENS VIEW: Open the AISENS VIEW app and navigate to the Sensor Information section. The electronic label is located below the product image.

AISENS Connect: Open the AISENS CONNECT app and navigate to the Overview section. The electronic label can be found at the bottom of the list.

22:28
91

AISENS Connect

位址	10.174.255.41
密碼	12345678

排程

排程錄製功能	關閉
開始錄製日期/時間	2025/09/10 20:09:08
結束日期	2025/09/11 20:09:08
工作日	--
間隔頻率	--
錄製時間	--

NTP 伺服器位址 (IP)

自動同步	關閉
位址	--
時區	--
最後更新時間	--

Regulatory

FCC ID	MSQ-AISENS-100AW
NCC Label(Contains)	CCAP24Y10020T9




R 211-250316

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ASUS IoT
Sensor Information
Recording Data

MQTT Broker | SSID: EXP21 Smartphone7717 | Address: 10.174.255.41 | Password: 12345678

Sensor Information

S9IMP6000009N35
Find AISENS

Model	AISENS 100AW	
Brand	ASUS	
BlueTooth Status	Disconnected	
Current Voltage	High	



Sensor Info

Bandwidth	6 kHz	Sampling Rate
G Range	± 8 g	Temperature

Wi-Fi Info | Last seen 2025-09-14 21:48:20

Model Name : AISENS 100AW
FCC ID : MSQ-AISENS-100AW
Contains : CCAP24Y10020T9




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AISENS CONNECT AISENS VIEW

2. Data Sheet

Wireless Vibration/Temperature Sensor
DATASHEET

ASUS IoT

AISSENS 100AW

Advancing Condition Monitoring with Wi-Fi Connectivity and Full-Scale Data Precision

Features

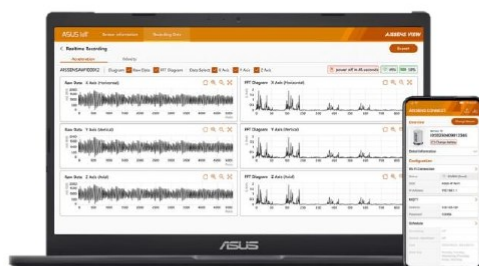
- 6KHz sensitivity for precise early anomaly detection
- Dual Wi-Fi/BLE channels ensure effortless setup and deployment
- Comprehensive PC and mobile app support for user-friendly operation
- MQTT open protocol enables rapid custom development
- Certified IP68 for maximum protection with robust impact resilience

Specifications

3-Axis Accelerometer Sensor	Axis	X-Y-Z
	Frequency Range	10Hz~6000Hz
	Amplitude Range	$\pm 2g \pm 4g \pm 8g$ (Default) $\pm 16g$
	Recording Types	RAW Data, OA, FFT,
	Output Data Rate	26667Hz
Temperature Sensor	Range	-20°C ~ 80°C
Wireless Interfaces	Topology	Wi-Fi 2.4GHz, 802.11b/g/n + BT4.2 (+BLE)
	Transmit Power	Up to 20dBm@11b ; 14dBm@11g/n
Configuration	Interface	Bluetooth Low Energy
Indicator	LED	Power, Tx, Rx
Water & Dust-Proof	IP Class	68
Power	Power Input	3.6V 5400mAh
	Battery Life	2 Years (Sampling raw data for 5 seconds every three hours)
Mechanical	Mounting	Magnetic and Mounting pad
	Dimensions	Height : 73mm(Body) / 80.75mm (w/magnetic mount), Max diameter : $\phi 47.3$ mm
	Weight	prox. 250g
Environment	Operating Temp.	-20°C ~ 80°C (Battery powered)
	Storage Temp.	-20°C ~ 85°C (Without battery)
	Relative Humidity	10 to 95% (non condensing)
	EMC	NCC(TW), SRRC(CN), CE(EU), VCCI(JP), FCC(US)
	Neutral Salt Spray test	Passed, 72hrs



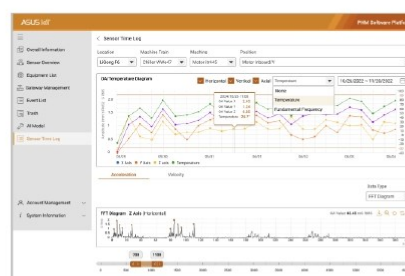
Companion Software



AISSENS View (Windows)

AISSENS Connect (iOS/Android)

- Proximal Bluetooth Configuration (PC/Mobile)
- Scheduled Data Acquisition (PC)
- High-Precision Time and Frequency Domain Display (PC)
- OTA Firmware Updates and Continuous Feature Iteration (PC)



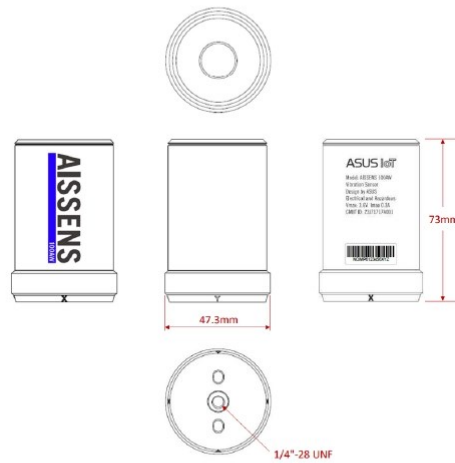
AISPHM-AI Diagnosis & Maintenance Platform

- Manage 100+ sensors simultaneously
- Trend Analysis
- Deep Learning-Based Defect Detection Modeling
- Custom Rule-Based Detection
- On-premise Ubuntu deployment

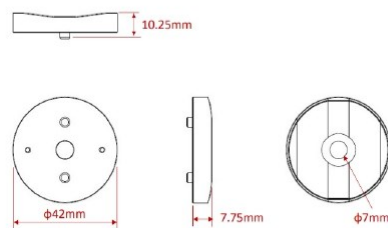
For more information: <http://iot.asus.com>

The specifications and price are subject to change without prior notice 2018 ASUSTek Computer Inc. All rights reserved.

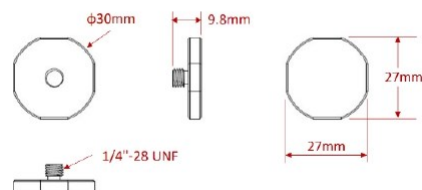
Sensor Body



Magnetic Base



Mounting Pad



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