

edgeRX™ Platform User Guide

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edgeRX™ Dashboard User Guide

⚠ Note: This guide covers the dashboard user flows. Physical installation steps and hardware specifications are intentionally excluded and should be referenced from the respective hardware datasheets and user guides.

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1. Introduction

1.1 About This Guide

TDK SensEI's edgeRX™ end-to-end platform is a complete solution for real-time equipment health monitoring. The edgeRX™ solution leverages edge AI to process data locally at the source for faster, more accurate, and more efficient insights. edgeRX™ is a user-friendly, low-maintenance solution that optimizes the collection, analysis, and management of machine health data. By continuously monitoring the health status of critical assets, edgeRX™ reduces unexpected downtime, optimizes maintenance to improve efficiency and effectiveness, and enables predictive maintenance for users.

This guide provides a comprehensive step-by-step approach to using the edgeRX™ Dashboard for monitoring machine performance. By leveraging real-time data visualization on the dashboard, factory operators can proactively address maintenance needs, reducing downtime and operational costs.

1.2 Related Documentation

For hardware setup, installation, and physical device troubleshooting, please refer to the following user manuals:

Document	Model Number	Contents
edgeRX™ Gateway User Manual	SE5100204G-01	Gateway hardware setup, power connection, network configuration, LED indicators, physical troubleshooting
edgeRX™ Lynq Sensor User Manual	SE1111101G-01	Sensor hardware activation, physical installation, battery information, LED indicators, physical troubleshooting
edgeRX™ Pro Sensor User Manual	SE3116308G-01	Sensor hardware activation, physical installation, battery information, LED indicators, physical troubleshooting

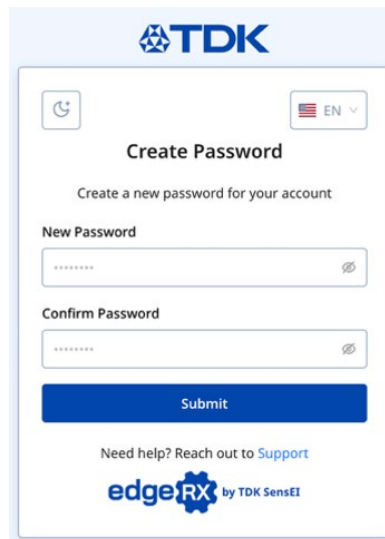
2. Getting Started

2.1 Logging into Your Account

Follow these steps to log into your account:

2.1.1 First-Time Login (New Users)

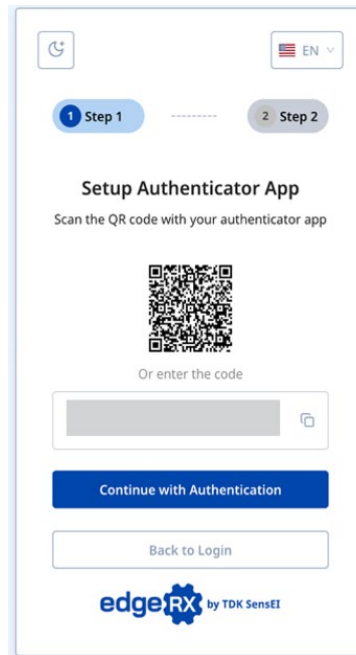
1. Admin can trigger a welcome email via the dashboard as mentioned in [3.1.2 Adding a New User](#).
2. Open the welcome email received from TDK SensEI.
3. Click the login link to access the edgeRX™ Dashboard.
4. Create your password during the first login. Passwords must include a mix of uppercase and lowercase letters, numbers, and special characters, and be between 8 to 18 characters.
4. Complete the MFA setup process (see [Section 2.1.2](#)).



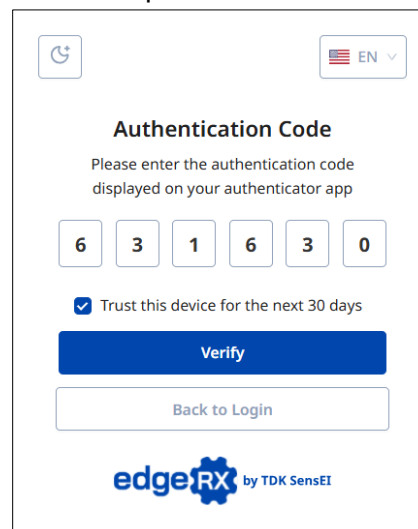
2.1.2 MFA / Authenticator Setup

Multi-Factor Authentication (MFA) adds an extra layer of security to your account.

1. After entering your credentials, you will be prompted to set up MFA.
2. Download an authenticator app on your mobile device (e.g., Google Authenticator, Microsoft Authenticator).
3. Scan the QR code displayed on screen using your authenticator app.



4. Click **"Continue with Authentication"**.
5. Enter the 6-digit verification code generated by your authenticator app.
6. Click **"Verify"** to complete the setup.



⚠ Select the **"Trust This Device"** checkbox to bypass MFA for 30 days on the device.

2.1.3 Existing Users

1. Navigate to the edgeRX™ Dashboard login page.
2. Enter your registered email address and password.
3. Enter the 6-digit code from your authenticator app (if MFA is enabled and device is not trusted).

4. Click "**Login**" to access the Dashboard.

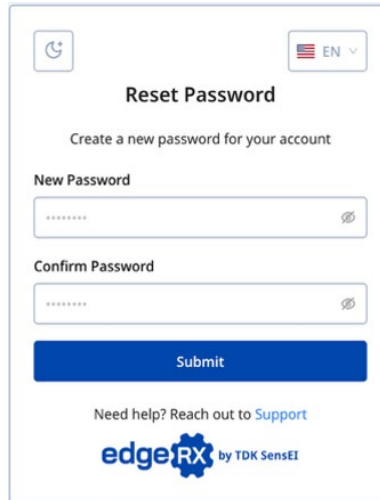
⚠ **Note:** Contact your Administrator if you lose access to the authenticator app on your device and cannot log on to the Dashboard.

2.1.4 Forgot Password

If you have forgotten your password:

1. Click the "**Forgot Password**" link on the login page.

2. Enter your registered email address.
3. Click "**Submit**" to receive a password reset link via email.
4. Open the email and click the reset link.
5. Enter and confirm your new password. Passwords must include a mix of uppercase and lowercase letters, numbers, and special characters, and be no longer than 18 characters.

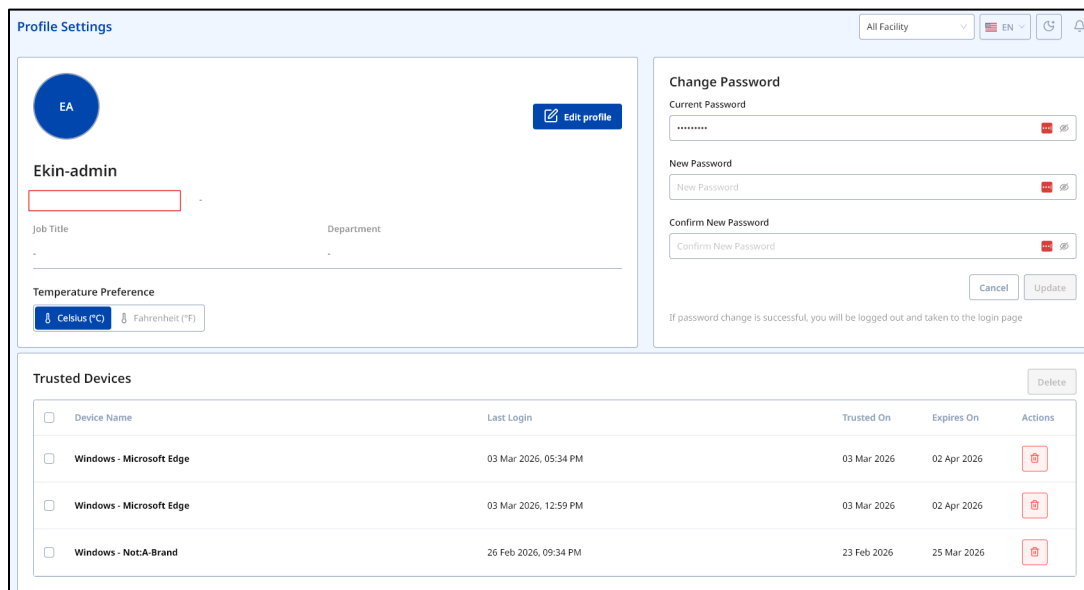


The image shows a 'Reset Password' form. At the top, there is a refresh icon and a language dropdown set to 'EN'. The title is 'Reset Password'. Below it, the instruction says 'Create a new password for your account'. There are two password input fields: 'New Password' and 'Confirm Password'. Both fields have a strength indicator icon on the right. Below the fields is a blue 'Submit' button. At the bottom, there is a link for 'Support' and the 'edgeRX by TDK SenseI' logo.

6. Click "**Reset Password**" to complete the process.
7. Return to the login page and sign in with your new credentials (see [Section 2.1.3](#))

2.1.5 Profile Settings

To manage your profile settings, click your username on the bottom-left corner.



The image shows the 'Profile Settings' page. At the top right, there is a facility dropdown set to 'All Facility', a language dropdown set to 'EN', and icons for refresh and notifications. The main content area is divided into two columns. The left column shows the user's profile: a circular profile picture with 'EA', the username 'Ekin-admin', and an 'Edit profile' button. Below this are fields for 'Job Title' and 'Department'. There is also a 'Temperature Preference' section with radio buttons for 'Celsius (°C)' and 'Fahrenheit (°F)'. The right column contains a 'Change Password' section with fields for 'Current Password', 'New Password', and 'Confirm New Password', along with 'Cancel' and 'Update' buttons. A message states: 'If password change is successful, you will be logged out and taken to the login page'. At the bottom, there is a 'Trusted Devices' section with a 'Delete' button and a table of trusted devices.

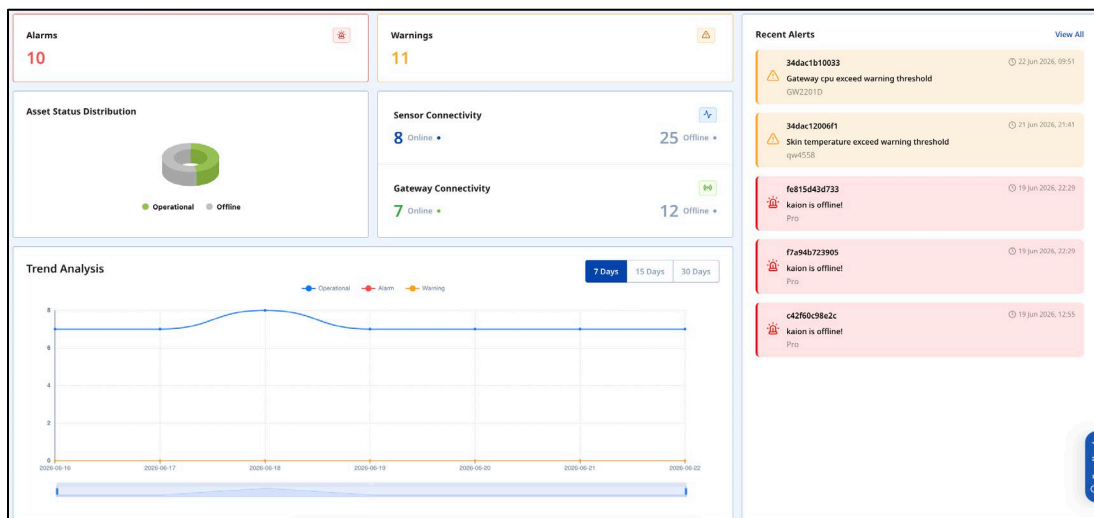
Device Name	Last Login	Trusted On	Expires On	Actions
☐ Windows - Microsoft Edge	03 Mar 2026, 05:34 PM	03 Mar 2026	02 Apr 2026	☐
☐ Windows - Microsoft Edge	03 Mar 2026, 12:59 PM	03 Mar 2026	02 Apr 2026	☐
☐ Windows - Not:A-Brand	26 Feb 2026, 09:34 PM	23 Feb 2026	25 Mar 2026	☐

On the Profile Settings page, you can:

- Update your job title and add a profile picture.
- Update your account password (if password change is successful, you will need to log in to the Dashboard again).
- View or remove trusted devices from MFA bypass.
- Update your preferred temperature unit from Celsius to Fahrenheit and vice-versa.

2.2 Navigating the Homepage Dashboard

After logging in, you will be directed to the Homepage Dashboard. Here you'll see an overview of real-time information on your sensors:



Widget	Description	User Action / Click Behavior
Alarms	Active alarms across all assets	Navigates to the Alerts page with Alarm data filter
Warnings	Active warnings across all assets	Navigates to the Alerts page with Warning data filter
Asset Status Distribution	Asset online/offline status	Navigates to the Assets page
Sensor Connectivity	Sensor online/offline status	Navigates to the Sensor page
Gateway Connectivity	Gateway online/offline status	Click to view Gateway page
Trend Analysis Chart	High-level metrics showing asset behavior over time	Click to view 7d/15d/30d trend data
Recent Alerts	Recent Top 5 Notifications	Navigates to Alerts page

2.2.1 Location / Facility Selector

Use the location/facility selector dropdown to switch between different sites or facilities within your organization.

Note: Access to the location/facility selector is restricted to **Admin** and **Global Executive** users only.

2.2.2 Language Selector

The Global Language Selector is in the top right corner of the dashboard screen. Use the selector to switch between the following languages:

- English (default)
- Japanese
- Simplified Chinese

The selected language persists across all pages of the application.

2.2.3 Theme Toggle

The theme toggle is in the top right corner of the screen. Use this to switch between:

- Light theme
- Dark theme

The selected theme persists across all pages of the application.

 **Troubleshooting:** If any widget appears inactive or blank, confirm that your gateways and sensors are online.

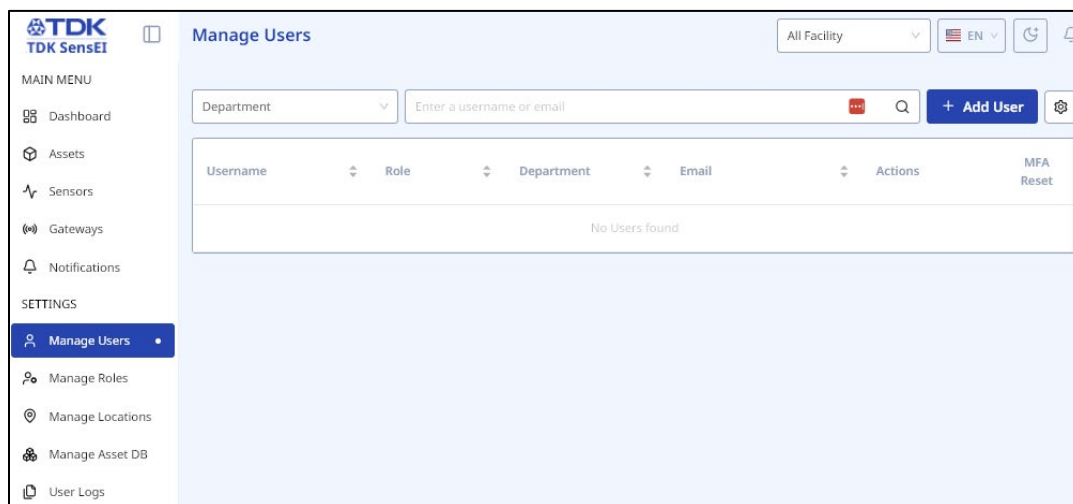
3. Managing Users & Roles (for Admin Users)

Before you can manage the sensors and gateway included in the edgeRX™ Starter Kit, you must create an account in the edgeRX™ Dashboard. The email you use to sign up will become your Admin user. Admin users can create additional users, including other Admin users with either the same or custom permissions.

After your account is created, you are automatically granted administrator privileges in the Dashboard. From here, you can create roles and assign permissions based on your specific needs.

3.1 Manage Users

From the Main Menu, navigate to **Settings > Manage Users** to access user management functions.



3.1.1 Viewing the Users List

The user list displays all users within your organization. From here, you can:

- View all registered users
- Filter users by Department
- Search for users by username or email ID
- Adjust the number of rows displayed per page from the default 10 to anywhere between 20-100 and vice-versa

3.1.2 Adding a New User

⚠ Note: Before you can add users, you need to create roles for your organization (see Section [3.2 Manage Roles](#)). Permissions are attached to roles.

To add a new user:

1. Click the **"Add User"** button on the top right corner.
2. Enter the following details in the modal:

Add User

User Name*

Email*

Role*

Select Role

Location*

Select Location

Department

Select Department

Cancel

Add User

Field	Description
User Name	Full name of the user
Email	User's email address (used for login)
Role	The role to be assigned to the user
Location	The location to which the user is attached
Department (Optional)	The department to which the user is assigned

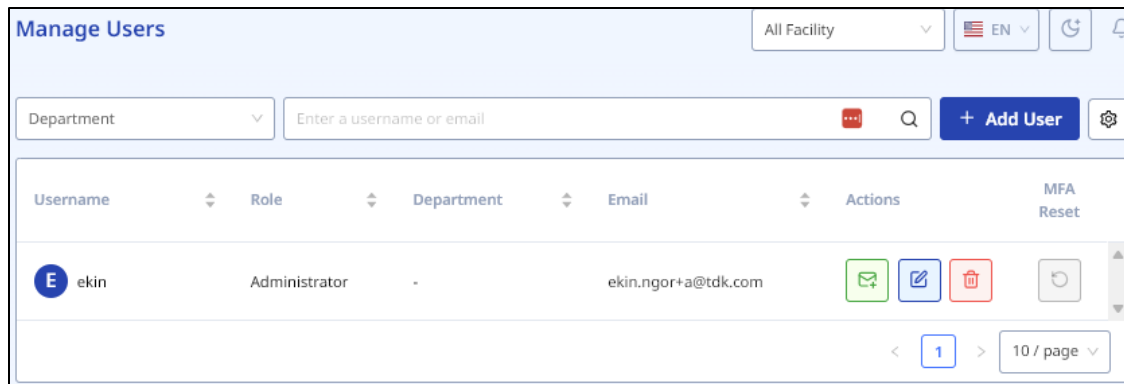
- Click **"Add User"** to create the new user account.
- Click **"Cancel"** to terminate the action without adding the user.

 **Note:** New users receive a welcome email with instructions to set up their password.

3.1.3 Managing Existing Users

For each user in the list, you can perform the following actions:

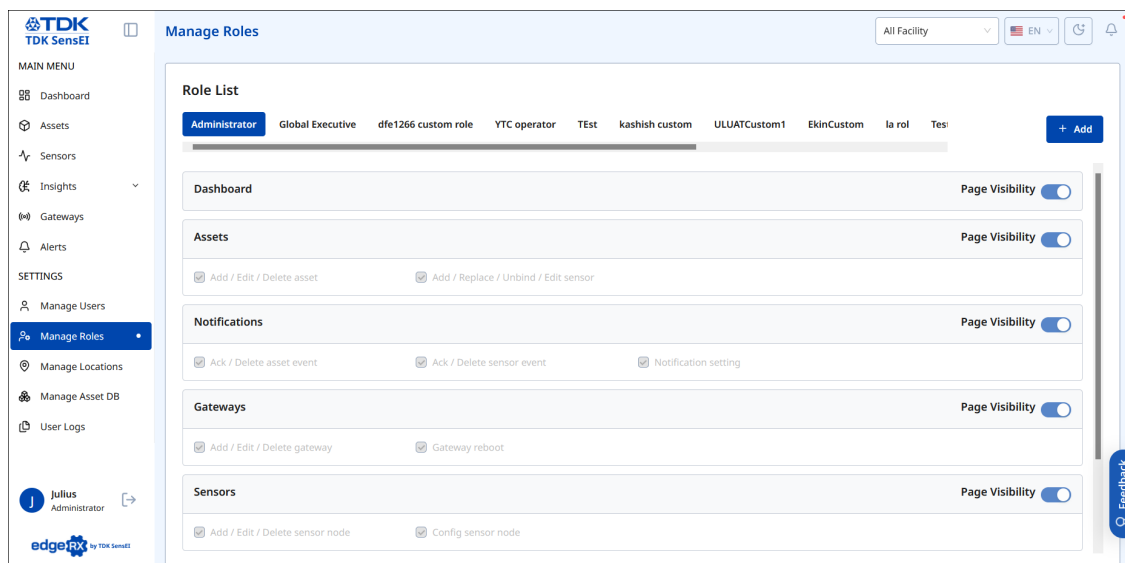
Action	Description	When to Use
Edit User Details	Update user information	User changes role, department, or email
Assign Roles	Change the user's role and permissions	User responsibilities change
Resend Welcome Email	Resend the welcome email	User hasn't completed initial setup
Reset Password	Force password reset for active users	User forgets password
Resend Verification Email	Resend the verification email	User updates email address
Reset MFA	Clear MFA setup for a user	User loses access to authenticator app



To perform any of these actions, click the corresponding button in the **Actions** column to the left of a user's name.

3.2 Manage Roles

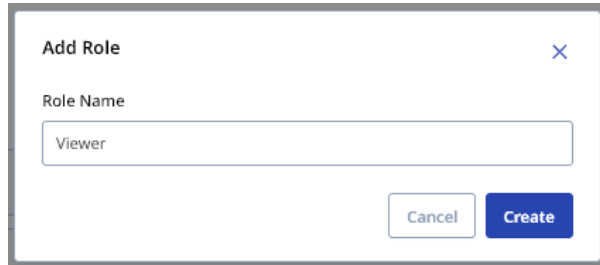
Navigate to **Settings > Manage Roles** to create or edit roles and assign module-level access.



3.2.1 Adding a New Role

To add a new role:

1. Click the **"Add"** button.
2. Enter the role name.
3. Click **"Create"** to add the new role.
4. Click **"Cancel"** to terminate the action.



The image shows a modal dialog box titled "Add Role" with a close button (X) in the top right corner. Inside the dialog, there is a label "Role Name" above a text input field. The input field contains the text "Viewer". At the bottom right of the dialog, there are two buttons: "Cancel" and "Create".

3.2.2 Editing a Role Name

To edit a role name:

1. Select a role from the list on top,
2. Click the **Edit** button.
3. In the **Update Role** window, update the role name.
4. Click **Update** to apply the change or **Cancel** to discard the process.

3.2.3 Deleting an Existing Role

To delete a role:

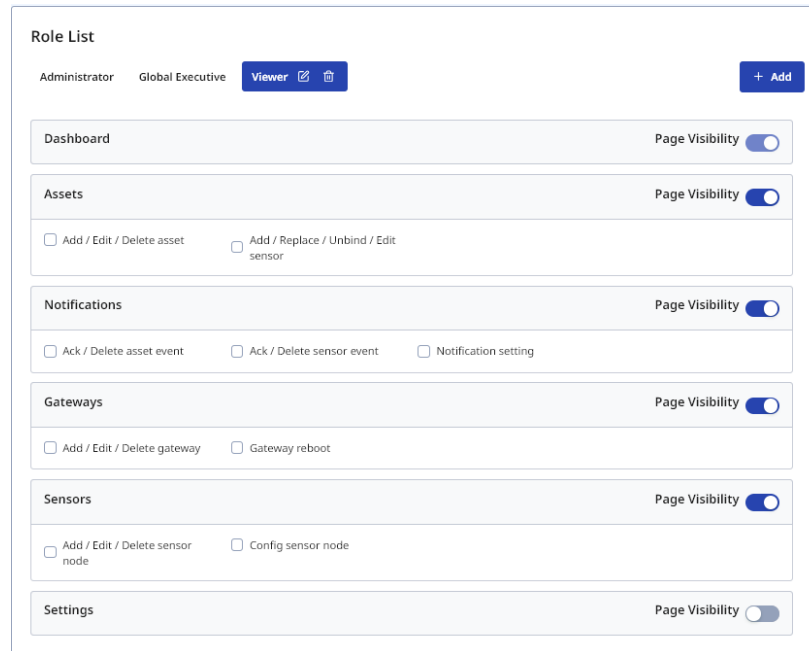
1. Select a role from the list on top,
2. Click the **Delete** button.
3. Click **Delete Permanently** to delete the account or **Cancel** to discard the process.

3.2.4 Configuring Role Permissions

To configure permissions, select the role you just created from the role list and use the toggle buttons and checkboxes to enable permissions for the role:

- Toggle buttons control **module access** (e.g., Sensors, Gateways, Assets, Notifications)
- Checkboxes control **specific actions** within modules (e.g., View, Add, Edit, Delete)

To disable permissions, toggle the corresponding buttons off and/or deselect the corresponding checkboxes.



3.3 Global Executive Role

The **Global Executive** role has read-only permissions to view dashboards and data including:

- Sensors and Gateways
- Notifications
- Insights

3.4 Profile Settings

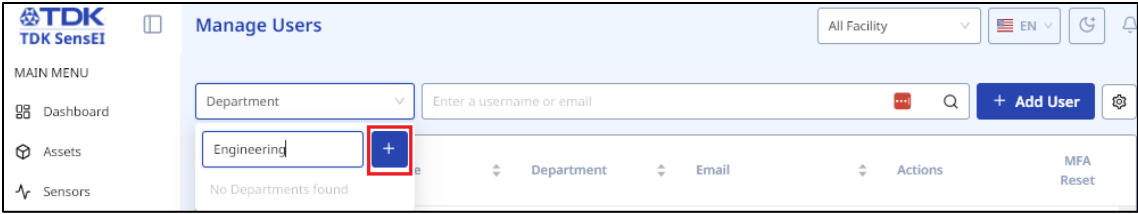
Users can manage their own accounts via **Profile Settings**. For detailed instructions, see [Section 2.1.5](#).

3.5 Managing Departments

If your organization assigns roles to users based on department, you can manage these departments from the **Manage Users** page. To create a new department, Select **Department**, enter the department's name, and click **+**.

To edit a department's name, select the department from the list, click the **Edit** button, update the name, then click **Save**.

To delete a department, select the department, then click the **Delete** button.

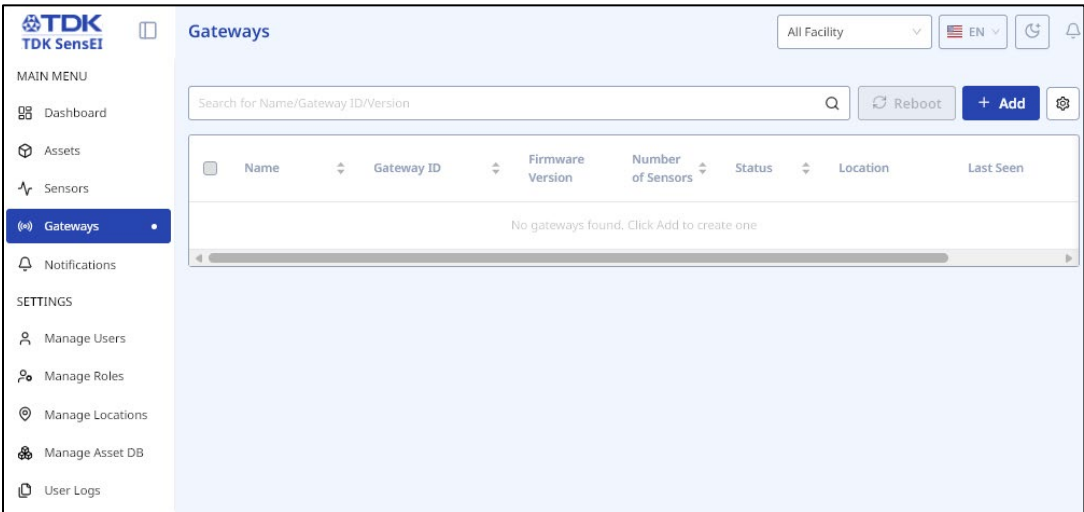


4. Gateway Management

4.1 Adding a Gateway to the Dashboard

Note: Before adding a gateway, set up a location first. Refer to [12.1 Location Hierarchy](#) to set up a location.

Log into the edgeRX™ Dashboard, then select **Gateways** from the Main menu.



To Add a Gateway

- On the **Gateways** page, click the **Add** button on the top right.

- On the **Add Gateway** window, enter the required details:

Field	Description
Gateway Name	A custom name for identification
Gateway ID	The 12-character Gateway ID (found on the Gateway product box or on the flat-bottom surface of the Gateway)
Location	Location of the Gateway on the floorplan

- (Optional) Select the gateway location on the map or enter its X and Y coordinates in the corresponding fields.

Add GW2201D 2.0

Gateway ID*

Name*

Location*

Coordinate X (Meter)

Coordinate Y (Meter)

Please click on the map to select a location

- Click **"Save"** to add the Gateway to the list and make it available for monitoring and management.
- Go to the Gateway Details tab and look at the Status on the bottom right. If Status says **Online**, the Gateway is available for monitoring.

← Gateways
Berkeley
EN

Berkeley Gateway 1
Reboot

Details
Sensors
Diagnostics
Logs

Gateway Information

Gateway Name:	Gateway ID:	Firmware Version:	Attached Sensors:
Gateway 1	34dac1b101cd	2.0.3	0
Location:	Last Seen Timestamp:	CPU/RAM:	Status:
Berkeley/Building A/East Side	2026-08-08 10:43:19	33% / 29%	Online

4.2 Managing Gateways

4.2.1 Reboot an Online Gateway

1. Select a gateway from the list.
2. Click the **"Reboot"** button.
3. In the Reboot window, click **"Confirm"** to reboot the Gateway
4. Click **Cancel** to stop the reboot process.

 **Note:** You can only reboot one Gateway at a time. After rebooting, it may take a few minutes for the Gateway to come back online.

4.2.2 Delete a Gateway

1. Select the gateway from the list.
2. Click the **"Delete"** button on the left.
3. In the Delete gateway window, click **"Delete"** to confirm removal of the Gateway.
4. Click **"Cancel"** to stop the delete process.

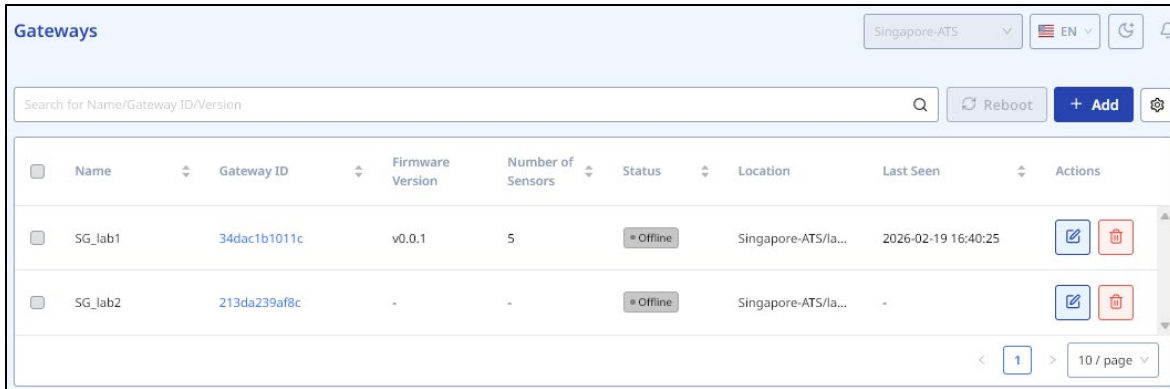
4.2.3 Edit a Gateway

1. Select the gateway from the list.
2. Click the **Edit** button.
3. In the Edit Gateway window, update the Required fields.
4. Click **"Save"** apply changes, or click **"Cancel"** to discard them.

4.3 Viewing the Gateways List

The Gateways list provides a searchable, paginated view of all Gateway devices.

Feature	Description
Search Bar	Locate Gateways by Name, Gateway ID, or Version No.
Rows per Page	Adjust the number of rows displayed per page from the default 10 to anywhere between 20-100 and vice-versa
Column Settings	Customize the columns you see on the list by clicking the Table Settings button in the top-right corner.

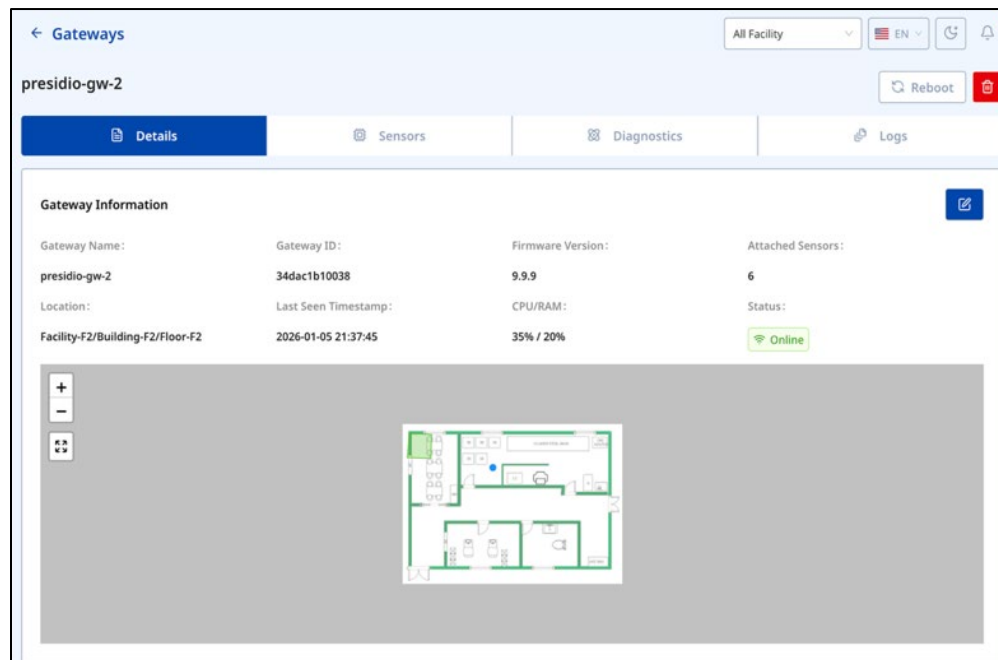


The screenshot shows the 'Gateways' dashboard. At the top, there's a search bar and buttons for 'Reboot' and '+ Add'. Below is a table with columns: Name, Gateway ID, Firmware Version, Number of Sensors, Status, Location, Last Seen, and Actions. Two gateways are listed: SG_lab1 and SG_lab2. SG_lab1 has Gateway ID 34dac1b1011c, Firmware Version v0.0.1, 5 sensors, and is Offline. SG_lab2 has Gateway ID 213da239af8c, Firmware Version -, 0 sensors, and is Offline. The bottom right shows pagination: 1 / 10 page.

Name	Gateway ID	Firmware Version	Number of Sensors	Status	Location	Last Seen	Actions
SG_lab1	34dac1b1011c	v0.0.1	5	Offline	Singapore-ATS/la...	2026-02-19 16:40:25	[Edit] [Delete]
SG_lab2	213da239af8c	-	-	Offline	Singapore-ATS/la...	-	[Edit] [Delete]

4.4 Gateway Detail View

To access detailed information about a Gateway, click the **Gateway ID** from the list. This opens the Gateway Details View:



The screenshot shows the 'Gateway Details View' for 'presidio-gw-2'. The top bar includes a back arrow, 'Gateways' title, and filters for 'All Facility', language 'EN', and a refresh button. Below the title bar are tabs for 'Details' (selected), 'Sensors', 'Diagnostics', and 'Logs'. The 'Details' tab shows 'Gateway Information' with a table of key-value pairs: Gateway Name (presidio-gw-2), Gateway ID (34dac1b10038), Firmware Version (9.9.9), Attached Sensors (6), Location (Facility-F2/Building-F2/Floor-F2), Last Seen Timestamp (2026-01-05 21:37:45), CPU/RAM (35% / 20%), and Status (Online). Below the table is a floor plan diagram with a green dot indicating the gateway's location.

Gateway Name:	Gateway ID:	Firmware Version:	Attached Sensors:
presidio-gw-2	34dac1b10038	9.9.9	6

Location:	Last Seen Timestamp:	CPU/RAM:	Status:
Facility-F2/Building-F2/Floor-F2	2026-01-05 21:37:45	35% / 20%	Online

4.4.1 Details Tab

This tab displays the following information:

- Gateway Name
- Gateway ID
- Online/Offline Status
- Firmware Version
- Number of Connected Sensors
- Location
- Last Seen Timestamp
- Real-time CPU and RAM usage

4.4.2 Sensors Tab

From this tab, you can:

- View sensors currently connected to the Gateway
- Add/delete sensors to/from the Gateway
- Click on a Sensor ID to view sensor details (see [Section 5](#))

Details

Sensors

Diagnostics

Logs

Sensor List

+ Add Sensor

Sensor ID	Sensor Type	Associated Asset	Firmware Version	RSSI	Last Seen on	Status	Action
34dac1200909	Lynq	lab_motor	1.105	-47dBm	2026-02-06 14:53:04	Offline	
34dac1200a23	Lynq	lab_motor	1.105	-39dBm	2026-02-03 14:36:53	Offline	
34dac120018a	Lynq	lab_motor	1.105	-40dBm	2026-02-03 14:36:14	Offline	
34dac1200b94	Lynq	lab_motor	1.105	-21dBm	2026-01-14 09:52:54	Offline	
34dac1200860	Lynq	lab_motor	1.105	-35dBm	2026-01-14 09:52:46	Offline	

< 1 >

10 / page

4.4.3 Diagnostics Tab

From this tab, you can monitor the health and performance of the Gateway over time.

CPU and RAM Usage Graph

- Analyzes gateway performance based on CPU and RAM utilization
- Toggle between predefined time ranges: **1 Day**, **3 Days**, **1 Week**
- Alternatively, use the custom date range picker to view up to three (3) months of historical data.



Received Packets Statistics Graph

- Analyzes network traffic patterns
- Toggle between predefined time ranges: **1 Day**, **3 Days**, **1 Week**
- Alternatively, use the custom date range picker to view up to three (3) months of historical data.



4.4.4 Logs Tab

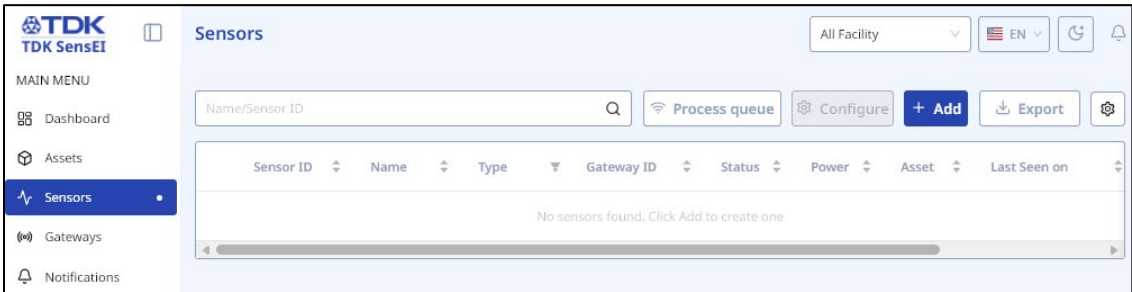
View the Gateway's behavior and operational history:

- Date of last firmware update, with user details
- Event details, including:
 - Online/offline status changes
 - Reboots
 - Sensor assignments
 - Location changes

5. Sensor Management

5.1 Adding a Sensor to the Dashboard

Log into the edgeRX™ Dashboard using your authorized credentials, then select **Sensors** from the Main menu.



Note: Only users with **Sensor Provisioning** permissions can add sensors to the system. **Super Admin** and **Admin** users can add sensors to any gateway, while other users can add sensors only to gateways assigned to their locations.

To Add a Sensor

- In the **Sensors** page, click the **Add** button on the top right.

- In the **Add Sensor** window, enter the required details:

Field	Description
Sensor Type	Select Lynq or Pro
Sensor ID	The Sensor ID (printed on the side of each sensor, 6 characters for Lynq and 12 characters for Pro)
Sensor Name	Create a custom name for the sensor
Gateway	Select the Gateway to which the sensor will be attached

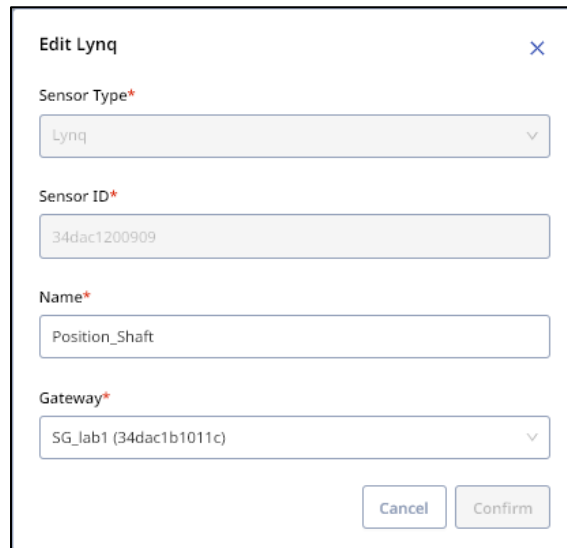
- Click **"Add"** to register the sensor in the system.

⚠ **You can add a total of 10 Lynq or Pro sensors to a single gateway.** Sensors can also be added or attached to a gateway from the **Gateways > Sensors** tab (see [Section 4.4.2. Sensors Tab](#)).

5.2 Managing Sensors

5.2.1 Edit a Sensor

1. On the **Sensors** page, select the sensor from the list.
2. Click the **"Edit"** button on the left
3. In the Edit window, update the required fields.
4. Click **"Confirm"** to apply changes, or click **"Cancel"** to discard them.



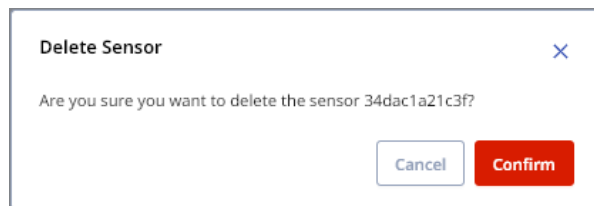
The 'Edit Lynq' dialog box contains the following fields:

- Sensor Type***: A dropdown menu with 'Lynq' selected.
- Sensor ID***: A text input field containing '34dac1200909'.
- Name***: A text input field containing 'Position_Shift'.
- Gateway***: A dropdown menu with 'SG_lab1 (34dac1b1011c)' selected.

At the bottom right, there are two buttons: 'Cancel' and 'Confirm'.

5.2.2 Delete a Sensor

1. On the **Sensors** page, select a sensor from the list.
2. Click the **"Delete"** button to the left of the sensor.
3. In the **Delete Sensor** window, click **"Confirm"** to delete the sensor, or click **"Cancel"** to quit the process.



The 'Delete Sensor' dialog box contains the following text:

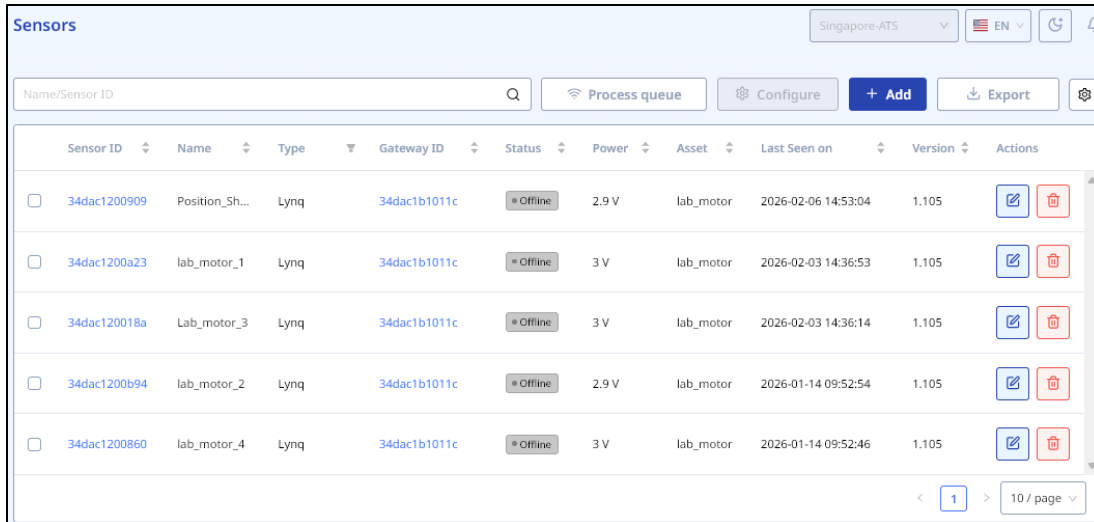
Are you sure you want to delete the sensor 34dac1a21c3f?

At the bottom right, there are two buttons: 'Cancel' and 'Confirm'.

Once deleted, the sensor is removed from the Dashboard and is no longer monitored.

5.3 Sensor List Features

The Sensor list provides a searchable, paginated view of all your Sensors.



Sensor ID	Name	Type	Gateway ID	Status	Power	Asset	Last Seen on	Version	Actions
34dac1200909	Position_Sh...	Lynq	34dac1b1011c	Offline	2.9 V	lab_motor	2026-02-06 14:53:04	1.105	[Edit] [Delete]
34dac1200a23	lab_motor_1	Lynq	34dac1b1011c	Offline	3 V	lab_motor	2026-02-03 14:36:53	1.105	[Edit] [Delete]
34dac120018a	Lab_motor_3	Lynq	34dac1b1011c	Offline	3 V	lab_motor	2026-02-03 14:36:14	1.105	[Edit] [Delete]
34dac1200b94	lab_motor_2	Lynq	34dac1b1011c	Offline	2.9 V	lab_motor	2026-01-14 09:52:54	1.105	[Edit] [Delete]
34dac1200860	lab_motor_4	Lynq	34dac1b1011c	Offline	3 V	lab_motor	2026-01-14 09:52:46	1.105	[Edit] [Delete]

Feature	Description
Search Bar	Locate sensors by Sensor Name, Sensor ID, or Gateway ID.
Rows per Page	Adjust the number of rows displayed per page from the default 10 to anywhere between 20-100 and vice-versa.
Column Settings	Customize the columns you see on the list by clicking the Table Settings button in the top-right corner.

Table Columns:

- Sensor ID
- Sensor Name
- Sensor Type
- Linked Gateway ID
- Online/offline status
- Power (Battery Voltage or Wired)
- Linked Asset
- Last Seen Time
- Firmware version
- Delete and Edit (actions that can be performed on the sensors)

5.4 Sensor Configuration

5.4.1 Process Queue

Click the **"Process Queue"** button on the top panel to view current/pending OTA and Configuration updates for your sensors.

Process Queue ✕

[Clear History](#)

OTA Configure

No.	Sensor ID	Sensor Type	Status	Created On	Upgrade On
1	34dac120018a	Lynq	Finished	2026-01-13 14:32:02	2026-01-13 14:38:34

< 1 > 10 / page ▾

5.4.2 Configure Accelerometer, KPI and Raw Data Intervals

Sensors Singapore-ATS ▾ EN ▾ 🔔

Name/Sensor ID 🔍 📶 Process queue ⚙️ Configure + Add 📄 Export ⚙️

	Sensor ID	Name	Type	Gateway ID	Status	Power	Asset	Last Seen on	Version	Actions
☒	34dac1200909	Position_Sh...	Lynq	34dac1b1011c	Offline	2.9 V	lab_motor	2026-02-06 14:53:04	1.105	✎ 🗑️
☐	34dac1200a23	lab_motor_1	Lynq	34dac1b1011c	Offline	3 V	lab_motor	2026-02-03 14:36:53	1.105	✎ 🗑️
☐	34dac120018a	Lab_motor_3	Lynq	34dac1b1011c	Offline	3 V	lab_motor	2026-02-03 14:36:14	1.105	✎ 🗑️
☐	34dac1200b94	lab_motor_2	Lynq	34dac1b1011c	Offline	2.9 V	lab_motor	2026-01-14 09:52:54	1.105	✎ 🗑️
☐	34dac1200860	lab_motor_4	Lynq	34dac1b1011c	Offline	3 V	lab_motor	2026-01-14 09:52:46	1.105	✎ 🗑️

< 1 > 10 / page ▾

1. Select one or more Sensors of the same type from the list.
2. Click the **"Configure"** button on the top panel.
3. In the Sensor Configuration window, the Accelerometer box shows the sensor's default configuration values. Edit these values if needed.
4. Click **"Save"** to apply changes.

⚠️ Note: When configuring one or more sensors of the same type, the updated values are applied to all the selected sensors.

Sensor Configuration Settings, KPI and Raw Data Intervals

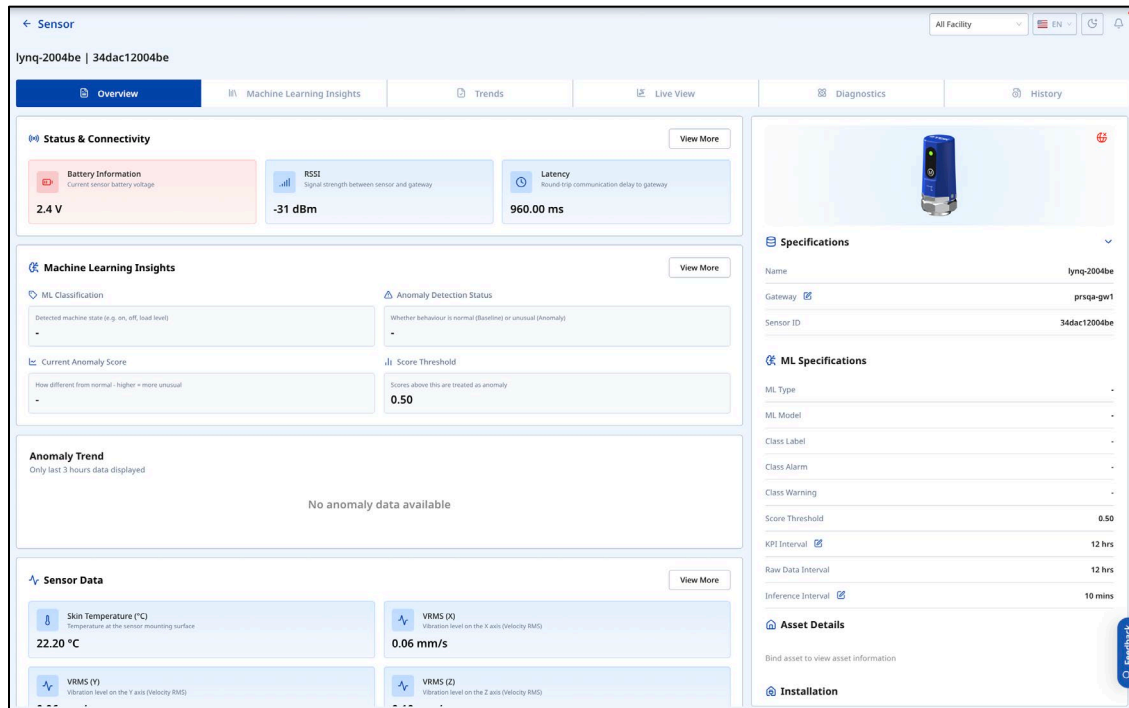
Setting	Default Value	Allowed Values	Notes
Accelerometer	Output Data Range (ODR): 8 kHz Full Scale Range (FSR): $\pm 8g$	ODR: 1, 2, 4, 8 (kHz) FSR: $\pm 2, \pm 4, \pm 8, \pm 16$ (g)	ODR controls the rate at which the Accelerometer obtains samples. FSR decides the range of values that can be measured.
Magnetometer (Pro sensor only)	Output Data Range (ODR): 200 Hz	ODR: 5, 10, 20, 50, 100, 200, 290 (Hz)	ODR controls the rate at which the Magnetometer obtains samples.
Wake On Motion (Pro sensor only)	Threshold: $\pm 1g$ Output Data Rate (ODR): 12.5 Hz	Threshold: $\pm 0.5g$ to $\pm 1.5g$ ODR: 1.6, 12.5, 25, 50, 100, 200 (Hz)	Threshold controls how much motion must be detected prior to activating the accelerometer on the Pro sensor. The threshold applies to both positive and negative acceleration. ODR controls the rate at which the Accelerometer obtains samples.
Gyroscope (Pro sensor only)	Output Data Range (ODR): 8 kHz Full Scale Range (FSR): ± 2000 $^{\circ}/s$	ODR: 1, 2, 4, 8 (kHz) FSR: $\pm 250, \pm 500, \pm 1000, \pm 2000$ ($^{\circ}/s$)	ODR controls the rate at which the Gyroscope obtains samples. FSR decides the range of values that can be measured.
Microphone (Pro sensor only)	Output Data Range (ODR): 16 kHz	ODR: 16, 32, 51.2 (kHz)	ODR controls the rate at which the Microphone obtains samples.
KPI Interval	0 hrs, 10 mins	0, 1, 2, 4, 8, 12 (Hours) 0, 1, 3, 5, 10, 15, 30 (Minutes)	Controls how often KPI data is calculated.
Raw Data Interval	0 hrs, 10 mins	0, 1, 2, 4, 8, 12 (Hours) 0, 1, 3, 5, 10, 15, 30 (Minutes)	Controls how often raw sensor data is captured and stored.

- Admins / Super Admins can edit the sensor configurations, KPI and Raw Data intervals.
- Custom Role Users can only edit KPI intervals; Raw Data interval remains hidden.

- Shorter intervals provide more frequent updates but reduces battery life; longer intervals mean smooth fluctuations and reduce load.

5.5 Sensor Detail View

In the Sensors page, click a sensor ID to view all data related to the sensor in one page.



5.5.1 Overview Tab

Status & Connectivity:

- **Battery Information** - Displays the current sensor battery voltage or indicates if the sensor is running on wired power.
- **RSSI (Received Signal Strength Indicator)** - Measures signal strength between sensor and gateway. Numbers closer to zero represent a stronger, better signal.
- **Latency** - Round-trip communication delay to gateway. A lower number means a faster response, while a higher number means more delays.

⚠ Note: Clicking the **View More** button in this section opens the **Diagnostics** tab, which shows more details about the sensor's status and connectivity.



Machine Learning (ML) Insights:

- ML Classification / Anomaly Detection Status – ML models run on a single class Anomaly Classification, reports whether everything is normal or there is an anomaly.
- Current Anomaly Score – The current anomaly score reported from the sensor.

⚠ Note: Clicking the **View More** button in this section opens the **Machine Learning Insights** tab, which shows more details about ML insights from the sensor.

Machine Learning Insights

[View More](#)

ML Classification

Detected machine state (e.g. on, off, load level)

Normal

Anomaly Detection Status

Whether behaviour is normal (Baseline) or unusual (Anomaly)

Baseline

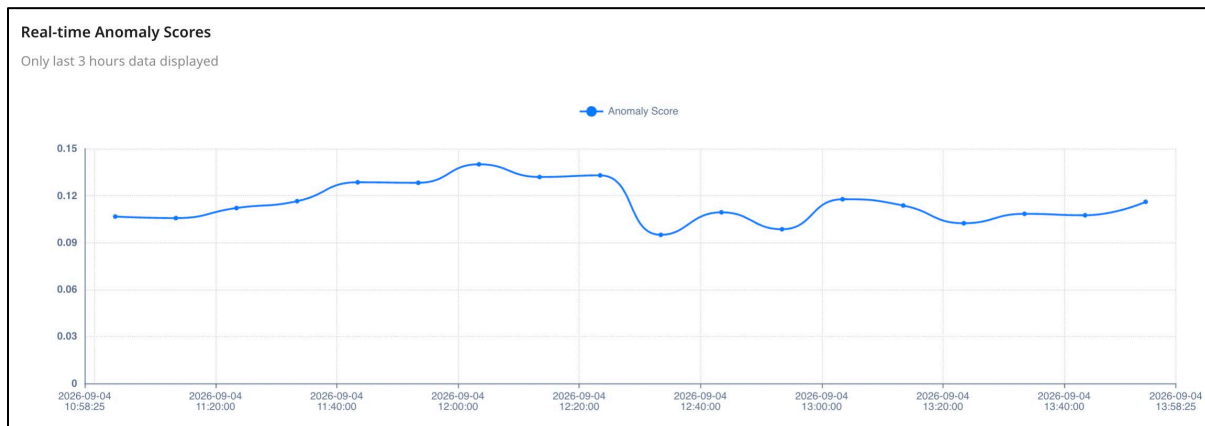
Current Anomaly Score

How different from normal - higher = more unusual

0.12

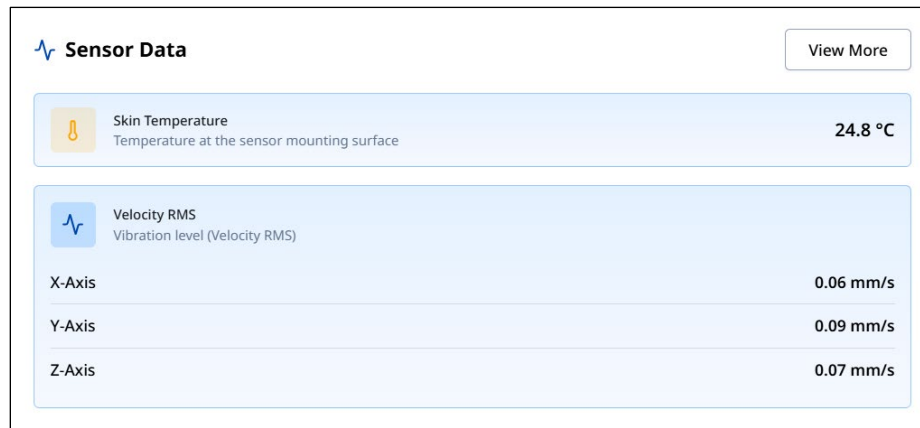
Anomaly Score Trend:

- Displays the sensor's anomaly score in the last 3 hours



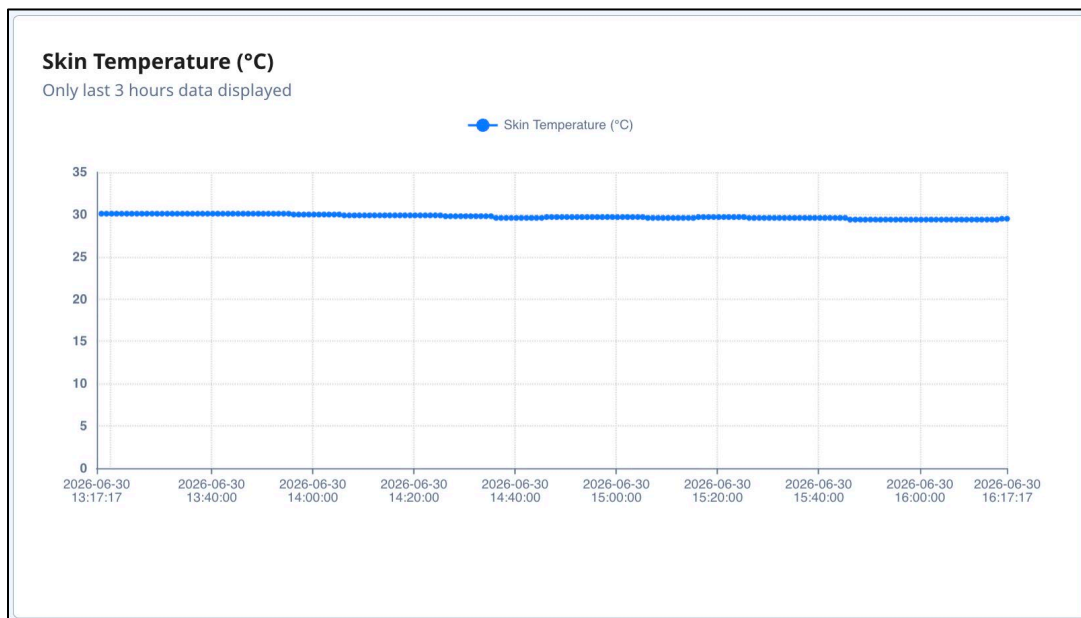
Sensor Data:

- Skin Temperature – Temperature at the sensor mounting surface
- VRMS (X) – Vibration level on the X axis (Velocity RMS)
- VRMS (Y) – Vibration level on the Y axis (Velocity RMS)
- VRMS (Z) – Vibration level on the Z axis (Velocity RMS)



Skin Temperature Graph:

- Displays the skin temperature in the last 3 hours

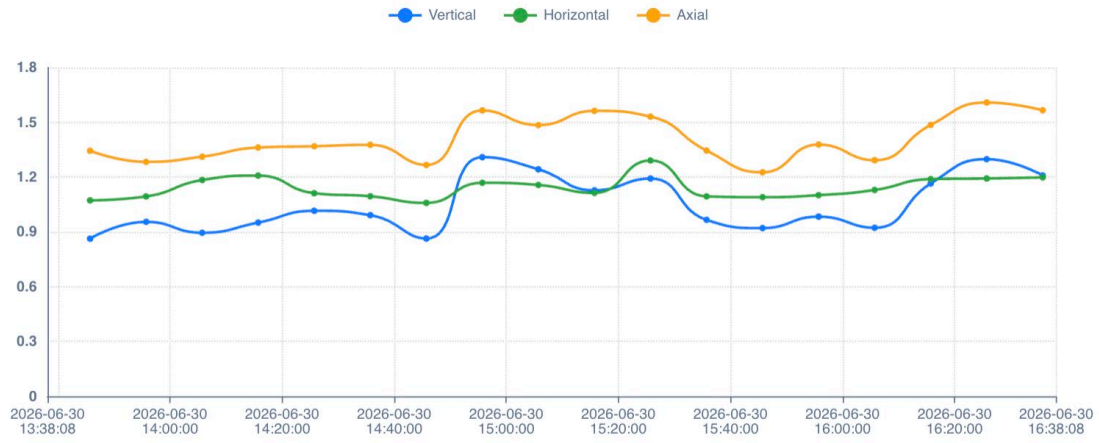


Velocity RMS Graph:

- Displays the velocity RMS values in the last 3 hours

Velocity RMS (mm/s)

Only last 3 hours data displayed



Sensor Specifications:

- Sensor name – The name of the sensor
- Gateway name – The name of the gateway the sensor is bound to
- Sensor ID – The MAC address of the sensor (6 characters for Lynq, 12 for Pro)
- Sensor Type – The type of edgeRX™ sensor Version – The firmware version that is currently running on the sensor

Accelerometer Specifications:

- Output Data Rate (ODR) – The sampling rate of the sensor, measured in number of samples per second (Hz)
- Full-Scale Range (FSR) – The smaller the range, the more sensitive the accelerometer will be to lower amplitude signals
- KPI Interval – How often the sensor should collect data to populate KPI Trends
- Raw Data Interval – How often the sensor should collect raw data
- Inference Interval – How often the sensor should perform ML inference

⚠ Note: There are **Edit** buttons next to specifications that are directly editable in this section, e.g. Gateway, Accelerometer, KPI, raw data, and inference intervals.

Specifications

Name

Building-1a

Gateway

Gw-37dac1b10061

Sensor ID

34dac1098765

Sensor Type

Lynq

Version

-

Accelerometer

Output Data Rate

4 kHz

Full Scale Range

±4 g

KPI Interval

10 mins

Raw Data Interval

10 mins

Inference Interval

10 mins





Specifications

Name

Building-1a

Gateway 

Gw-37dac1b10061

Sensor ID

34dac134dac1

ML Specifications

ML Type

-

ML Model

-

Class Label

-

ML Specifications:

- Machine Learning Type – Type of anomaly detection technique. Single Class Anomaly is trained exclusively to identify any deviation as an anomaly
- Machine Learning Model – Name of the model running on the sensor
- Class Label – Possible values returned by machine learning model
- Class Alarm/Warning – Enables sending of notifications if sensor detects an anomaly

ML Specifications

ML Type

Single-Class Anomaly Classification

ML Model

2009529899_AUTOENCODER

Class Label

Normal, Anomaly

Class Alarm 

-

Class Warning 

-

Score Threshold 

0.80

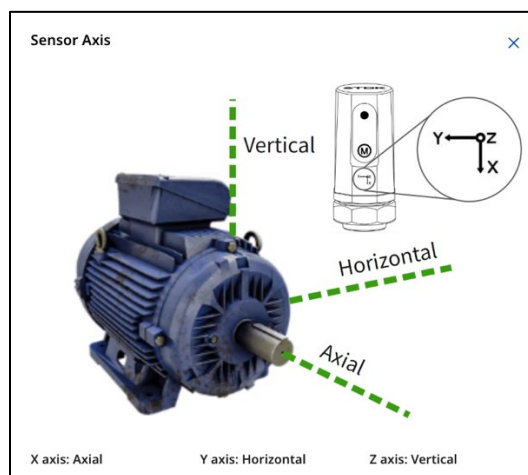
Asset Details:

- Asset Type – The type of asset the sensor is bound to
- Asset Model – The asset model the sensor is bound to
- Asset Name – The name given to the asset
- Asset Location – The physical location of the asset
- Mounting Location – The sensor's mounting position on the asset

Asset Details	
Asset Type	Motor
Asset Model	Model1
Asset Name	Motor-test
Asset Location	Facility-F2 / Building-F2 / Floor-F2
Mounting Location	front

Installation Location:

- Shows where the sensor is mounted relative to the asset



5.5.2 Machine Learning Tab

Please refer to [7. Machine Learning in edgeRX™](#) for detailed information on Machine Learning.

5.5.3 Trends

Please refer to [Section 9. Sensor Trend Data & Monitoring](#) for detailed information on KPI Trends and Raw Data.

5.5.4 Live View

Please refer to [9.3 Live View](#) for detailed information on how to use the Live View feature.

5.5.5 Diagnostics Tab

Select a time or date range to view historical data including:

- Battery Voltage (applicable to Lynq and Pro sensors only)
- RSSI (Signal Strength)
- Packet Statistics
- Latency

Battery Voltage Thresholds (applicable to Lynq and Pro sensors only).

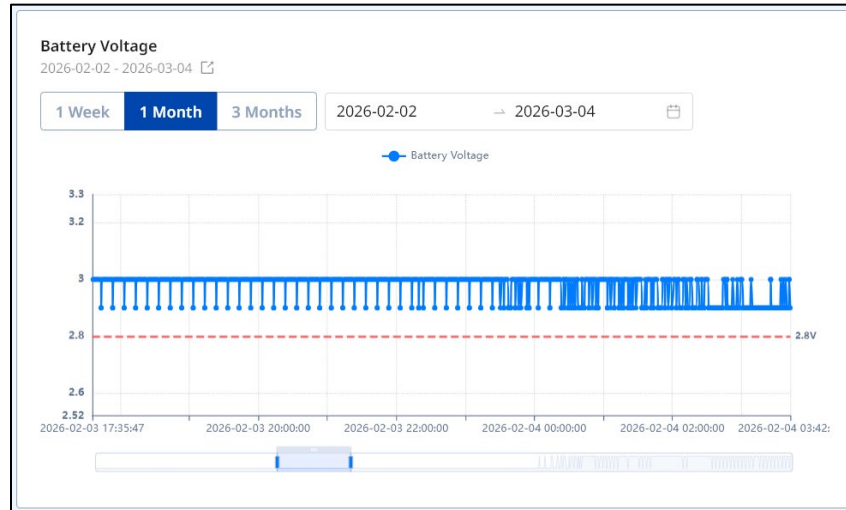
By default, Lynq sensors are considered healthy when battery voltage is above **2.6 V**, and Pro sensors when above **3.0 V**.

- If voltage drops below the **warning threshold**, the Dashboard raises a warning.
- If voltage drops below the **alarm threshold**, the Dashboard raises an alarm.

Threshold values are configurable from the **Alerts** menu.

Sensor Type	Warning Threshold	Alarm Threshold	Configurable Range
Lynq	2.6 V	2.4 V	2.0 V – 3.0 V
Pro	3.0 V	2.6 V	2.0 V – 3.0 V

- **Healthy:** Voltage above the default threshold.
- **Warning:** Voltage drops below the warning threshold.
- **Alarm:** Voltage drops below the alarm threshold.
- **Configurable:** Values can be adjusted from the **Alerts** menu.



RSSI

RSSI measures signal strength between sensor and gateway, with numbers closer to zero representing a stronger, better signal. For best performance, place sensors within a range better than **-74 dBm** to ensure consistent communication and minimize interference from physical or environmental sources.

- **Warning:** RSSI drops below the warning threshold.
- **Alarm:** RSSI drops below the alarm threshold.
- **Configurable:** Values can be adjusted from the **Alerts** menu.

RSSI Status	RSSI Values
Strong	≥ -50 dBm
Good	-51 dBm to -70 dBm
Poor	< -71 dBm to -80 dBm
Unusable	< -81 dBm

Packet Statistics

The Packet Statistics Graph shows the network traffic between the sensor and gateway.

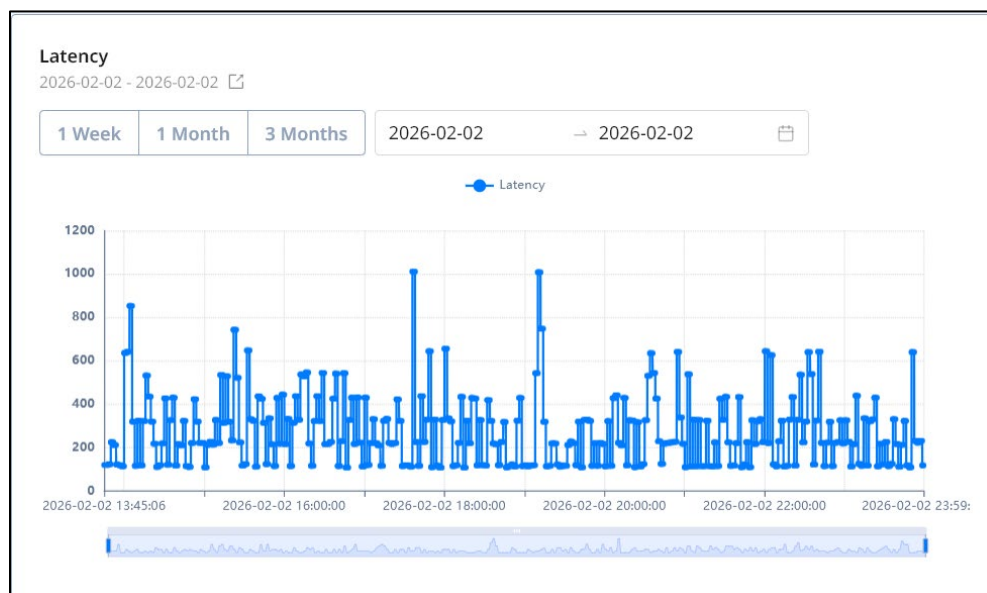


Data Filters:

- Toggle between predefined time ranges: 1 Week, 1 Month, 3 Months.
- Alternatively, use the custom date range picker. Users can view up to three (3) months of historical data.

Latency

Latency graph shows the round-trip communication delay (measured in milliseconds) of KPI and raw data packets from the sensor to the gateway.



Data Filters:

- Toggle between predefined time ranges: 1 Week, 1 Month, 3 Months.

5.5.6 History Tab

From the Activity sub-tab, you can view a chronological record of system and model-related events, including:

- Configuration changes
- Model deployments
- Sensor status changes
- Sensor resets
- Cluster/class label renaming
- Firmware updates
- Interval changes
- Changes in associations with assets, Gateways, or networks

On the Logs sub-tab, you can view installation and removal records associated with the sensor or system.

Item	Event	User	Updated On
1	cn2202b 3.0 is offline!	-	2026-02-03 14:54:05
2	update Change parameter "Live view:Data source" from no selection to Axial/Radial_V/Ra Change parameter "Live view:ODR" from 0kHz to 1kHz Change parameter "Live view:FSR" no selection to 2	Karan.Shetti	2026-02-02 13:45:45
3	cn2202b 3.0 is online	-	2026-02-02 13:44:56
4	cn2202b 3.0 is offline!	-	2026-01-14 09:56:05
5	cn2202b 3.0 is online	-	2026-01-13 14:53:31
6	cn2202b 3.0 is offline!	-	2026-01-13 14:48:05
7	Change parameter "Name" from Shaft-end to lab_motor_1	Karan.Shetti	2026-01-13 14:25:02
8	cn2202b 3.0 is online	-	2025-12-22 17:01:50
9	add cn2202b 3.0 sensorID:200a23 bind to gatewayID:34dac1b1011c.	Karan.Shetti	2025-12-22 17:00:27

6. Asset Management

Assets are the individual pieces of equipment to which **edgeRX™ sensors** are attached or assigned.

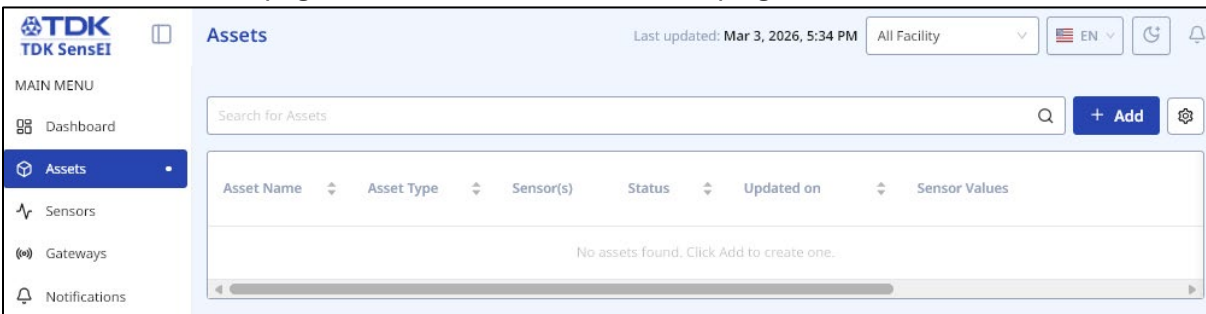
To manage assets, log into the edgeRX™ Dashboard, then navigate to the **Assets Page** to view all registered assets in a searchable, paginated list.

- Note:** To set up assets on the edgeRX™ dashboard, users must have:
1. created a location (see [Section 12.1.1](#)).
 2. added an asset model to the Asset DB section (see [Section 12.2.2](#)), or added a model during asset creation.

6.1 Adding Assets

To Add a New Asset

1. On the Assets page, click the **Add** button on the top right.



2. On the **Add Asset** window, enter the required details:

Field	Description
Asset Name	Custom name for identification.
Department	The department responsible for the asset, previously defined under the Manage Users page (see Manage Users).
Asset Type	Select from the predefined types, e.g. fan, bearing base, pump.
Criticality	The criticality level of the asset, or how important is it to your organization's functioning.
Asset Model	Select from the existing models or create a new one. Available choices depend on the selected asset type.
Image	Upload an image of the asset (images must be in .jpg, jpeg, or png formats, and no larger than 2MB in size).
Facility	The mapped facility or zone to which the asset is assigned.
Coordinates	The X and Y coordinates of the asset on the map component.

Asset Name*

Lab Motor

Department*

Engineering

Asset Type*

Motor

Criticality*

High

Asset Model*

QE-10

Rotate speed (RPM)

600

Power (kW)

300

DE bearing*

N206

Line Frequency (Hz)

Line Frequency

Num of poles

Num of poles

Voltage (V)

Voltage

Current (A)

Current

Facility*

Ekin Lab / Building / Floor

Add asset image

The uploaded file must have a .jpg, .jpeg, .png extension, and the file size should be limited to 2MB.

Cancel

Add

- Click **"Add"** to register the asset in the system, or click **Cancel** to stop the asset registration process

Once added to the system, the asset appears in the Assets list and becomes available for monitoring and configuration.

TDK

TDK SenseI

Assets

Last updated: Mar 3, 2026, 5:34 PM

All Facility

EN

MAIN MENU

Dashboard

Assets

Sensors

Gateways

Notifications

SETTINGS

Manage Users

Search for Assets

Q

+ Add

Asset Name	Asset Type	Sensor(s)	Status	Updated on	Criticality	Location
Lab Motor	Motor	0	Operational	2026-03-03 19:05:17	High	Ekin Lab/Building/Floor

<

1

>

10 / page

6.2 Asset List Features

Feature	Description
Search Bar	Locate assets by name or sensor type
Column Settings	Customize the columns you see on the list by clicking the Table Settings button in the top-right corner.
Rows per Page	Adjust the number of rows displayed per page from the default 10 to anywhere between 20-100 and vice-versa

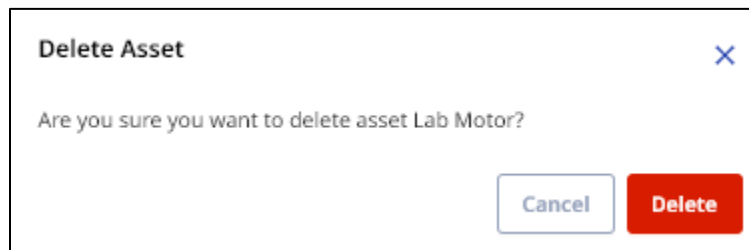
Table Columns:

- Asset Name
- Asset Type
- Sensor(s)
- Status
- Updated on
- Sensor Values
- Criticality
- Location
- Actions

6.3 Deleting Assets

To delete an asset:

1. Select an asset from the list.
2. Click the **"Delete"** button to the right.
3. Click **"Delete"** to confirm deletion of the asset, or click **"Cancel"** to stop the delete process.



6.4 Binding Sensors to Assets

To bind a sensor to an asset:

1. On the **Assets** page, select the **Asset** to open its Detail View.

The screenshot shows the 'Assets' page in the TDK SenseI interface. At the top, there's a navigation bar with a back arrow, the title 'Assets', and a dropdown menu showing 'Singapore-ATS'. To the right of the dropdown are buttons for language (EN), a refresh icon, and a notification bell. Below the navigation bar, the asset name 'lab_motor' is displayed next to a document icon. To the right of the asset name are two buttons: a blue '+ Bind Sensor' button and a red trash can icon. Below this is a tabbed interface with four tabs: 'Overview' (selected), 'Status', 'Event', and 'Log'. The 'Overview' tab is active, showing a large image of a green motor with five numbered callouts (1-5). To the right of the image is a 'Specifications' section with a pencil icon for editing. It lists various attributes: Asset Name (lab_motor), Criticality (High), Department (Test), Asset Model (QW-10), Asset Type (Motor), Rotate speed (600 RPM), Power (300 kW), DE bearing (1111), Line Frequency (Hz), Num of poles, Voltage (V), and Current (A). To the right of the specifications is an 'Alarm Threshold' section with a pencil icon for editing. It shows 'Skin temperature' with 'Warning' at 40.00°C and 'Alarm' at 50.00°C. Below this, it shows 'ISO standard: ISO10816-3/Group 1/Flexible' with 'Warning' at 7.1mm/s and 'Alarm' at 11mm/s.

2. Click the **"Bind Sensor"** button on the top right corner.
3. On the Bind Sensor window, enter the required details:

Field	Description
Sensor Type	The sensor's type (Lynq or Pro)
Sensor ID	The sensor that will be bound to the asset (select from the list of available sensors)
Mounting Position	Physical mounting location on the asset
Orientation	Sensor orientation (X, Y, Z axis) relative to the mounting position

Bind Sensor

Sensor Type*

Lynq

Sensor ID (Sensor Name)*

34dac1323232 (Test_323232 Lynq)

Position*

front

Orientation

X-Horizontal/Y-Axial/Z-Vertical

X Axis*

Horizontal

Y Axis*

Axial

Z Axis*

Vertical

1 front

2 top

3 back

4 bottom

5 side-test

Vertical

Cancel

Add

- Click **"Add"** to apply the updates or click **Cancel** to stop the binding process.

Unbinding a Sensor from an Asset

On the **Asset Details** page, scroll down to the Sensors list at the bottom.

- Select the Sensor ID from the list.
- Click the **"Unbind"** button on the top right corner.
- Click **"Unbind"** to confirm unbinding the sensor from the asset, or click **"Cancel"** to stop the unbinding process.

Unbind Sensor

Are you sure you want to unbind this sensor from the asset?

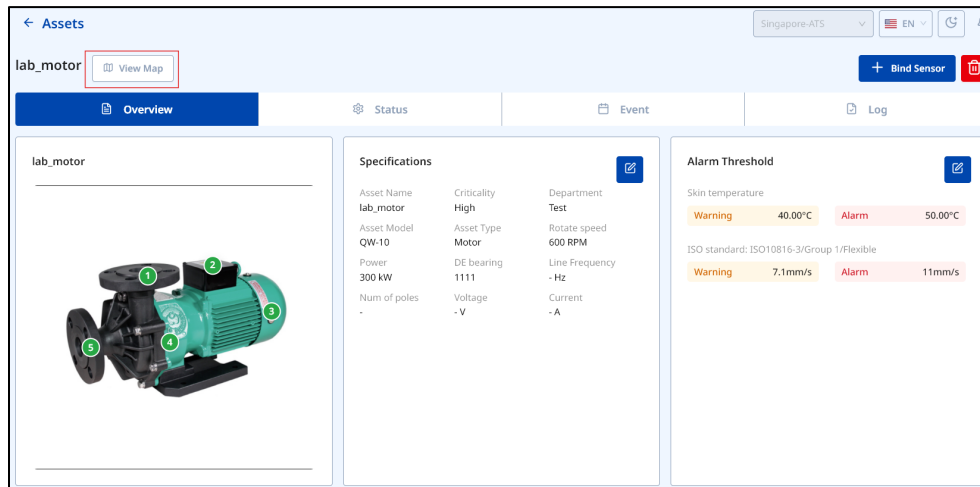
Cancel

Unbind

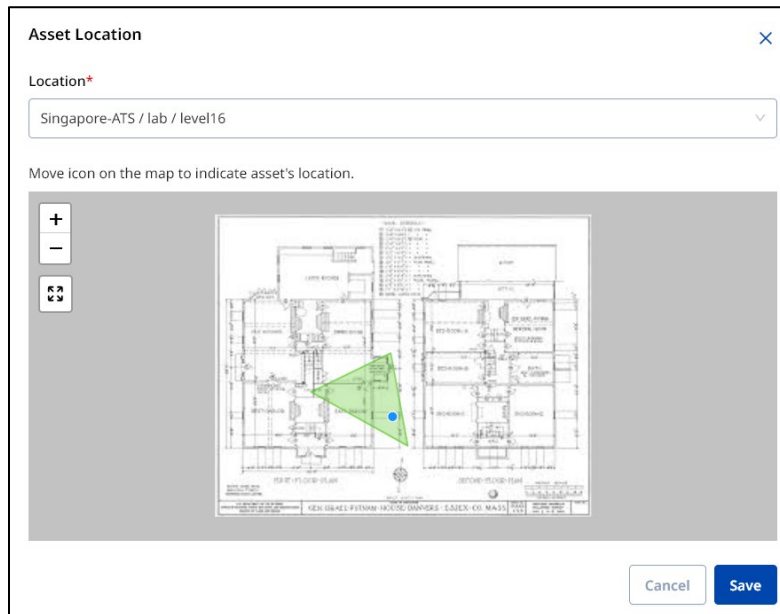
6.5 Asset Location Management

To update an asset's location:

1. Click the **"View Map"** button to open the interactive map.



2. Click the **"Edit"** button located on the top left of the Asset Location window.
3. Select the new location of the sensor from the list.



4. Click **"Save"** to update the location, or click **Cancel** to discard the update.

6.6 Asset Detail View

Select an asset from the list to open the **Asset Detail View**, which shows the asset's configuration settings, sensor assignments, and performance metrics.

The screenshot shows the 'Overview' tab for an asset named 'lab_motor'. The interface includes a top navigation bar with 'Overview', 'Status', 'Predictive Health', 'Event', and 'Log' tabs. A 'View Map' button is next to the asset name. The main content area is divided into three sections: 1. Asset Image: A 3D model of a motor with numbered indicators (1-5) for sensor positions. 2. Specifications: A table listing asset details. 3. Alarm Threshold and Predictive Health Settings: Configuration options for monitoring frequency and alert sensitivity.

Specifications		
Asset Name	Criticality	Department
lab_motor	High	Test
Asset Model	Asset Type	Rotate speed
QW-10	Motor	600 RPM
Power	DE bearing	Line Frequency
300 kW	1111	- Hz
Num of poles	Voltage	Current
-	- V	- A

Alarm Threshold	
Skin temperature	
Warning	40.00 °C
Alarm	60.00 °C
ISO standard: ISO10816-3/Group 2/Rigid	
Warning	2.8 mm/s
Alarm	4.5 mm/s

Predictive Health Settings

Monitoring Frequency *
Every 12hours (Default)

Alert Sensitivity
Standard - 50th percentile
High (More Alerts) | Low (Fewer Alerts)

6.6.1 Overview Tab

Displays in read-only format:

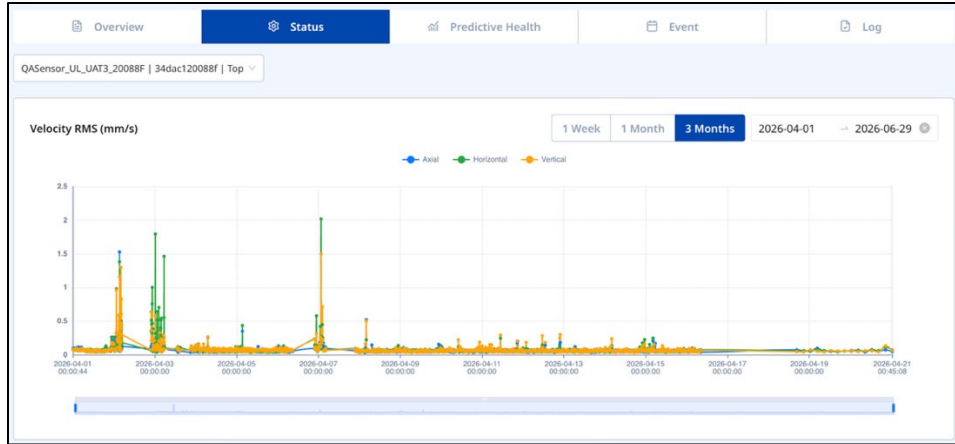
- Location (click the **View Map** button next to the asset name to view its location)
- Model Details, including numbered indicators for the sensor positions on the asset's diagram
- Asset Specifications
- Alarm Threshold and Predictive Health Settings (visible only if a sensor is bound to the asset)
- List of sensors bound to the asset, if any

All Sensors								
Sensor Name	Sensor ID	Status	Classification	Sensor Type	Sensor Mode	Position	Gateway	Last Updated On
lab_motor_1	34dac1200a23	Offline	--	Lynq	KPI/Raw Data/--	Top	SG_lab1	2026-02-13 05:25:40
lab_motor_2	34dac1200b94	Offline	--	Lynq	KPI/Raw Data/--	black	SG_lab1	2026-02-13 05:25:53
Lab_motor_3	34dac120018a	Offline	--	Lynq	KPI/Raw Data/--	3	SG_lab1	2026-02-13 05:25:58
lab_motor_4	34dac1200860	Offline	--	Lynq	KPI/Raw Data/--	side	SG_lab1	2026-02-13 05:19:07

6.6.2 Status Tab

Displays:

- Sensor trend data for vibration and temperature over time (refer to Section 9. Sensor Trends for more information)
- Visual indicators for anomalies and performance degradation



6.6.3 Predictive Health Tab

Please refer to [10. Predictive Maintenance](#) for more information about this feature.

6.6.4 Event Tab

Provides:

- A chronological record of sensor and asset-related actions

lab_motor View Map + Bind Sensor

Overview Status Predictive Health **Event** Log

Search Source/Sensor/Event All Alarm Warning

Status	Source	Sensor	Event	Reported On	Updated On	Count	User
Warning	lab_motor	34dac1200a23	Skin temperature exceed warning threshold	2026-01-13 14:27:16	-	1	
Closed	lab_motor	34dac1200b94	Skin temperature exceed alarm threshold	2026-01-13 14:36:54	2026-01-13 14:37:24	1	Karan She tti (deactivat ed)
Closed	lab_motor	34dac1200b94	Skin temperature exceed alarm threshold	2026-01-13 14:37:54	2026-01-13 14:52:34	1	Karan She tti (deactivat ed)

< 1 > 10 / page

6.6.5 Log Tab

Shows:

- Installation and removal records
- Historical changes such as binding, unbinding, coordinate updates, and normal/warning/alarm status changes.

lab_motor View Map + Bind Sensor

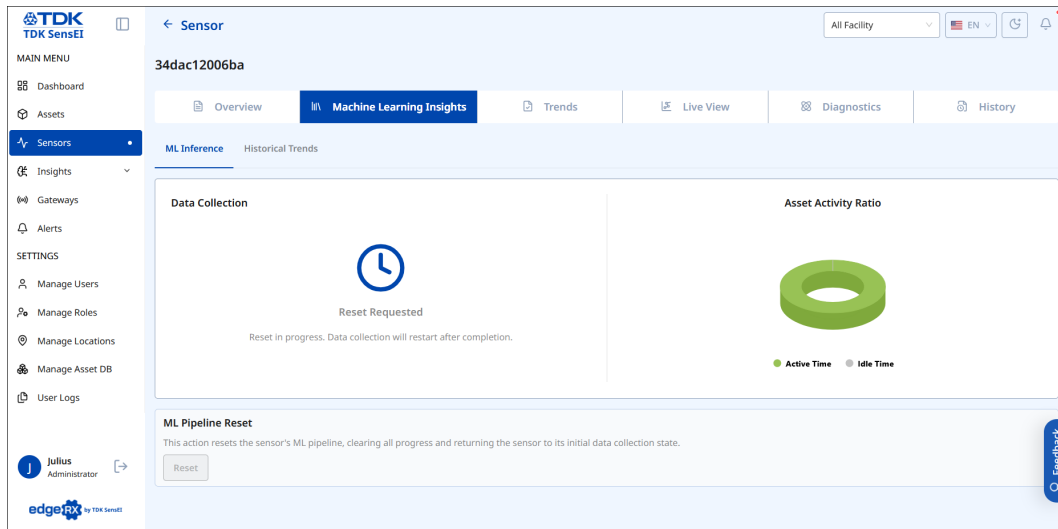
Overview Status Predictive Health Event **Log**

Item	Event	User	Updated On
1	Change location to "Singapore-ATS/lab/level16"	xinyan_sa	2026-04-24 07:27:59
2	Change location to "YTC/W1/4F"	xinyan_sa	2026-04-24 07:26:51

7. Machine Learning in edgeRX™

7.1 ML Information Overview

The edgeRX™ platform processes data locally at the source. Summary ML information is available in the **Sensor Detail View > Overview Tab** (see [Section 5.5.1](#)).



7.2 ML Model Types

The specific ML model type deployed in each sensor depends on the:

- Asset type
- Monitoring requirements
- Historical performance data

8. Viewing AI Inference Results

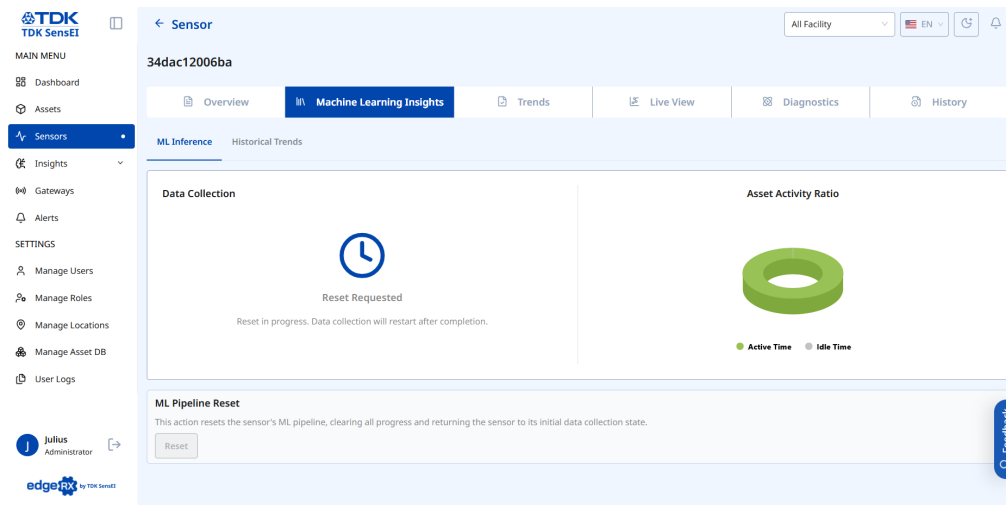
8.1 Machine Learning Insights

The **Machine Learning (ML) Insights** tab enables you to view AI-based classifications and anomaly scores of the sensor, allowing you to assess the operational status of the asset and detect abnormal conditions in real-time.

To navigate to a sensor's **Machine Learning Insights** tab, go to **Sensors > Sensor Detail View**.

You can also navigate to **Insights > Live Diagnostics**, then select a sensor from the list to open the selected sensor's **Machine Learning Insights** tab.

Alternatively, from **Insights > Live Diagnostics**, select **View Insights** from the **ML Progress** column under the **Sensor List**, if available.



8.2 Live Diagnostics

Sensor ID	Name	Type	Status	Asset Name	ML Progress
34dac120008a	lynq-20008a	Lynq	Offline	-	Completed
34dac1111111	3232	Lynq	Offline	High Capacity Industrial Backup Power Generator System	-
34dac110032b	site1-sensor	Lynq	Offline	New-Motor-F2	-
34dac1111122	Sens	Lynq	Offline	-	Warning
34dac112000d	Test1	Lynq	Offline	-	-
34dac1123400	sensor-a01	Lynq	Offline	-	-
34dac112345f	TestSensor-jv-1	Lynq	Offline	-	-
34dac1137478	Sensor Demo 2 1	Lynq	Offline	-	-
34dac1200048	sensor48	Lynq	Offline	New Fan-2	Alert

From the **ML Progress** column in **Insights > Sensor List**, you can also view recommended actions for a sensor, such as resetting the ML pipeline.

8.3 ML Progress Bar and Asset Pie Chart

The **ML Progress section** provides visibility into the ML pipeline status for each sensor. It helps you understand data collection progress, model readiness, and asset behavior during the ML lifecycle.

8.3.1 ML Progress States

The ML Progress section dynamically updates based on the current state of the ML pipeline.

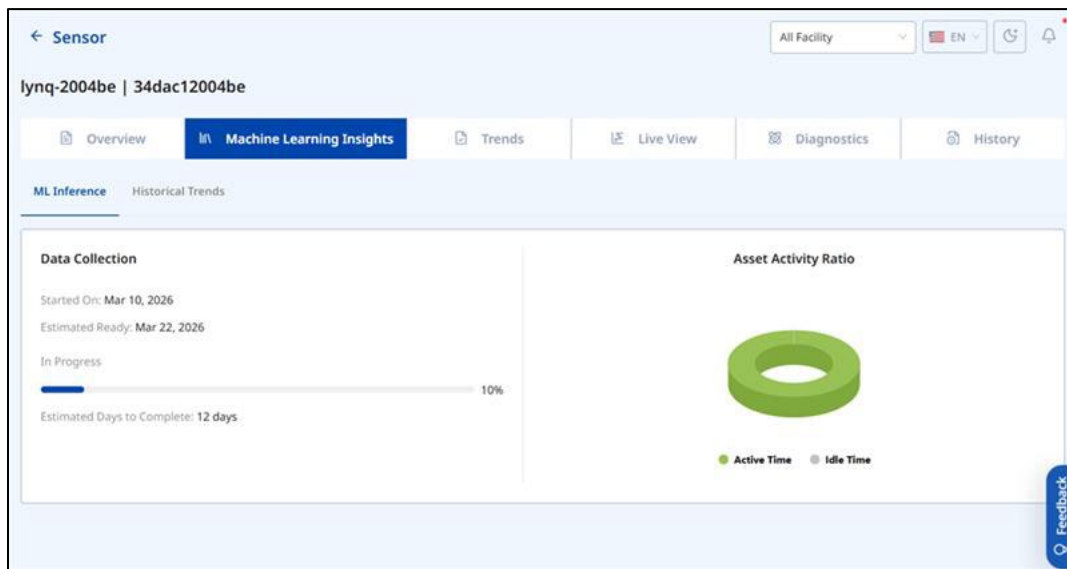
In Progress State

1. Displays current data collection progress.

2. Status: In Progress.
3. Start Date
4. Estimated Ready Date
5. Progress bar with completion percentage
6. Estimated days remaining

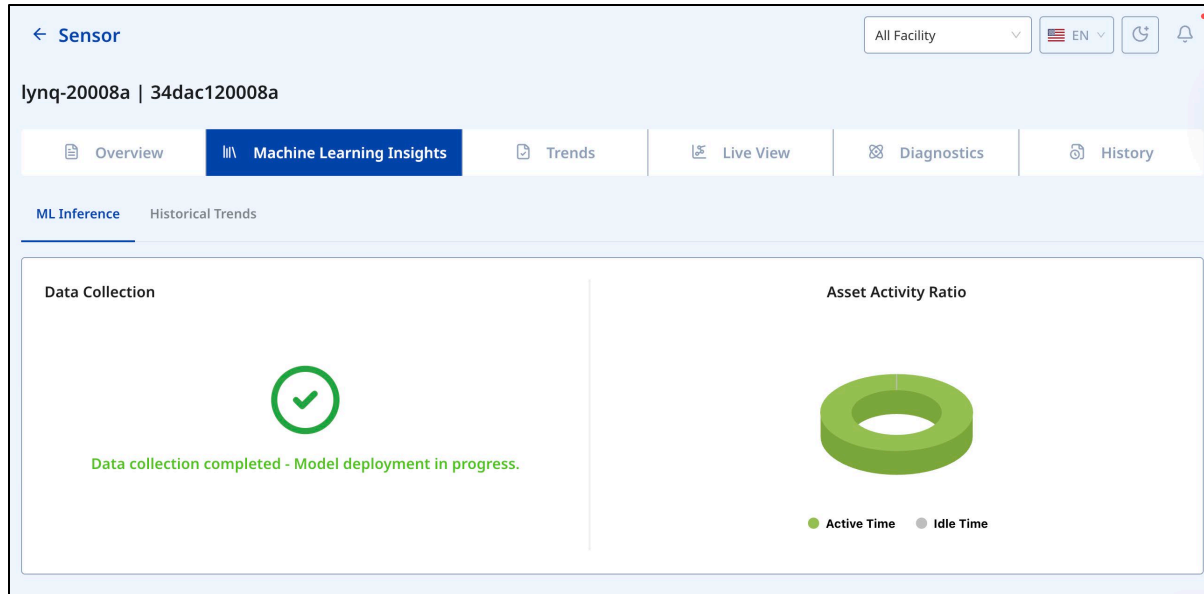
If data collection has not started:

- Progress is shown as **0%**
- Dates and estimates are displayed as “-”



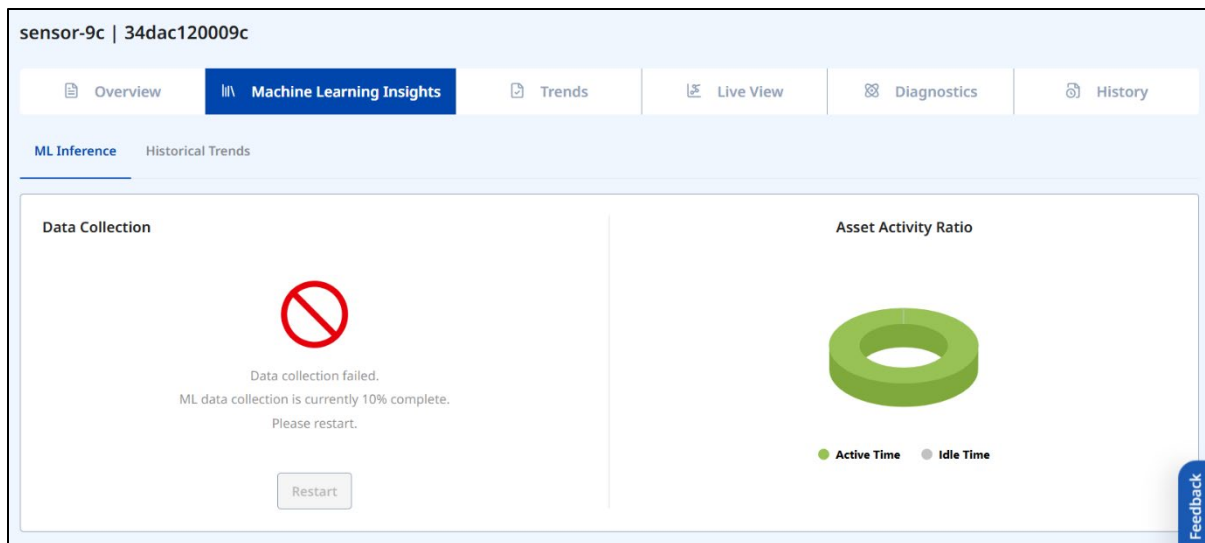
Completed State

- Displays message: **“Data Collection Completed – Model Deployment in Progress.”**
- Progress bar and related details are removed.
- Automatically transitions to the ML Insights view after deployment.



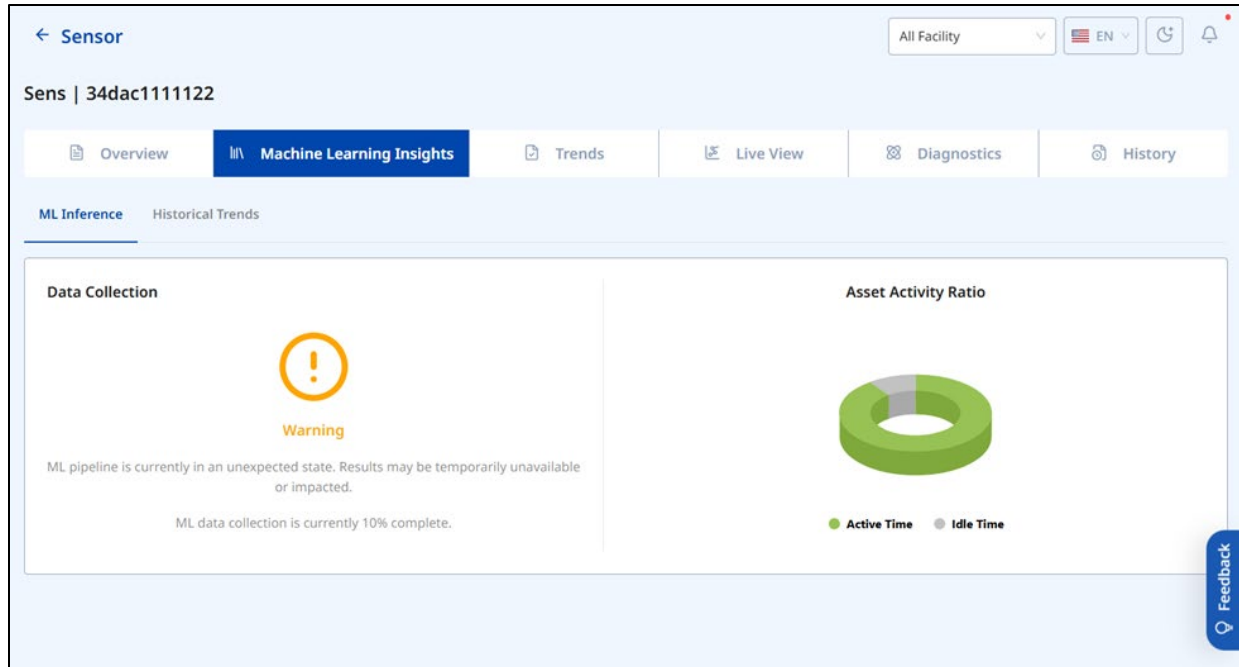
Failure State

- Displays Status: *Failure* message.
- Shows failure message with current progress percentage.
- Provides a **Restart / Recalibrate** button.
- ML insights are not displayed in this state.



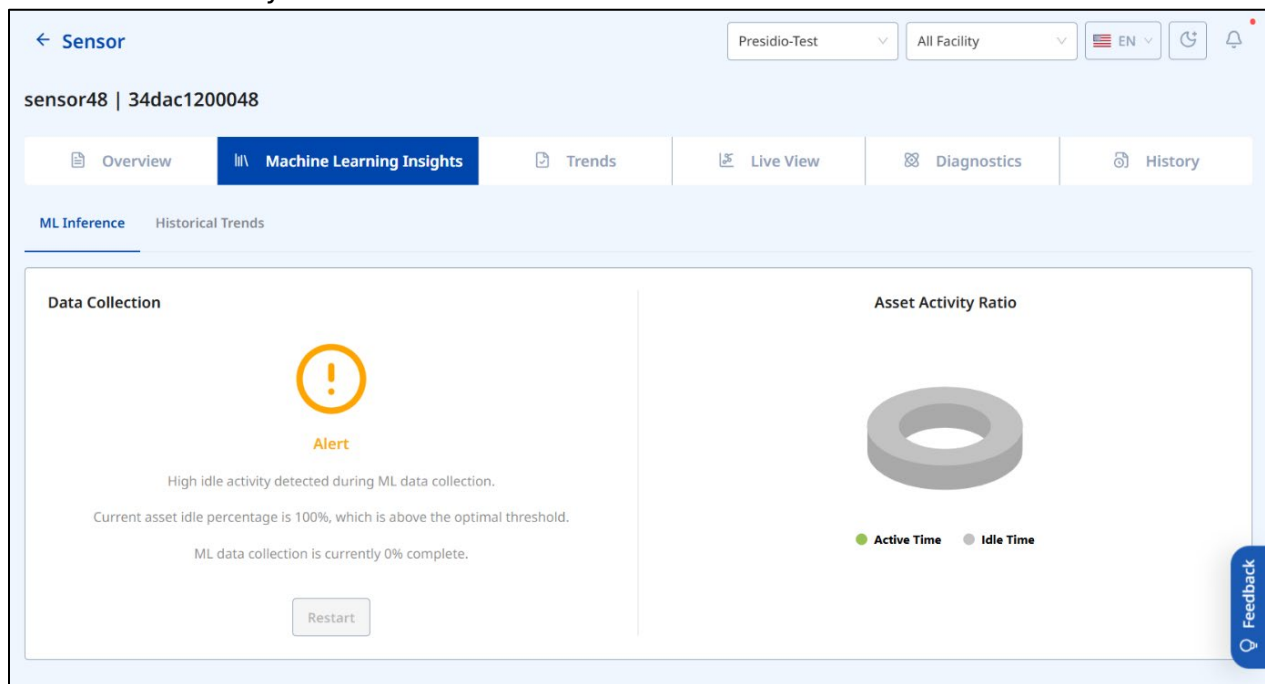
Warning / Generic State

- Displays backend status (e.g., Warning, Alert).
- Shows message indicating temporary impact on results.
- ML insights are hidden to prevent misleading data.



Alert State (High Idle Activity)

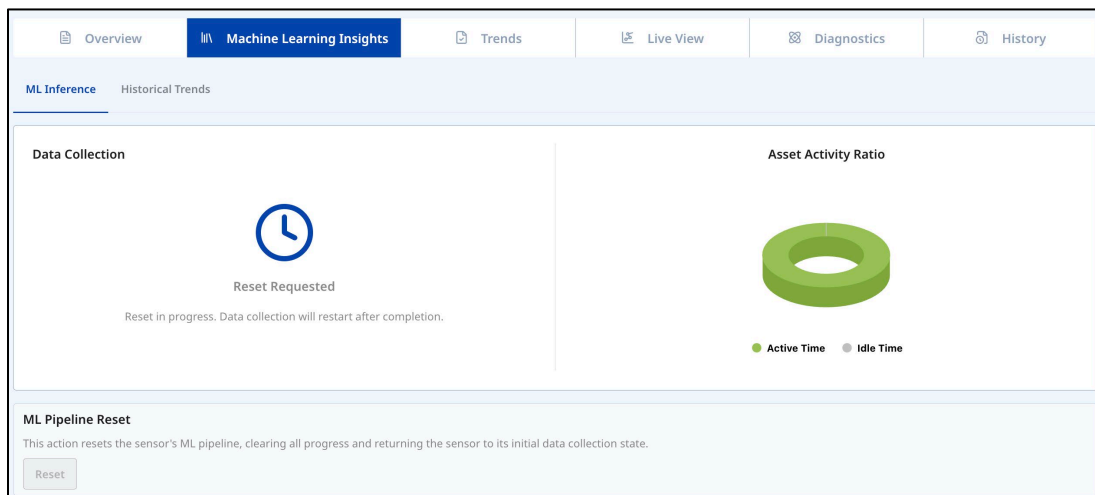
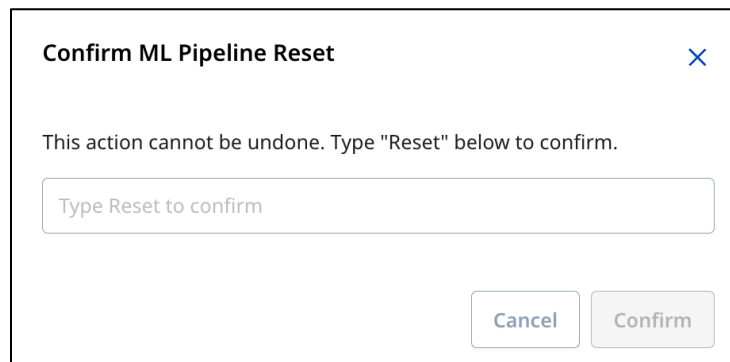
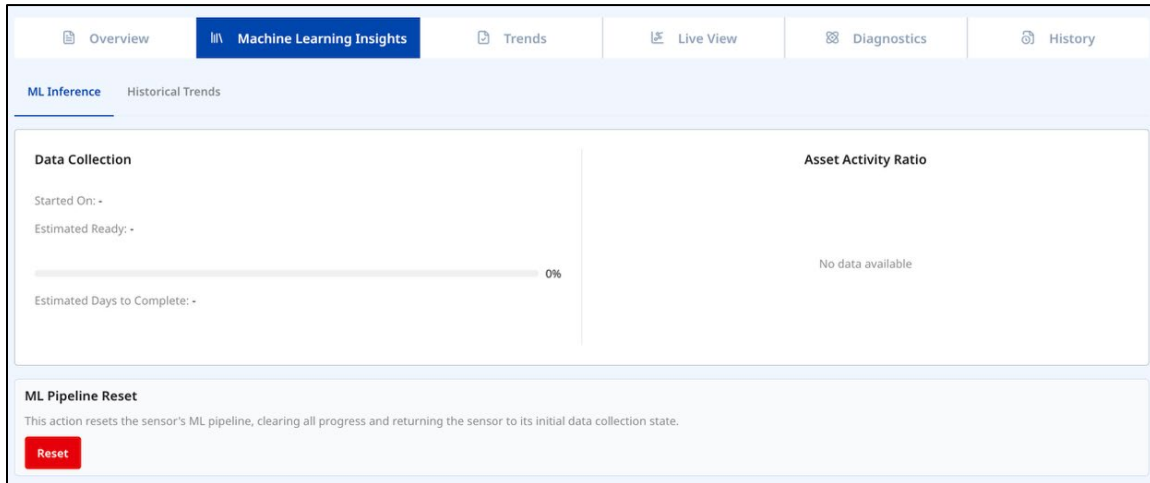
- Displays alert message when excessive idle time is detected.
 - Idle percentage
 - Current ML progress
- Automatically restarts data collection once conditions normalize.



8.3.2 ML Pipeline Reset (for Admins Only)

The ML Pipeline Reset button allows you to completely clear the current ML configuration and start the process over. Clicking this button:

1. Invalidates all previously collected training data.
2. Returns the sensor to data collection state.

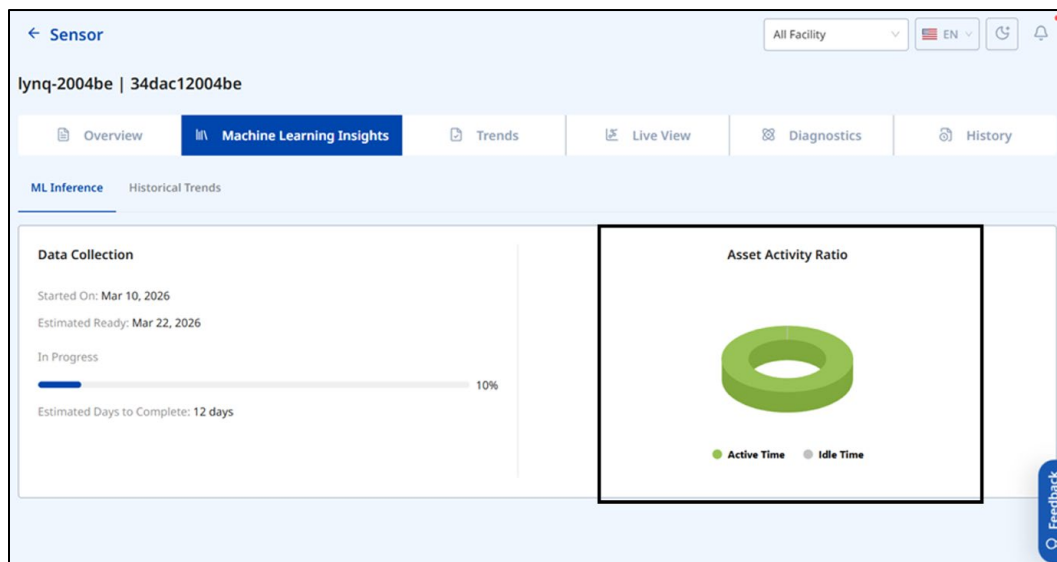


8.3.3 Asset Activity Ratio

During ML data collection, the system provides a visual representation of asset usage.

Chart Details

- Title: **Asset Activity Ratio**
- Displays:
 - Active Time
 - Idle Time
- On mouseover, displays percentage values for active and idle time.



8.4 ML Inference Tab

The ML Inference tab displays:

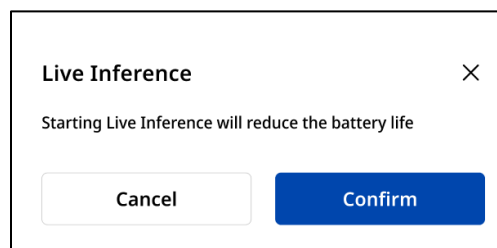
- Inference results
- Real-time Anomaly scores

8.5 Start/Stop Live Inference

Starting Live Inference

To start collecting live inference data:

1. On the Sensors page, select a sensor from the list.
2. On the Sensor Detail View, select Machine Learning Insights, click **"Start Live Inference"**.
3. Click **"Confirm"** to obtain real-time scores, or click **"Cancel"** to quit the process.



Stopping Live Inference

Clicking "**Stop Live Inference**" before the predefined 10-minute timer ends terminates the collection of live inference data.



Viewing Real-Time Data

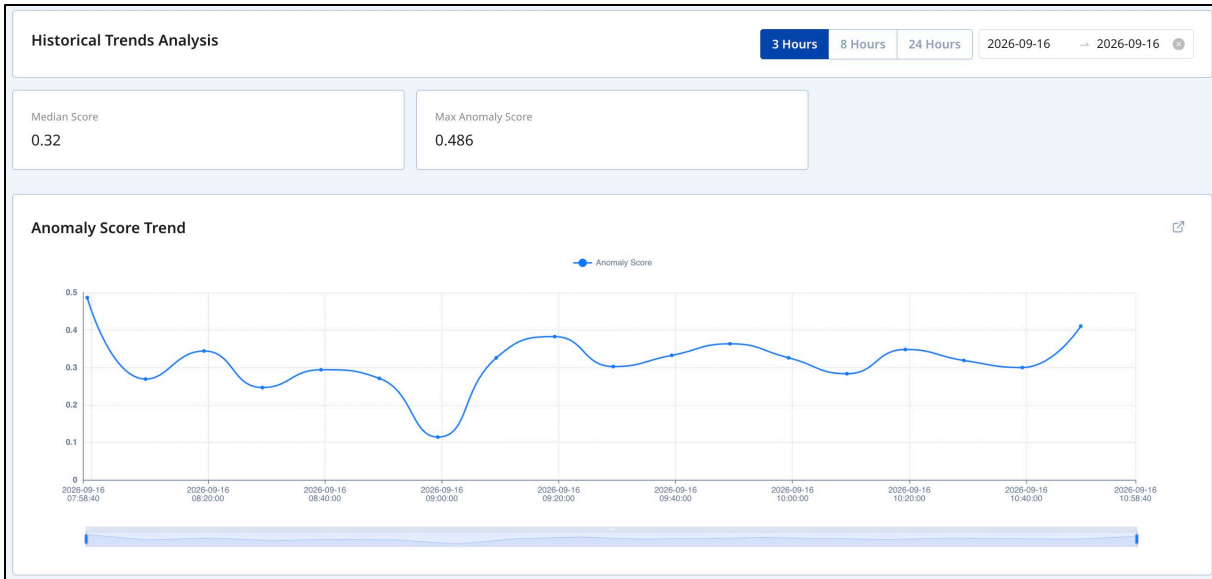
The user can view the:

- Real-Time Anomaly scores, which monitors live system behaviour.
- 3-Hour Real-Time Anomaly Trend Chart, which tracks anomalies and performance shifts in the past three hours.

8.6 Historical Trends Analysis

The **Historical Trends** tab displays the trend analysis of the sensors, including:

- Median Score
- Max Anomaly Score
- Anomaly Score Trend



Time Range Selection

Toggle between predefined time ranges:

- 3 hours
- 8 hours
- 24 hours

Alternatively, use the date range picker to observe data in:

- Anomaly Score Trend charts

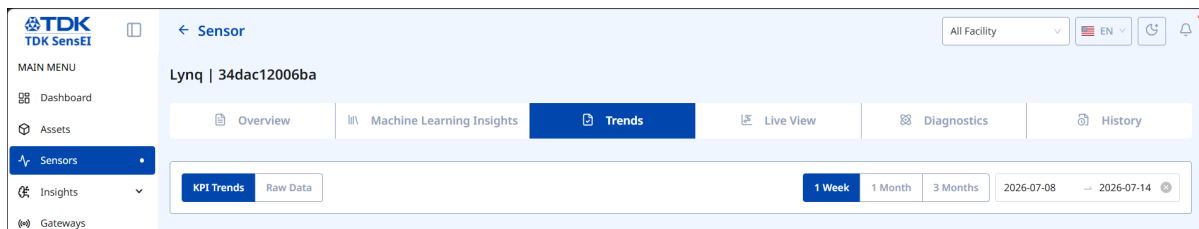
9. Sensor Trend Data & Monitoring

9.1 Trend Data

Navigate to the **Sensor Detail View > Trends** tab to view performance trends and raw signal values.

The available Trend data depends on the sensor type, with **ISO, Temperature, and Acceleration data** available to all sensor types (**Lynq and Pro**). However, **Magnetometer, Gyroscope, and Microphone data** are available **only for Pro sensors**.

If a sensor does not have any associated historical data, a **No data available** message is shown on the page.

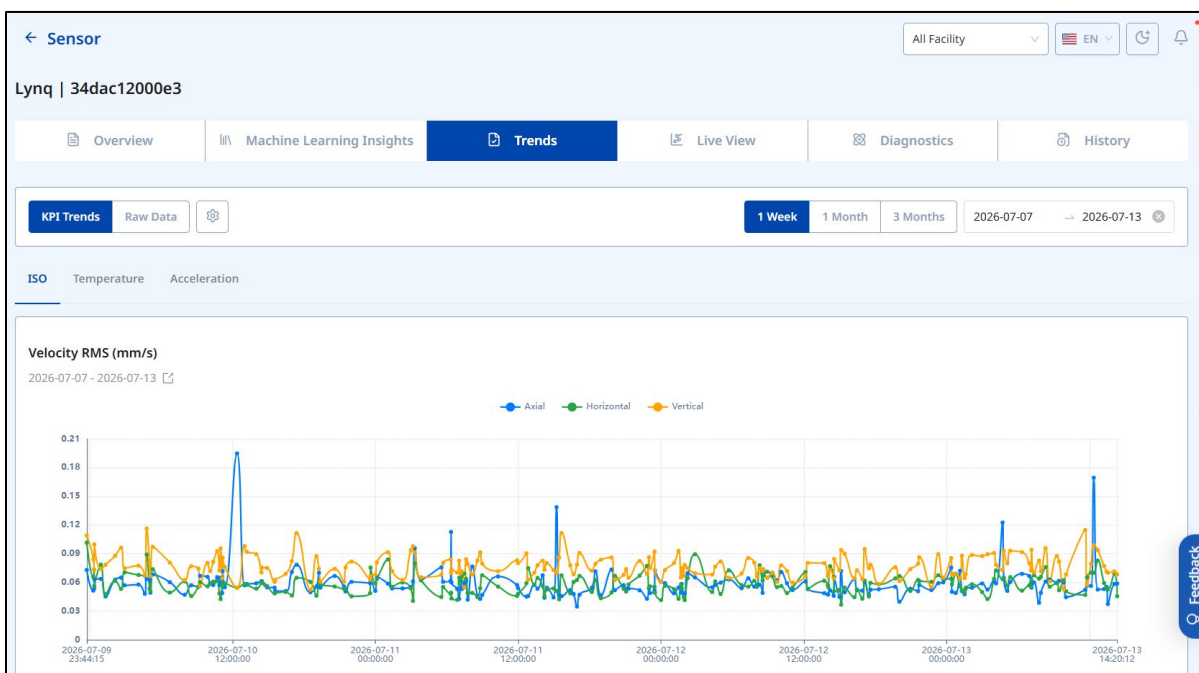


9.1.1 KPI Trends Tab

9.1.1.1 For Lynq and Pro Sensors

The KPI Trends tab displays data taken from a sensor accelerometer's KPI interval values.

The KPI Trends tab includes three sub-tabs:



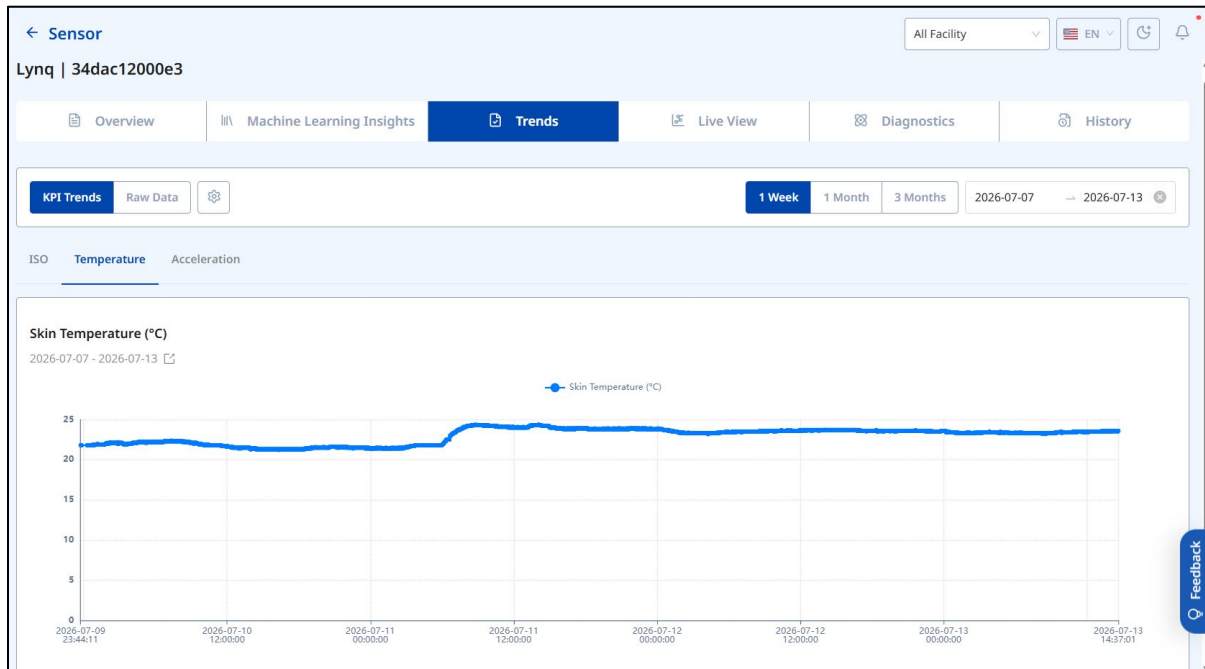
ISO Sub-tab

Displays the following:

- Velocity RMS (mm/s)
- Rotating Speed (RPM)

Temperature Sub-tab

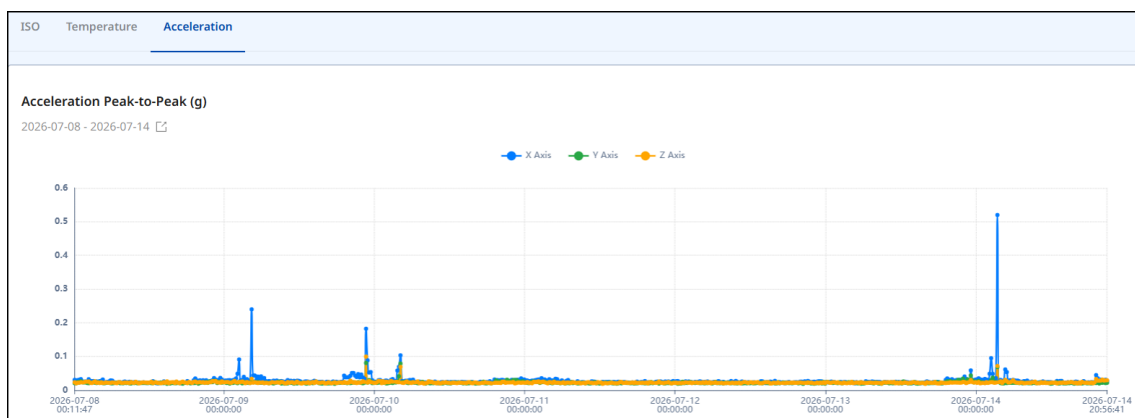
Displays skin temperature data (in Celsius) for the selected sensor.



Acceleration Sub-tab

Displays the following:

- Acceleration Peak-to-Peak (g)
- Acceleration RMS (g)
- Crest Factor



Date/Time Range Selection:

- Toggle between **1 Week**, **1 Month**, and **3 Months**, respectively.
- Alternatively, use the custom date picker.

9.1.1.2 For Pro Sensors Only

Aside from the three tabs discussed in Section 9.1.1.1, there are three (3) types of trend data also available in Pro sensors. These are displayed in their own respective tabs when viewing a Pro sensor's trend data.

Magnetometer Tab

Displays the following:

- Magnetometer RMS (millitesla, mT)
- Magnetometer Peak-to-Peak (millitesla, mT)
- Rotating Speed (RPM)

Gyroscope Tab

Displays the following:

- Gyroscope RMS ($^{\circ}$ /s)
- Gyroscope Peak-to-Peak ($^{\circ}$ /s)

Microphone Tab

Displays the following:

- Microphone RMS (counts)
- Microphone Peak-to-Peak (counts)

9.1.2 Raw Data Tab

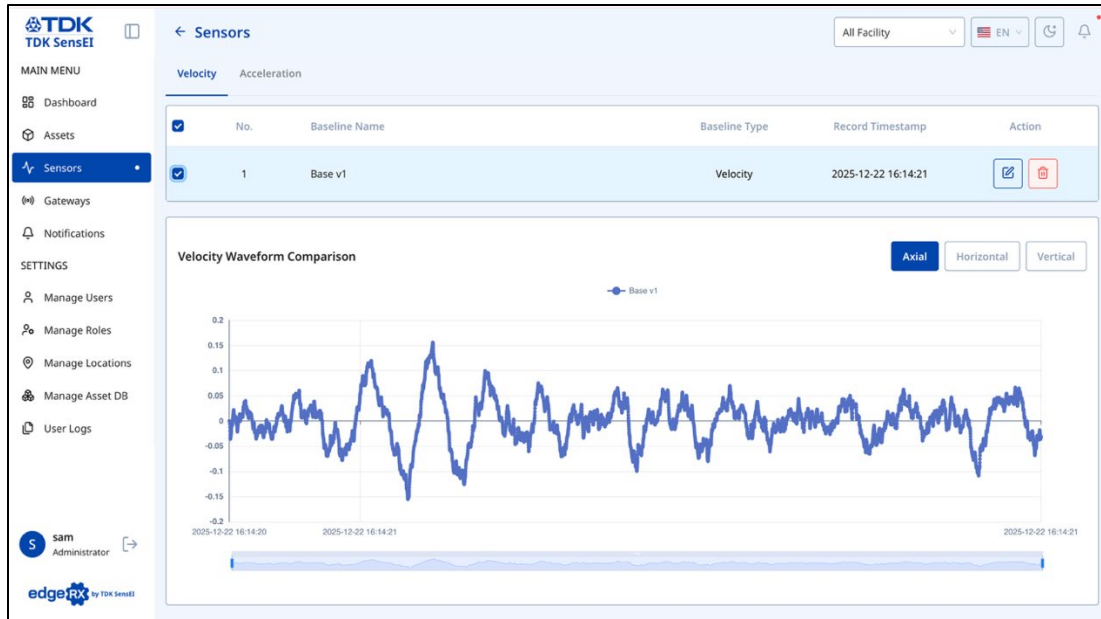
Unlike the KPI Trends tab, raw signal-based charts are displayed in the Raw Data tab.

Detailed raw sensor data with time-based selection and advanced analytics (statistics, spectra, and frequency insights) allow in-depth diagnostics and help identify anomalies in sensor behavior.

Like KPI data, the available raw data depends on the sensor type, with **Velocity** and **Acceleration** data available to all sensor types (**Lynq and Pro**), and **Gyroscope**, **Magnetometer** and **Microphone raw data** available for **Pro** sensors only.

If a sensor does not have any associated historical raw data, a **No data available** message is shown on the page.

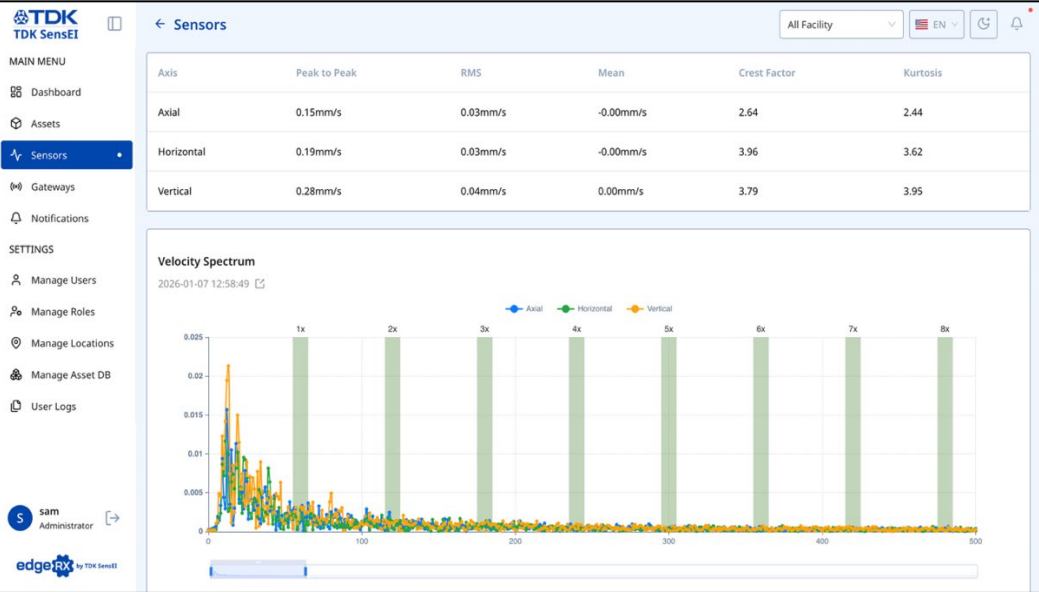
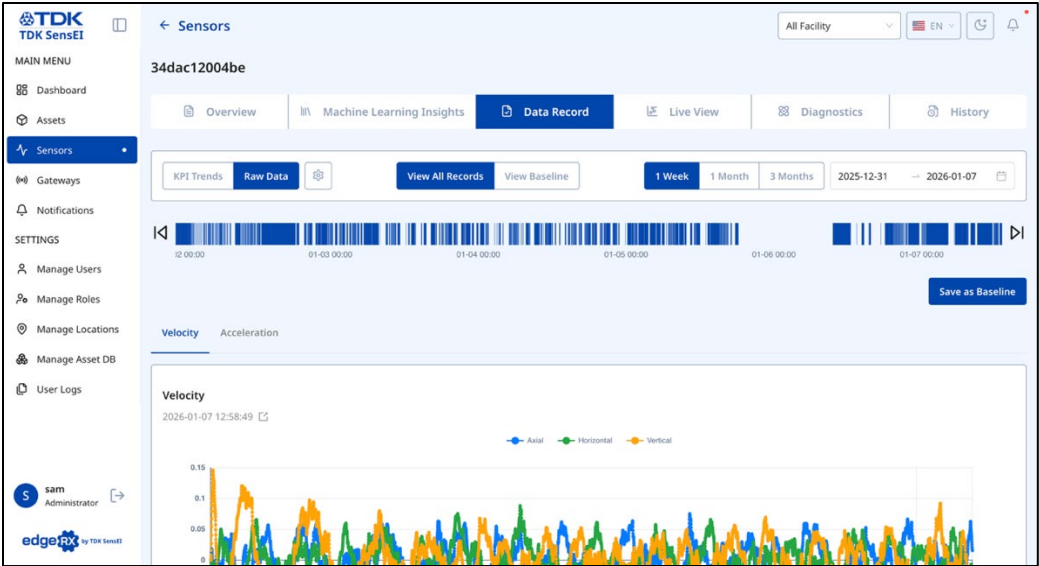




Velocity Sub-tab (Applies to All Sensors)

Displays the following:

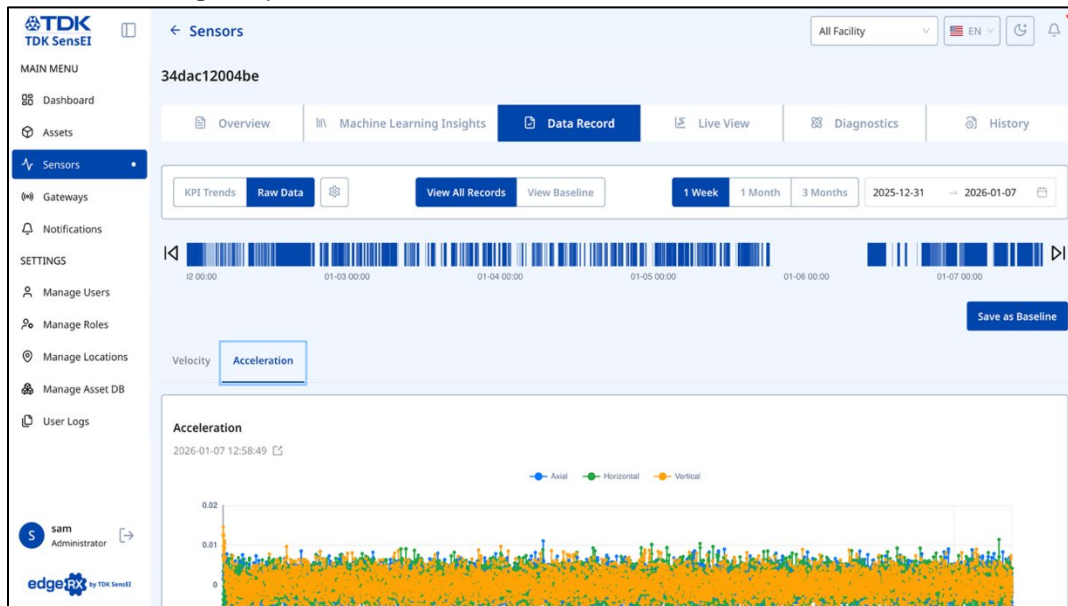
- Velocity Raw Data Chart
- Velocity Statistics
 - Displays the following computed metrics:
 - Peak-to-peak (P2P)
 - RMS
 - Mean
 - Crest Factor
 - Kurtosis
- Velocity Spectrum
- Velocity Frequency Insights
- Harmonic Frequencies

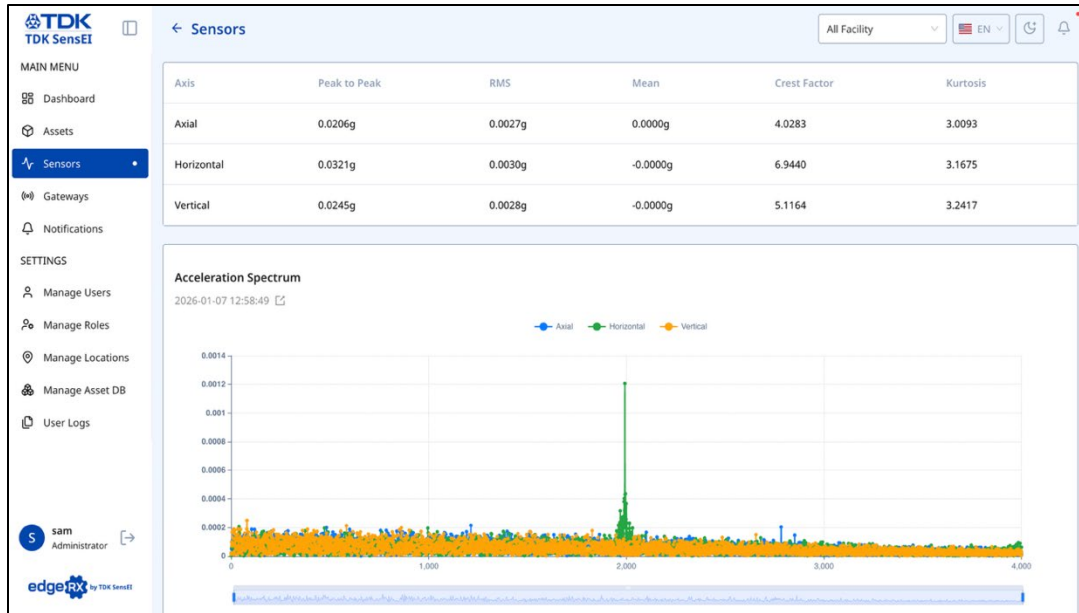


Acceleration Sub-tab (Applies to All Sensors)

Displays the following:

- Acceleration Chart
- Acceleration Statistics
 - P2P
 - RMS
 - Mean
 - Crest Factor
 - Kurtosis
- Acceleration Spectrum
- Acceleration Frequency Insights
- Acceleration Analysis
 - Envelope Analysis
 - Bearing Frequencies





Magnetometer Sub-tab (for Pro Sensors Only)

Displays the following:

- Raw Data (Magnetometer)
- Statistics
 - P2P
 - RMS
 - Mean
 - Crest Factor
 - Kurtosis
- Magnetometer Spectrum
- Peak Frequencies
- Harmonic Frequencies

Gyroscope Sub-tab (for Pro Sensors Only)

Displays the following:

- Raw Data (Gyroscope)
- Statistics
 - P2P
 - RMS
 - Mean
 - Crest Factor
 - Kurtosis
- Gyroscope Spectrum
- Peak Frequencies
- Harmonic Frequencies

Microphone Sub-tab (for Pro Sensors Only)

Displays the following:

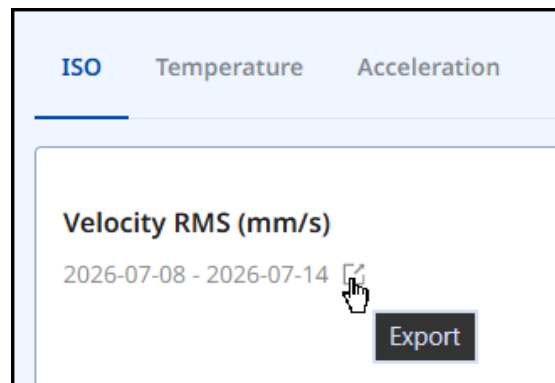
- Raw Data (Microphone)
- Statistics
 - P2P
 - RMS
 - Mean
 - Crest Factor
 - Kurtosis
- Microphone Spectrum
- Peak Frequencies
- Harmonic Frequencies

9.1.3 Exporting Data

Each KPI and Raw Data chart includes an **"Export"** button to download data in **CSV format**.

To export:

1. Navigate to the desired chart (KPI Trend or Raw Data).
2. Click the **"Export"** button.
3. The data will be downloaded as a CSV file.



9.2 ISO-Based Results

ISO standards provide vibration thresholds for machinery condition monitoring.

9.2.1 Understanding ISO Standards

ISO vibration standards define acceptable vibration levels for rotating machinery based on:

- Machine type
- Operating speed
- Mounting configuration

9.2.2 Viewing ISO Results

ISO-based results are displayed in the **KPI Trend > ISO** sub-tab (see [Section 9.1.1](#)). The system compares measured vibration levels against configured ISO thresholds to determine asset health status.

9.2.3 Configuring ISO Standards

For information on configuring ISO standards and thresholds, see [Section 12.4](#).

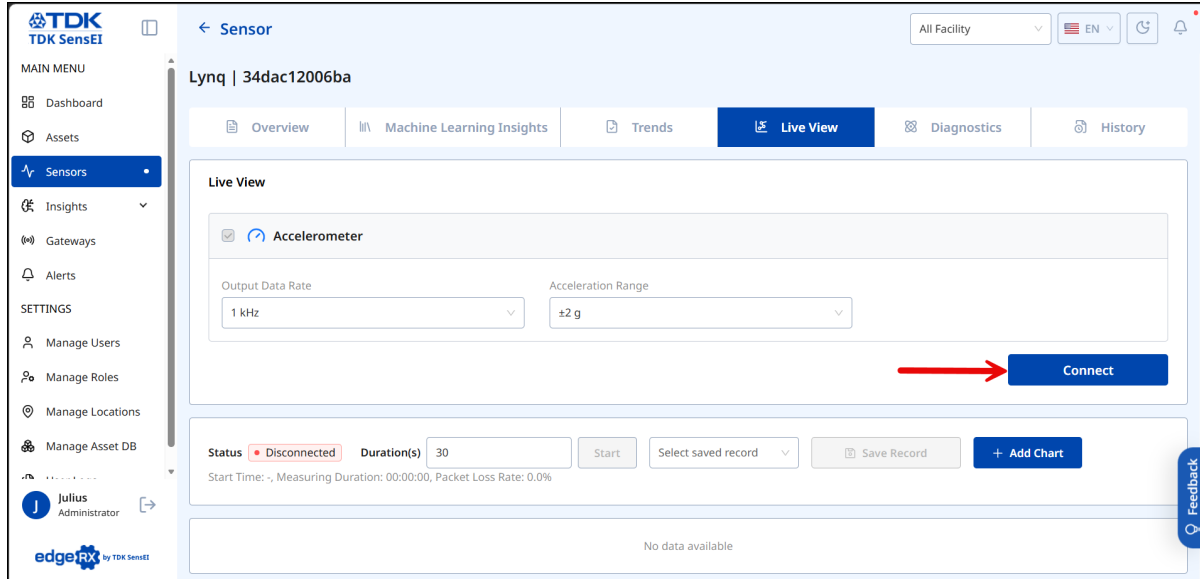
9.3 Live View

Navigate to **Sensor Detail View > Live View** tab to monitor real-time acceleration waveforms across vertical, axial, and horizontal axes. Connection status is displayed in real time.

When connecting to Live View, the sensor starts streaming data in real-time to the gateway, collecting more data and bypassing the previously chosen KPI Intervals.

Using Live View

1. Head to **Sensors > Live View** tab.
2. Under the **Accelerator** section of the **Live View** page, update the output data rate and acceleration range if needed.
3. Click the **Connect** button on the bottom right of the Accelerometer field. This updates the sensor status to **Connecting**.
4. Upon successful connection, the sensor status is updated to **Connected**.



Adding Charts

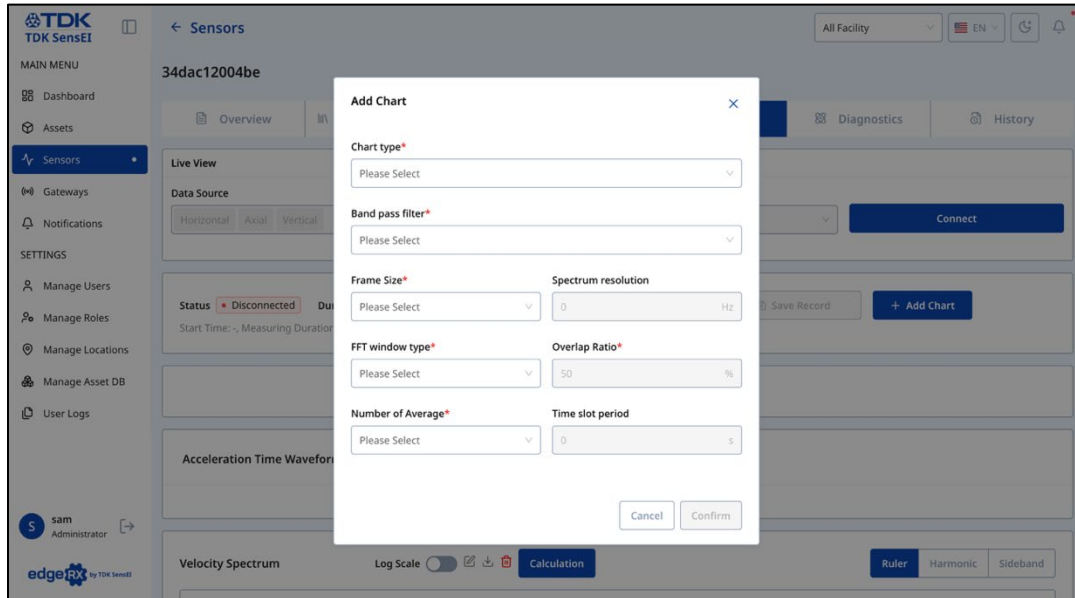
From the Live View tab, you can add the following chart types:

1. Accelerometer Spectrum
2. Envelope Spectrum
3. Velocity Spectrum
4. Magnetometer Spectrum

5. Gyroscope Spectrum
6. Microphone Spectrum

To add a new chart:

1. Click **"Add Chart"**.



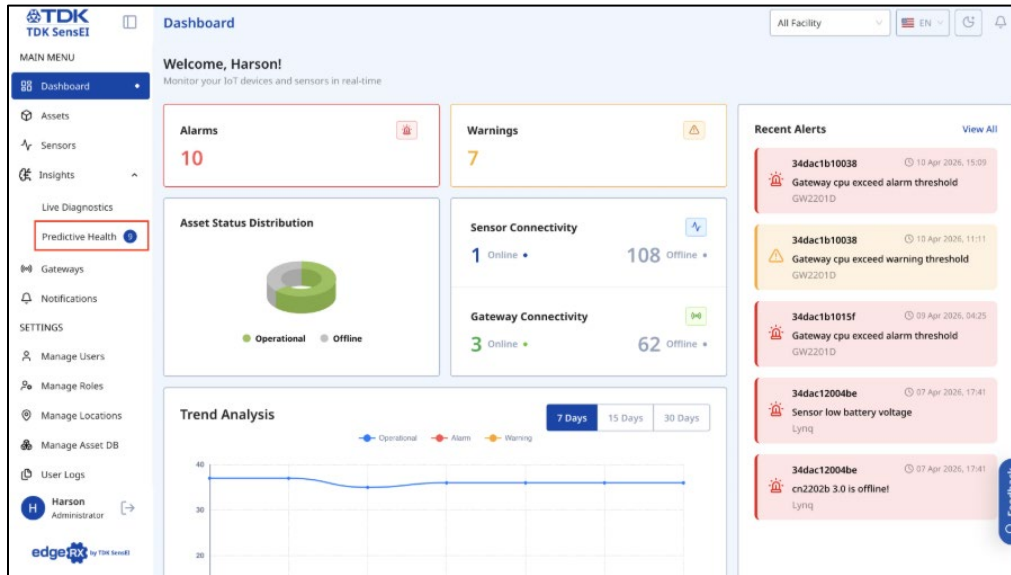
2. Click **"Confirm"** to add the chart, or **"Cancel"** to discard it.

Parameter	Description
Band pass filter	Filters data to isolate a specific frequency range. It strips away unrelated machine noise so the AI can focus on targeted fault zones.
Frame Size	The number of sample points per data block. Larger frame sizes give the AI a sharper, more detailed view of the frequencies.
FFT window type	The signal filter used to smooth data edges. It reduces artificial noise ('leakage') so the AI can accurately measure peak heights.
Number of average	The number of merged data blocks . Higher averaging reduces random floor noise to reveal hidden, repetitive fault peaks.
Spectrum resolution	The clarity of the frequency spectrum. Higher resolution separates closely spaced peaks to detect hidden faults early.
Overlap Ratio	The percentage of data shared between consecutive spectrum charts. Higher overlap ensures brief, sudden faults aren't missed.
Time slot period	The duration of a single raw data capture. A longer period provides higher frequency resolution to separate closely spaced faults.

10. Predictive Maintenance

10.1 Navigating to the Predictive Health Page

From the Main Menu, select **Insights**, then **Predictive Health**.



The Predictive Health page has two tabs:

1. **Current Prediction:** Provides visibility into all open predictive maintenance alerts related to your assets.
2. **History Status:** Provides a consolidated view of resolved alerts.

Predictive Health

All Facility

EN

Open Alerts

Open Alerts

Asset Name	Description	Location	Reported On	Count
High Capacity Industrial Backup Power Generator System	Critical bearing and coupling faults with unacceptable vibration levels	-	2026-04-09 17:50:34	67
High Capacity Industrial Backup Power Generator System	Critical bearing and coupling faults with unacceptable vibration levels	-	2026-04-09 17:50:34	67
PDM-Non-iso asset	Critical bearing wear with radial-dominant vibration pattern	-	2026-04-09 17:50:34	40
pre-compressor	Critical bearing wear and impeller imbalance detected	-	2026-04-09 17:50:34	61
High Capacity Industrial Backup Power Generator System	Multiple critical bearing and alignment faults detected	-	2026-04-09 16:06:32	67
High Capacity Industrial Backup Power Generator	Multiple critical bearing and alignment faults detected	-	2026-04-09 16:06:32	67

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10 / page

Feedback

The Predictive Health feature is also accessible from the **Asset Details** page (see Predictive Health Tab for more information).

10.2 Accessing Individual Alerts

Click the asset name that raised the alert to open its detailed view.

Predictive Health All Facility EN 🕒 🔔

Open Alerts Open Alerts

Asset Name	Description	Location	Reported On	Count
High Capacity Industrial Backup Power Generator System	Critical bearing and coupling faults with unacceptable vibration levels	-	2026-04-09 17:50:34	67
High Capacity Industrial Backup Power Generator System	Critical bearing and coupling faults with unacceptable vibration levels	-	2026-04-09 17:50:34	67
PDM-Non-iso asset	Critical bearing wear with radial-dominant vibration pattern	-	2026-04-09 17:50:34	40
pre-compressor	Critical bearing wear and impeller imbalance detected	-	2026-04-09 17:50:34	61
High Capacity Industrial Backup Power Generator System	Multiple critical bearing and alignment faults detected	-	2026-04-09 16:06:32	67
High Capacity Industrial Backup Power Generator System	Multiple critical bearing and alignment faults detected	-	2026-04-09 16:06:32	67

1 10 / page Feedback

10.3 Current Prediction

The Current Prediction Tab shows currently open predictive maintenance alerts, if any, for an asset's selected sensor.

Assets All Facility EN 🕒 🔔

High Capacity Industrial Backup Power Generator System View Map + Bind Sensor 🗑️

Overview Status **Predictive Health** Event Log

Select a Sensor 34dac1111111 (111111) 📉

Current Prediction History Status

AI Analysis 🕒 09 Apr 2026, 17:50 🔗

Fault Detected - The Test-Generator is operating in a critical fault state with severe mechanical degradation across multiple measurement points. Both sensors report unacceptable vibration levels that exceed ISO 20816-3 safety standards, with axial and radial vibrations in the Critical severity range (Zone D). Sensor 34dac1344566 exhibits an axial-dominant vibration pattern (9.16 mm/s) indicating primary coupling misalignment or thrust bearing degradation, combined with significant radial imbalance (H/V ratio 2.07) suggesting parallel misalignment or mounting problems. Sensor 34dac1111111 shows a radial-dominant pattern (10.85 mm/s total radial) with a 55% increase in vibration over 31 days, indicating rapid rotor imbalance progression and accelerating radial bearing wear. The convergence of these fault signatures across both sensors—combined with forecast data predicting sustained critical conditions through April 12, 2026—indicates imminent catastrophic failure risk. Root cause analysis reveals concurrent mechanical faults: coupling/thrust bearing issues at the primary measurement point, rotor imbalance and radial bearing degradation at the secondary point, and potential mounting or foundation integrity problems affecting both locations. Immediate shutdown and comprehensive maintenance intervention is required to prevent equipment failure and ensure operational safety.

Critical bearing and coupling faults with unacceptable vibration levels

Primary Concerns

- Coupling misalignment and thrust bearing degradation (Sensor 34dac1344566)
- Rotor imbalance with accelerating radial bearing wear (Sensor 34dac1111111)
- Parallel misalignment and mounting integrity issues
- Rapid vibration degradation trend (55% increase over 31 days)
- Multiple axes at Critical severity (Zone D) exceeding ISO 20816-3 thresholds

Feedback

Sensor alert indicators include:

- **Red (Alert):** The fault threshold is likely to be reached.
- **Green (Normal):** The asset is operating within the threshold; there are no issues.
- **Blue (Calibrating):** Data collection in progress; predictions will begin once ample data has been collected.



When there is an active prediction, you can take the following actions:

1. **Confirm:** Indicates that the predicted issue has been validated and addressed.
2. **False Alarm:** Indicates that the prediction is not a concern or is a false alarm.

Assets

All Facility

EN

- Sustained critical conditions forecast through April 12, 2026
- Imminent risk of catastrophic bearing failure and rotor damage

Critical Sensors

- 34dac1344566: Coupling misalignment and thrust bearing degradation
- 34dac1111111: Rotor imbalance and radial bearing wear

The generator exhibits critical mechanical faults with unacceptable vibration levels across multiple axes. Axial vibration (x-axis) at 9.16 mm/s and horizontal radial vibration (y-axis) at 7.73 mm/s both exceed ISO 20816-3 Zone D thresholds, indicating severe coupling/thrust bearing issues combined with significant radial imbalance. The radial H/V ratio of 2.07 reveals pronounced directional imbalance, suggesting parallel misalignment or mounting problems requiring immediate intervention.

Axis	Current (Vrms)	Current ISO Zone	Predicted (Vrms)	Forecasted ISO Zone
Y-Axis	7.73 mm/s	Zone D	7.70 mm/s	Zone D
X-Axis	9.16 mm/s	Zone D	8.94 mm/s	Zone D
Z-Axis	3.73 mm/s	Zone C	3.64 mm/s	Zone C

Conclusion

Issue Confirmed

False Alarm

The generator is operating in a FAULT state with unacceptable vibration levels that exceed ISO 20816-3 safety standards. Both axial and horizontal radial vibrations are in Zone D (unacceptable), indicating critical mechanical faults. The directional analysis reveals axial-dominant vibration (9.16 mm/s) suggesting coupling misalignment or thrust bearing degradation, combined with significant radial imbalance (H/V ratio 2.07) indicating parallel misalignment or mounting issues. Forecast data predicts sustained critical conditions through April 12, 2026. Immediate corrective action is required to prevent catastrophic failure. Recommended actions: (1) Inspect and realign generator coupling, (2) Check thrust bearing condition and lubrication, (3) Verify mounting bolts and foundation integrity, (4) Perform detailed frequency analysis to identify specific fault frequencies.

Operational Health Trend

Feedback

⚠ **Note:** Your feedback helps improve model accuracy, enabling better predictions.

10.4 History Status

The **History Status** tab contains a complete record of all predictive alerts that were previously raised for the asset.

Assets

All Facility

EN

High Capacity Industrial Backup Power Generator System

View Map

+ Bind Sensor

Overview

Status

Predictive Health

Event

Log

Select a Sensor

34dac1344566 (344566)

Current Prediction

History Status

Alert History

09 Apr 2026, 17:50 Open

The generator exhibits critical mechanical faults with unacceptable vibration levels across multiple axes. Axial vibration (x-axis) at 9.16 mm/s and horizontal radial vibration (y-axis) at 7.73 mm/s both exceed ISO 20816-3 Zone D thresholds, indicating severe coupling/thrust bearing issues combined with significant radial imbalance. The radial H/V ratio of 2.07 reveals pronounced directional imbalance, suggesting parallel misalignment or mounting problems requiring immediate intervention.

09 Apr 2026, 16:06 Open

The generator exhibits critical mechanical faults with unacceptable

AI Analysis

09 Apr 2026, 17:50

Fault Detected - The Test-Generator is operating in a critical fault state with severe mechanical degradation across multiple measurement points. Both sensors report unacceptable vibration levels that exceed ISO 20816-3 safety standards, with axial and radial vibrations in the Critical severity range (Zone D). Sensor 34dac1344566 exhibits an axial-dominant vibration pattern (9.16 mm/s) indicating primary coupling misalignment or thrust bearing degradation, combined with significant radial imbalance (H/V ratio 2.07) suggesting parallel misalignment or mounting problems. Sensor 34dac1111111 shows a radial-dominant pattern (10.85 mm/s total radial) with a 55% increase in vibration over 31 days, indicating rapid rotor imbalance progression and accelerating radial bearing wear. The convergence of these fault signatures across both sensors—combined with forecast data predicting sustained critical conditions through April 12, 2026—indicates imminent catastrophic failure risk. Root cause analysis reveals concurrent mechanical faults: coupling/thrust bearing issues at the primary measurement point, rotor imbalance and radial bearing degradation at the secondary point, and potential mounting or foundation integrity problems affecting both locations. Immediate shutdown and comprehensive maintenance intervention is required to prevent equipment failure and ensure operational safety.

Critical bearing and coupling faults with unacceptable vibration levels

Primary Concerns

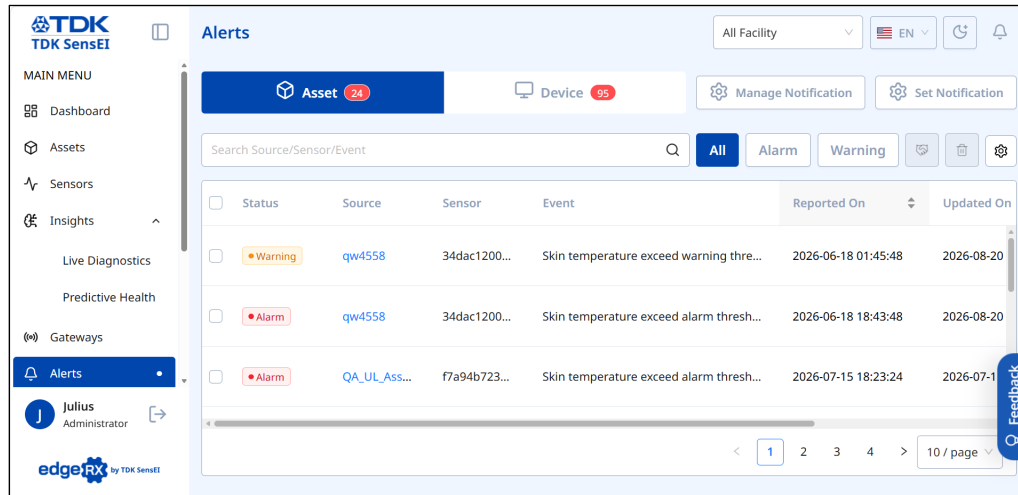
- Coupling misalignment and thrust bearing degradation (Sensor 34dac1344566)
- Rotor imbalance with accelerating radial bearing wear (Sensor 34dac1111111)
- Parallel misalignment and mounting integrity issues

Feedback

11. Alerts

11.1 Navigating to the Alerts Page

Log into the edgeRX™ Dashboard using your authorized credentials, then select **Alerts** from the Main menu.



11.1.1 Acknowledge an Alert

1. Select the notification from the list.
2. Click the **"Acknowledge"** button (denoted by a handshake icon).
3. Add a comment.
1. Click **"Confirm"** to acknowledge the alert, or click **"Cancel"** to stop the action.

11.1.2 Delete a Notification

2. Click the **"Delete"** button (denoted by a trash bin icon).
3. Click **"Confirm"** to delete the notification, or click **"Cancel"** to stop the action.

11.1.3 Bulk Actions

To acknowledge or delete alerts in bulk:

1. Either check the box on the topmost left to select all notification or select multiple notifications from the list.
2. Click the **"Acknowledge"** or **"Delete"** buttons on the top right. The number of selected notifications is shown over the buttons.

Status	Source	Sensor	Event	Reported On	Updated On	Count	Actions
Warning	QA_UL_Ass...	f7a94b7239...	Skin temperature exceed warning thres...	2026-06-26 17:29:42	2026-07-09 20:00:29	2	[Icon] [Icon]
Warning	QA_UL_Ass...	fe815d43d7...	Skin temperature exceed warning thres...	2026-07-06 23:54:06	2026-07-09 20:00:03	2	[Icon] [Icon]

11.2 Alert Views

While all alerts regardless of type (alarm or warning) are shown on the Alerts page by default, the Alerts list can be filtered to show only alarms or warnings. Select the appropriate buttons to the right of the **Search** bar to switch between All, Alarm, and Warning alerts.

Status	Source	Sensor	Event	Reported On	Updated On	Count	Actions
Warning	QA_UL_Ass...	f7a94b7239...	Skin temperature exceed warning thres...	2026-06-26 17:29:42	2026-07-09 20:00:29	2	[Icon] [Icon]
Warning	QA_UL_Ass...	fe815d43d7...	Skin temperature exceed warning thres...	2026-07-06 23:54:06	2026-07-09 20:00:03	2	[Icon] [Icon]

11.3 Email & Mobile Push Notifications

You may choose to receive email and/or mobile notifications for these alert types:

- **Asset alarms:** Triggered by sensor measurements loaded into the system.
- **Asset warnings:** Triggered by sensor measurements loaded into the system.
- **Device offline:** Triggered when a gateway or sensor node goes offline.
- **Predictive health:** Triggered when threshold breaches or potential issues are identified through predictive analysis of your sensor data.

For AI-inference alarms, you need to select the corresponding labels in either warning or alarms in the Edit Sensor Specifications page.

1. Click **Manage Notifications**.
2. In the **Manage Notifications** window, enable the **Email** toggle, the **Mobile** toggle, or both, for the alert types you want to receive.
3. A notification will briefly appear on screen to confirm your selection.
4. Close the **Manage Notifications** window.

Alerts

Asset 23

Device 86

All Facility

EN

Manage Notification

Set Notification

Search Source/Sensor/Event

All

Alarm

Warning

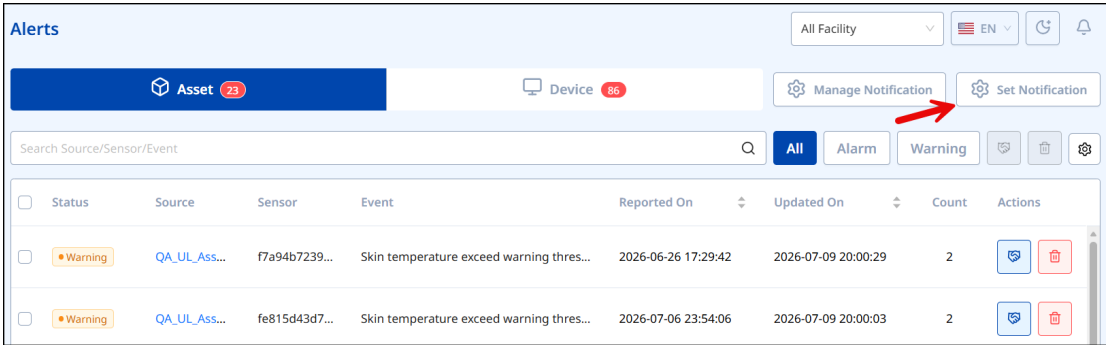
	Status	Source	Sensor	Event	Reported On	Updated On	Count	Actions
	Warning	QA_UL_Ass...	f7a94b7239...	Skin temperature exceed warning thres...	2026-06-26 17:29:42	2026-07-09 20:00:29	2	
	Warning	QA_UL_Ass...	fe815d43d7...	Skin temperature exceed warning thres...	2026-07-06 23:54:06	2026-07-09 20:00:03	2	

11.4 Setting Warning/Alarm Thresholds

The **Set Notification** feature allows users to configure and enable Warning and Alarm thresholds for various Sensor and Gateway parameters.

To configure warning and alarm thresholds and enable alerts:

1. Click **"Set Notification"**.
2. On the **Set Notification** window, there are separate parameters for Lynq and Pro sensors and gateways.
3. Click the **Edit** button (denoted by a writing pen icon) under a parameter's **Action** column to set the parameter's threshold values.
4. Click **"Save"** to apply changes.



Set Notification

Sensor Configuration applicable only for Lynq

No	Parameter	Warning threshold	Alarm threshold	Action	Enable
1	Battery Voltage	2.8V	2.4V		☒
2	RSSI	-75dBm	-80dBm		☒

Sensor Configuration applicable only for Pro

No	Parameter	Warning threshold	Alarm threshold	Action	Enable
1	Battery Voltage	3V	2.5V		☒
2	RSSI	-75dBm	-85dBm		☒

Gateways

No	Parameter	Warning threshold	Alarm threshold	Action	Enable
1	CPU Usage	80%	90%		☒
2	RAM Usage	80%	90%		☒

Set Notification

Sensor Configuration applicable only for Lynq

No	Parameter	Warning threshold	Alarm threshold	Action	Enable
1	Battery Voltage	2.8V	2.4V	Cancel Save	☒
2	RSSI	-75dBm	-80dBm		☒

11.5 Alerts Table Features

The Alerts table provides a searchable, paginated view of all alerts.

Feature	Description
Search Bar	Find notifications from Assets and Devices
Rows per Page	Adjust the number of rows displayed per page from the default 10 to anywhere between 20-100 and vice-versa
Column Settings	Customize the columns you see on the list by clicking the Table Settings button in the top-right corner.

Notifications

Singapore-ATS
EN

Asset 1
Device 8
Set Notification

Search Source/Sensor/Event

All Alarm Warning

☐	Status	Source	Sensor	Event	Reported On	Updated On
☐	Closed	lab_motor	34dac1200b94	Skin temperature exceed alarm threshold	2026-01-13 14:37:54	2026-01-13 14:52:34
☐	Closed	lab_motor	34dac1200b94	Skin temperature exceed alarm threshold	2026-01-13 14:36:54	2026-01-13 14:37:24
☐	Warning	lab_motor	34dac1200a23	Skin temperature exceed warning threshold	2026-01-13 14:27:16	2026-01-13 14:27:16

Column Display
Reset

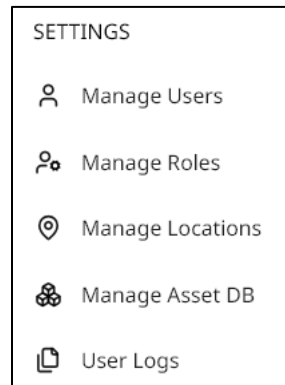
- ☒ Status
- ☒ Source
- ☒ Sensor
- ☒ Event
- ☒ Reported ...
- ☒ Updated ...
- ☒ Count
- ☒ Actions

1
10 / page

12. Configuring Settings

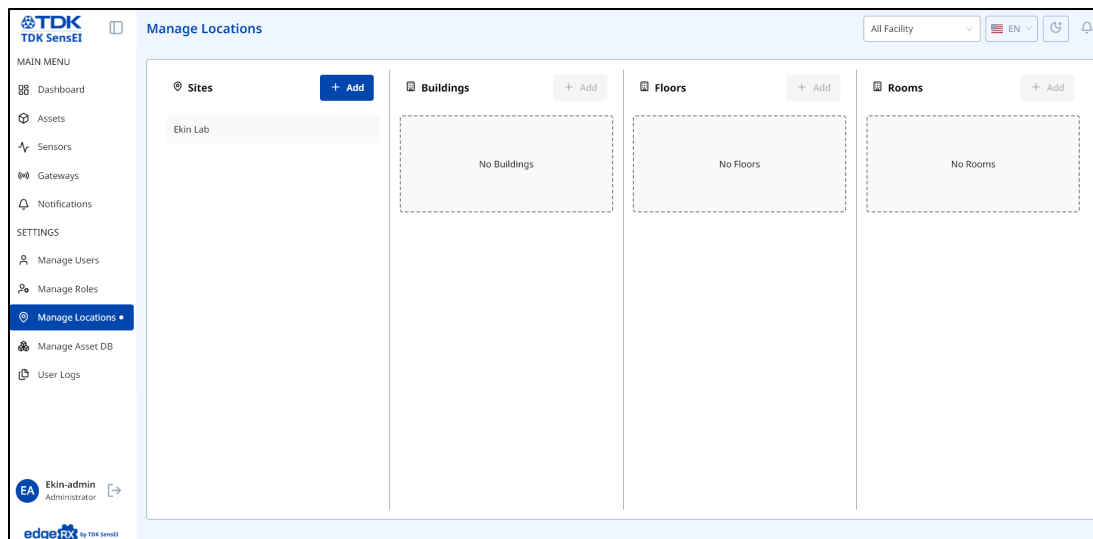
Log into the edgeRX™ Dashboard using your authorized credentials, then navigate to **Settings** to manage system-wide configurations. including locations and location hierarchy, asset databases, and user logs.

⚠ Note: User and role management are covered in the [Managing Users](#) and Roles section of this document.



12.1 Locations and Location Hierarchy

On the **Settings** menu, select **Manage Locations** to view the hierarchical layout of Sites, Buildings, Floors, and Rooms. By default, the system automatically selects the most relevant level in the hierarchy, allowing Users to quickly view associated data.

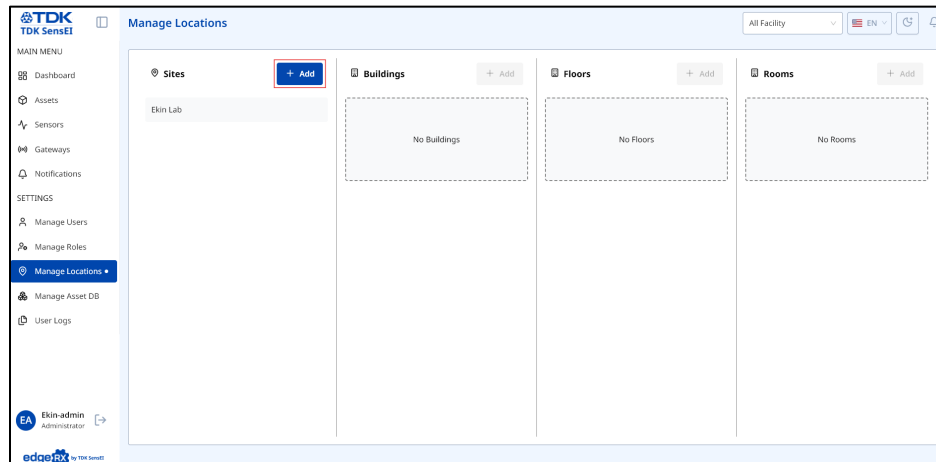


Hierarchy Structure:

- Site → Building → Floor → Room
- Once you add a site, its name is added to the page. You can then add buildings to sites, floors to buildings, and rooms to floors.

- Only site locations are displayed initially. Highlighting a site brings up the buildings, floors, and rooms that have been added to the site.
- Each location has a menu with Reorder (denoted by upward and downward pointing arrows), View, Edit, and Delete buttons. Use these buttons to manage locations accordingly (see [Managing Existing Locations](#)).

12.1.1 Adding a Site



1. Click **"Add"** to create a new site.
2. Enter the following details:

Field	Description
Site Name	Name of the site
Site Map (Optional)	The site map in PNG/JPG format and less than 2MB in size

3. Click **"Save"** to add the Site.

12.1.2 Managing Existing Locations

Use the following controls to manage Sites, Buildings, Floors, and Rooms:

Control	Action
Edit	Click the "Edit" icon, update Name/Image/Actual Distance, click "Save"
Delete	Click the "Delete" icon and confirm the action
Preview	Click the "Preview" (eye) icon to view location on map
Reorder	Use "Up" and "Down" arrow controls to move the location up and down the column

12.1.3 Adding a Building

A site may have one or more buildings. To add a building to a site:

1. Click the **"Add"** button under the Buildings column.
2. Enter the Building Name.

3. Mark at least three (3) separate points on the map. Once the points are marked, a triangular coverage zone appears on the map. This represents the area monitored by the gateways and sensors in the building.
4. Click "**Save**".

12.1.4 Adding a Floor

A building may have one or more floors. To add a floor:

1. Click **"Add"** button in the Floors box.
2. Enter the Floor Name.
3. Upload the floor plan image in PNG/JPG format, ensuring the file size is under 2MB.
4. Click **"Save"** to add a Floor.

12.1.5 Adding a Room

A floor may have one or more rooms. To add a room:

1. Click **"Add"** button in the Rooms box.
2. Enter the Room Name and select the Room Color from the list. The system visually groups sensor data or alerts tied to the room under the same color.
3. Once the points are marked, a triangular coverage zone appears on the map. This represents the area within the room that is monitored by your gateways and sensors.
4. Click **"Save."**

Add New Room

Room Name*

Boardroom

Room Color*

Green

+

-

↺ ↻ ↻

✎

🗑

Cancel

Save

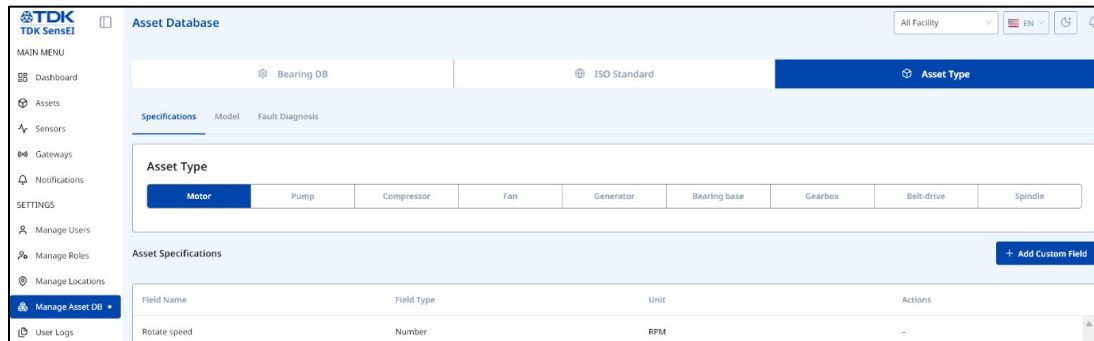
12.1.6 Map Toolbar

Use the Map Toolbar to interactively manage the layout:

- **Zoom** – Zoom in/out of the map
- **Reset** – Reset map to default view
- **Scaling (AB points)** – Set scale reference points
- **Origin adjustment** – Adjust map origin
- **Layout reset** – Reset layout to default

12.2 Manage Asset DB / Asset Types

Navigate to **Settings > Manage Asset DB > Asset Type** to view and configure asset types.

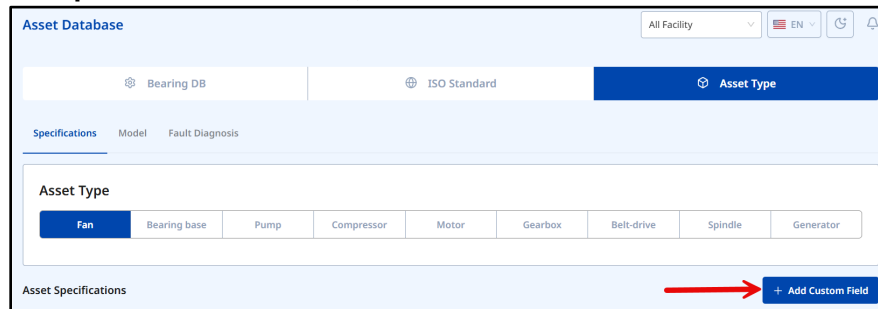


There are three sub-tabs under the Asset Type page:

1. **Specifications:** Allows setup of asset type specifications
2. **Model:** Allows setup of asset type models
3. **Fault diagnosis:** Lists the various faults that can be encountered by an asset type

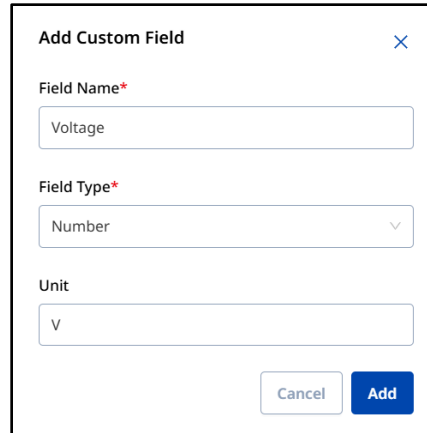
12.2.1 Adding a Custom Field

1. Under the **Specifications** sub-tab, click the **"+ Add Custom Field"** button.



2. Enter the following details:

Field	Description
Field Name	Name of the custom field
Field Type	Data type (text, number, etc.)
Unit	Unit of measurement (if applicable)



Add Custom Field [X]

Field Name*
Voltage

Field Type*
Number

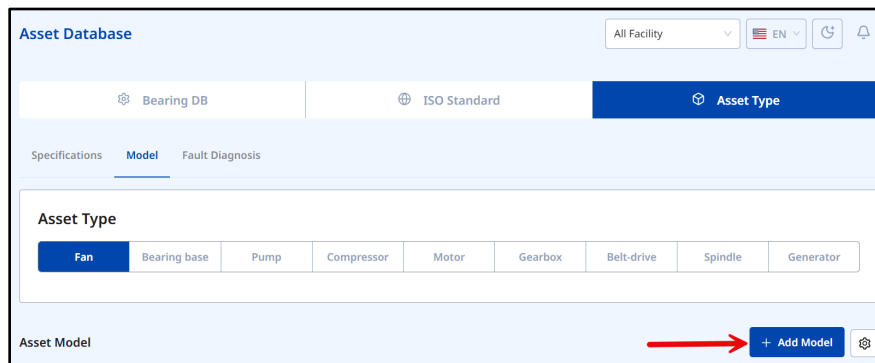
Unit
V

Cancel Add

3. Click **"Add"** to create the custom field.

12.2.2 Adding an Asset Model

1. Under the **Model** sub-tab, select the asset type from the predefined options. For example, to add a new Pump model, select Pump.
2. Click **"Add Model."**



Asset Database [All Facility] [EN] [Refresh] [Bell]

Bearing DB ISO Standard Asset Type

Specifications Model Fault Diagnosis

Asset Type

Fan Bearing base Pump Compressor Motor Gearbox Belt-drive Spindle Generator

Asset Model [Add Model] [Gear]

3. Select the required specifications for the selected asset type. Specifications may be different across model types. For example, you need to enter the following for a new pump model.

Field	Description
Asset Model Name	Name of the model
Rotate Speed (RPM)	Rotational speed in RPM
DE Bearing	Drive-end bearing specification
Num of Impeller	Number of impellers
Voltage (V)	Operating voltage
Current (A)	Operating current

12.2.3 Managing Asset Models

You can view all models under each type and use the **Edit** or **Delete** links to manage them. Sensor location values can also be added, edited, or deleted dynamically to define exact placement points.

12.3 Bearing DB

Navigate to **Settings > Manage Asset DB > Bearing DB** to view, add, edit, or delete bearing fault frequencies.

Bearing type	Number of balls	FTF_60RPM	BSF_60RPM	BPFO_60RPM	BPFI_60RPM	Actions
N206	12	0.419	2.988	5.023	6.977	[Edit] [Delete]
1111	9	0.402	2.461	3.621	5.379	[Edit] [Delete]
N214	16	0.433	3.683	6.933	9.067	[Edit] [Delete]
N210	15	0.429	3.429	6.429	8.571	[Edit] [Delete]

12.3.1 Adding a New Bearing Fault Frequency

1. Click **Add**.
2. Enter the following:

Field	Description
Bearing type	Type/model of bearing
Number of balls	Number of rolling elements
FTF_60RPM	Fundamental Train Frequency at 60 RPM
BSF_60RPM	Ball Spin Frequency at 60 RPM
BPFO_60RPM	Ball Pass Frequency Outer race at 60 RPM
BPFI_60RPM	Ball Pass Frequency Inner race at 60 RPM

3. Click **"Save"**.

12.3.2 Editing Bearing Fault Data

1. Click **Edit**.
2. Update the fault frequency values.
3. Click **Confirm** to save changes, or click **"Cancel"**.

12.3.3 Deleting Bearing Fault Data

1. Click **Delete**.
2. Click **"Confirm"** to delete the bearing, or click **"Cancel"** to stop the delete process.

12.3.4 Bulk Upload Bearing Faults

To bulk upload bearing faults:

1. Click **Import**.
2. Download the template file.
3. Complete the template file offline with your bearing data.

4. Upload the completed file back into the system.

Note: Microsoft Excel or any compatible spreadsheet software is required for editing the template file.

Import Bearing List

1. Download Template

Get the bearing template and fill in your data following the provided instructions.

Download Template

2. Upload the completed file

Click to upload or drag and drop

Supports .xlsx files only (Max: 10MB)

Cancel

Preview

12.4 ISO Standards

Navigate to **Settings > Manage Asset DB > ISO Standard** tab to view and configure vibration thresholds.

Asset Database				
All Facility				
EN				
Bearing DB ISO Standard Asset Type				
ISO Standard				
ISO Standard	Description	Warning threshold	Alarm threshold	Actions
ISO10816-3/Group 1/Rigid	300KW-50MW,rigid mounted	4.5 mm/s	7.1 mm/s	-
ISO10816-3/Group 1/Flexible	300KW-50MW,flexible mounted	7.1 mm/s	11 mm/s	-
ISO10816-3/Group 2/Flexible	15KW-300MW,flexible mounted	4.5 mm/s	7.1 mm/s	-
ISO10816-3/Group 2/Rigid	15KW-300MW,rigid mounted	2.8 mm/s	4.5 mm/s	-
1 10 / page				

12.4.1 Adding an ISO Standard

1. Click **Add**.
2. Enter the following:

Field	Description
ISO Standard	ISO standard name/number
Description	Description of the standard
Warning Threshold	Vibration level that triggers warning
Alarm Threshold	Vibration level that triggers alarm

3. Click **"Save"**.

12.4.2 Editing an ISO Standard

Only ISO standards that you manually added to the Asset DB can be edited or deleted.

1. Select the ISO standard from the list.
2. Click **Edit**.
3. Update the standard details.
4. Click **"Confirm"** to save the changes, or click **"Cancel"**.

12.4.3 Deleting an ISO Standard

1. Select the ISO standard from the list.
2. Click the **"Delete"** button.
3. Click **"Confirm"** to delete the ISO standard.

12.5 Fault Diagnosis

Navigate to **Settings > Manage Asset DB > Asset Type > Fault Diagnosis** to view a list of predefined fault types for the selected asset type. For example, to view the fault types that can be raised for a Pump model, select **Pump** from the Asset Type list.

Asset Database

All Facility

EN

Bearing DB

ISO Standard

Asset Type

Specifications

Model

Fault Diagnosis

Asset Type

Motor

Pump

Compressor

Fan

Generator

Bearing base

Gearbox

Belt-drive

Spindle

Fault Diagnosis

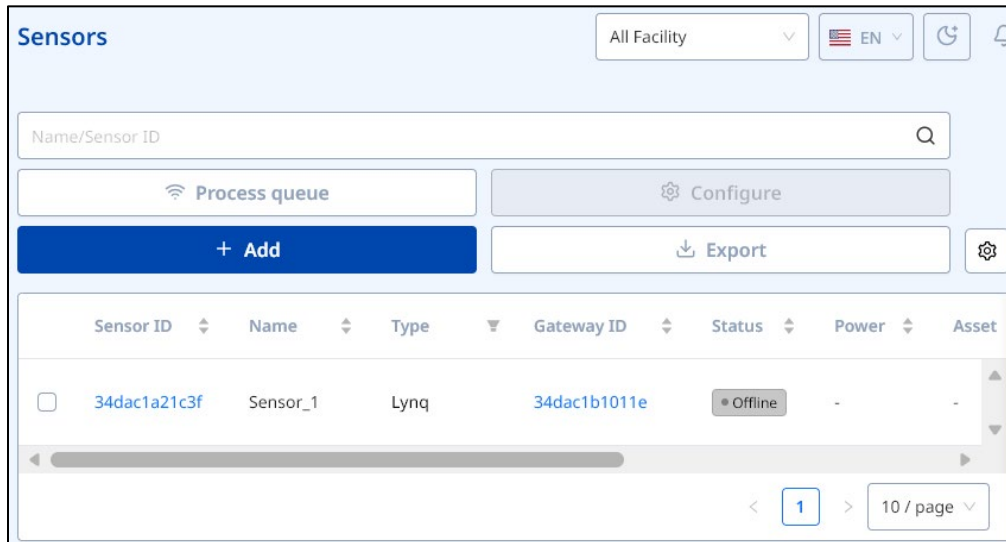
No.	Fault Name	Data Type	Parameter	Description
1	Imbalance	Spectra/Velocity	RPM	Imbalance occurs when the mass distribution of a rotating component is not uniform, causing it to generate centrifugal forces that lead to excessive vibration.
2	Angular misalignment	Spectra/Velocity	RPM	Angular misalignment occurs when shaft centerlines intersect at an incorrect angle, causing axial force vectors and moment loading that accelerate coupling wear.
3	Parallel misalignment	Spectra/Velocity	RPM	Parallel misalignment occurs when shaft centerlines develop offset parallelism, causing radial forces proportional to displacement distance that induce bearing overload.
4	Rolling bearing wear	Spectra/Envelope	Bearing type	Bearing wear occurs when rolling elements experience progressive material loss, causing characteristic vibration patterns and thermal elevation that reduce load capacity.
5	Structural looseness	Spectra/Envelope	RPM	Structural looseness occurs when mechanical joints lose design stiffness, causing excessive vibration and potential damage to the asset.

13. Troubleshooting

13.1 Sensor Appears Offline on Dashboard

If a sensor appears offline in the dashboard:

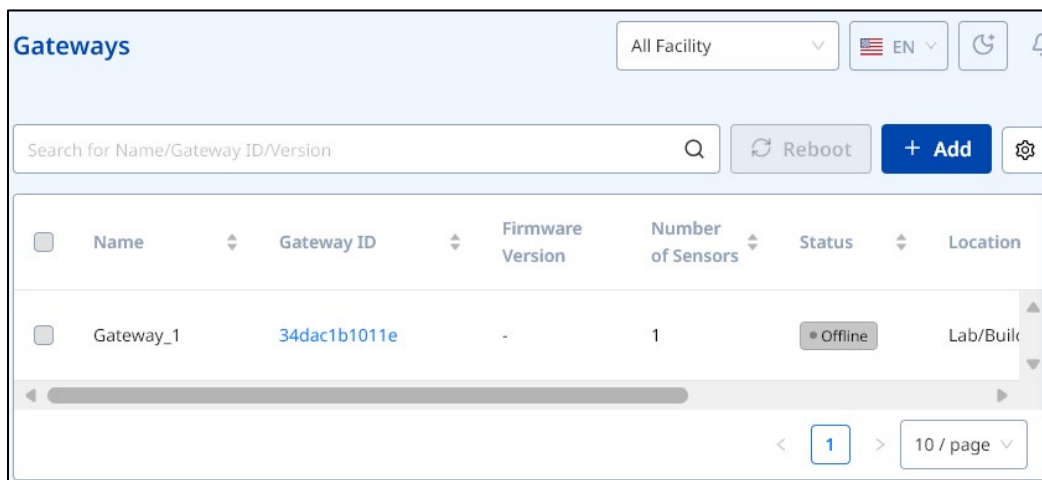
1. Ensure that the sensor was turned on by checking the on/off switch found in the sensor.
2. Ensure that the sensor MAC ID was entered successfully when adding the sensor.
3. Ensure that the sensor was successfully bound to the gateway and the asset.
4. Ensure that the sensor battery voltage is above 2.0 Volts.



13.2 Gateway Appears Offline on Dashboard

If a gateway shows as offline in the dashboard:

1. Ensure that the gateway power supply was attached properly.
2. Ensure that the gateway was added to a location successfully on the dashboard.



13.3 No Data Appearing on Dashboard

If sensor data is not appearing on the dashboard:

1. Verify that the sensors are online (see [Section 13.1](#)).
2. Verify that the gateways are online (see [Section 13.2](#)).
3. Check that the sensors are properly bound to assets.
4. Ensure that the sensors are within acceptable RSSI range (see [Section 5.5.5](#)).

13.4 Widget Appears Inactive or Blank

If widgets on the homepage dashboard appear inactive or blank:

1. Confirm that your gateways and sensors are online.
2. Check your network connection.
3. Verify that you have proper permissions to view the data.
4. Try switching to a different location using the location selector (if available).

13.5 Contacting Support

If any issues persist after following the troubleshooting steps, please contact TDK SensEI support at sensei.support@tdk.com or visit <https://sensei.tdk.com/edgerx-starter-documentation>.

When contacting us for support, please provide the following:

- User account information
- Description of the issue
- Screenshots (if applicable)
- Steps taken to troubleshoot

Appendix

A. Glossary of Terms

Term	Definition
Asset	A piece of equipment or machinery being monitored by the edgeRX™ system
edgeRX™	TDK SensEI's end-to-end platform for real-time equipment health monitoring
Gateway	Hardware device that collects sensor data and transmits it to the cloud
KPI	Key Performance Indicator – measurable values used to evaluate asset health
ML	Machine Learning – AI algorithms used to analyze sensor data
MFA	Multi-Factor Authentication – security feature requiring multiple verification methods
Sensor	Hardware device that collects vibration and temperature data from assets
ISO	International Organization for Standardization – defines vibration standards
RSSI	Received Signal Strength Indicator – measures wireless signal strength
RPM	Revolutions Per Minute – rotational speed measurement
RMS	Root Mean Square – statistical measure of vibration magnitude
FFT	Fast Fourier Transform – algorithm for frequency analysis