USER GUIDE

Ellenex Software Platform

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Introduction

This guide is designed to help you to get familiar and use the Ellenex platform easily and effectively. It provides clear instructions on how to access the platform, view and manage devices, monitor data, receive alerts, and troubleshoot common issues.

Whether you are new to this type of software or have experience with similar systems, this guide will help you navigate the platform confidently.

By following this guide, you will be able to:

- Access and log in to the platform via web or mobile app.
- Understand dashboards and data visualization tools.
- Manage devices and monitor their performance.
- Track network quality and troubleshoot connectivity issues.
- Configure alerts and notifications to stay informed in real time.

What Is the Ellenex Platform?

The Ellenex platform is a centralized monitoring and management system that connects with all the Ellenex devices, such as sensors, transmitters, or gateways. It collects data from these devices and presents it in an organized and easy-to-understand way. Users can view device status, track measurements (like pressure, temperature, or level), and quickly detect potential issues.

Key points about the platform:

- It is web-based, meaning you can access it from any modern browser (like Chrome, Edge, or Safari).
- It also has a mobile app called Ellenex Asset Monitoring, available for iOS and Android. The app lets you check device data, receive alerts, and manage devices directly from your smartphone or tablet.
- It is designed to be user-friendly, so both technical and non-technical users can navigate it without difficulty.

Why Use the Ellenex Platform?

The Ellenex platform helps you:

1. **Monitor assets remotely:** Check the real-time status of devices, even if they are in different locations.
2. **Save time and resources:** Get instant insights without having to manually check each device.
3. **Prevent issues before they happen:** Set alerts to notify you when a device is offline, battery is low, or a measurement exceeds limits.
4. **Access data anywhere:** Use the web platform at your desk or the mobile app on the go.
5. **Integrate with other systems:** Developers can use APIs to connect Ellenex with other software or analytics tools.

Main Features

1. **Near Real-Time Monitoring:** View live data from all your connected devices.
2. **Dashboard Visualization:** Easy-to-read charts, graphs, tables, and maps display device status, performance trends, and measurements.
3. **Device Management:** Add, configure, organize, and monitor devices from one centralized location.
4. **Network Health Monitoring:** Check signal strength (RSSI, SNR) and connectivity to ensure devices are communicating properly.
5. **Data Logging and Reporting:** Store historical data, generate reports, or export data for analysis.
6. **Alerts and Notifications:** Receive notifications via email, SMS, or the mobile app when certain thresholds are reached or devices go offline.
7. **Mobile App Convenience:** The Ellenex Asset Monitoring app provides full monitoring capabilities on your smartphone or tablet, allowing access to data, dashboards, and alerts anytime, anywhere.
8. **API Access:** Developers can integrate Ellenex data into third-party software or custom dashboards using API endpoints.

Who Should Use This Platform

The platform is designed for a wide variety of users:

- **Operators and Field Technicians:** Install, configure, and maintain devices.
- **Supervisors and Managers:** Monitor asset performance, review reports, and make operational decisions.
- **System Integrators and Engineers:** Connect Ellenex devices with other systems or analytics tools.
- **End Users:** Anyone who wants to monitor and understand their device data.

The platform is intuitive, so most daily tasks can be performed without technical expertise.

System Requirements

To access the Ellenex platform smoothly:

1. **Web Access:** Use a modern browser such as Chrome, Edge, or Safari.
2. **Mobile Access:** Download the Ellenex Asset Monitoring app from the App Store or Google Play.
3. **Internet Connection:** A stable internet connection is required to view real-time data.
4. **Login Credentials:** Provided by Ellenex or created by you.

Optional: A tablet or mobile device is recommended for on-the-go monitoring using the mobile app.

Platform Access and Setup

This section explains how to access the Ellenex platform, set up your account, and get started with monitoring your devices. It covers both the web dashboard and the mobile app, making it easy for new users and existing subscribers to follow along.

Step 1: Getting Started / Sign Up

If you already have a subscription, you can skip this step and go directly to Step 2.
If you have not signed up yet, follow these steps carefully:

1. **Access the Platform**
   - Web: Open a browser on your computer and go to https://ellenex.net
   - Mobile App: Download the Ellenex Asset Monitoring app from the App Store (iOS) or Google Play (Android).
2. **Sign Up for a New Account**
   - Click Sign Up or Create Account.
   - Enter your email address and create a secure password.
   - Carefully follow any on-screen instructions for registration.
3. **Confirm Your Email.**
   - After signing up, a confirmation email will be sent to your email address.
   - Open the email and click the confirmation link. This step is important because it verifies your email and activates your account.
   - If you don't see the email, check your spam/junk folder.

Once confirmed, your account is ready to use.

Always use a valid email address that you check regularly, as the platform may send important notifications and alerts to this email.

Step 2: Logging In

After signing up or if you already have an account, you can log in to access your devices and data.

1. **Web Dashboard Login**
   - Open https://ellenex.net in your browser.
   - Enter your email and password, then click Sign In.
   - If Multi-Factor Authentication (MFA) is enabled, follow the prompts to complete login securely.

2. **Mobile App Login**
   - Open the Ellenex Asset Monitoring app.
   - Enter the same login credentials used for the web platform.
   - Grant push notification permissions so the app can send alerts directly to your device.
   - After login, you will see the main dashboard where all your devices and data are displayed.

Step 3: Understanding User Roles and Permissions

The Ellenex platform has different user roles to control access levels. Knowing your role helps you understand which actions you can perform:

- **Admin:** Full access to all features, including user management, system settings, device configuration, and reports.
- **Operator:** Can monitor devices, view dashboards, and respond to alerts.
- **Viewer:** Can only view data and dashboards without making any changes.

Your role is assigned when your account is created, either during signup or by the administrator.

Step 4: Initial Setup

After logging in for the first time, it's important to complete basic setup tasks:

1. **Profile Settings**
   - Update your name, contact information, and password.
   - Set your preferred time zone to ensure data timestamps are accurate.

2. **Notifications and Alerts**
   - Choose how you want to receive alerts: email, SMS, or in-app notifications.
   - Set thresholds for critical measurements like battery level, signal strength (RSSI), or temperature.

3. **Explore the Dashboard**
   - Familiarize yourself with key sections: device list, maps, charts, tables, and alerts panel.
   - Spend a few minutes exploring the dashboard to understand how information is presented. This makes it easier to notice unusual readings or alerts later.

Step 5: Mobile App Setup

The Ellenex Asset Monitoring app complements the web platform by allowing remote monitoring and instant notifications.

1. **Download and Install the App**
   - iOS: App Store → search Ellenex Asset Monitoring
   - Android: Google Play → search Ellenex Asset Monitoring

2. **Log In Using Your Web Credentials**
   - Use the same email and password as your web account.
   - Enable notifications so that alerts can be sent directly to your phone.

3. **Mobile App Features**
   - View real-time dashboards and charts.
   - Monitor device status and signal quality.
   - Receive instant alerts for critical events.
   - Check historical data and generate simple reports on the go.

The app is ideal for field operators who need to check devices quickly without logging into the web dashboard.

Step 6: Tips for a Smooth Start

- Always ensure a stable internet connection before logging in.
- Use the latest version of a supported browser for the web dashboard.
- If you forget your password, click Forgot Password to reset it.
- Take a few minutes to explore both the web dashboard and mobile app to become familiar with navigation, widgets, and alerts.
- For first-time users, consider creating a test device or group to explore features without affecting live data.

Dashboard Overview

Welcome to Admin This is the main screen you see after logging in. Think of it as your command center, giving you a quick, high-level look at the health and status of all your IoT devices at a glance.
The dashboard is divided into several key sections:

Overall Health Status

This is your "at-a-glance" health check for your entire device fleet. It helps you instantly spot any major issues.

1. **Total Devices:** This shows the total number of devices registered to your account.
2. **Low Battery Devices:** This is a critical count of devices with low battery levels. Monitoring this helps you schedule maintenance before a device fails and stops sending data.
3. **Mis-Behaved Devices:** This shows the count of inactive or non-responding devices. A device may appear here for several reasons, such as losing its network connection, power failure, or a hardware fault, allowing you to quickly identify and troubleshoot problems.
4. **Triggered Alerts:** This shows how many active alerts you currently have that need your attention. (e.g., No Triggered Alert means all systems are running smoothly).

Data Source (The Main Menu)

The vertical menu on the left is your navigation hub to access all the features of the platform.

1. My Workspace

The My Workspace section is your personal settings area. This is where you control who you are in the system, what you have access to, and how the platform communicates with you. If the Dashboard is your “command center,” then My Workspace is your personal profile and control room. The page is divided into two main parts:

a) Roles Section (Left Side)

This area controls the workspace and role you are currently using. It’s especially helpful if your company has multiple departments, sites, or user levels.

- Active Workspace.
  This dropdown shows all the workspaces you have permission to access. A workspace can represent things like:
  - A specific project
  - A department (e.g., Operations, Field Team, R&D)
  - A physical site
  - A client account (if you manage multiple customers)

  By choosing a workspace, you are telling the platform: “Show me the devices, data, and alerts for THIS location or project.”
- Active Roles
  Your active role determines what actions you are allowed to perform in the selected workspace. Roles may include:
  - Viewers → can see data but cannot edit
  - Standard User → can access most features

  - Admin → full access to manage devices, alerts, and users

  Choosing a different role changes your permissions instantly. This helps organizations:
  - Maintain security
  - Control who can change configurations
  - Ensure users only see what they're meant to see

b) Details Section (Right Side)

This section contains your personal information and alert preferences. This is how the system knows how to reach you when something important happens.

- Full Name: Your name as it appears across the system. This is visible to other administrators and is used in notifications.
- Email Address: Your primary login email. The platform uses this email to send:
  - Alerts
  - Notifications
  - Password resets
  - System updates

  Make sure this address is always up to date.
- Phone Number: Your mobile number used for receiving SMS alerts. You can:
  - Change your country code
  - Update your number anytime
  - Verify it using OTP (one-time passcode)

  This ensures that important alerts reach you instantly when email isn't fast enough.
- Preferred Alert Method: This setting controls how you want the platform to notify you when events occur. You can choose:
  - SMS
  - Email
  - Both (recommended for critical monitoring)

  For example:
  - Low battery alerts
  - Device missing
  - Sensor threshold exceeded
  - Custom event rules

  Choosing the right method ensures you never miss something important.
- Verify Phone Number (Send OTP): If you want to receive SMS alerts, you must confirm your number first. Here's how it works:
  - Click Send OTP
  - You receive a text message with a code
  - Enter the code in the verification field
  - Your number is now validated

  Without verification, SMS alerts will not be delivered. This step prevents incorrect numbers or accidental misconfiguration.
- Save Button: Once you have updated your settings, click Save to apply the changes. If you leave the page without saving, your updates will not be stored.

2. My Devices

The My Devices section is where you can view and manage all devices assigned to your current workspace. This page gives you a clear list of devices along with their latest status, health, and key operational information. Think of this page as your device monitoring and quick-status view.

1. **Page Header and Actions**
   At the top of the screen, you will find:
   - Devices Title
     Shows that you are currently viewing the Devices section and indicates the total number of devices available in the selected workspace.
   - Search Device
     A search bar allows you to quickly find a specific device by name or EUID. This is useful when managing a large number of devices.
   - Add New Device
     A button on the top right lets you add a new device to the platform. This is typically used during onboarding of new devices.
2. **Device List Table**
   The main section of the page displays devices in a table format. Each row represents a single device and provides important information at a glance.
   - Name: This section shows the device name and EUID(Unique 16 digit Hexadecimal Numbers).
   - Last Data: Indicates the most recent data received from the device. This field helps you understand whether the device is actively communicating. For example:
     i. A sensor reading with a timestamp.
     ii. A “missing” status if no data has been received recently.
   - Battery: Displays the current battery voltage or battery status of the device.
   - Signal Quality: Shows the strength and quality of the device’s network connection.
3. **Accessing Individual Device Information**
   When you click on a device from the My Devices list, the platform opens a dedicated Device Details page. This page provides in-depth information about the selected device, including live data, historical trends, signal and battery status, parameters, and location.
   - Live Data Graph.
     The first major section displays a graph showing recent sensor data from the device. This helps users quickly understand how the device is behaving in real time or near real time. It includes:
     i. A time-series graph plotting sensor readings over time
     ii. The latest data samples received from the device
     iii. Visual indication of data trends and changes
   - Device Status and Technical Information.
     Below the graph, key technical and health information is displayed, including:

   i. Device Type / Model: Shows the model or category of the device (for example, pressure sensor, water level sensor, etc.).
   ii. Battery Status: Displays the current battery voltage or battery condition.
   iii. Signal Information: Shows network and connectivity details such as: Signal Strength and RSSI.
   iv. Last Communication Time: Displays when the device last sent data to the platform. This helps users determine whether the device is actively reporting.

- Payload Parameters.
  When you scroll further down the page, you will see Payload Parameters. This section explains how raw data received from the device is interpreted and converted into meaningful values. Each parameter includes:
   i. Parameter name (e.g., Pressure, Level, Distance, RSSI, Charge Level etc.)
   ii. Expression or calculation formula.
   iii. Measurement unit (e.g., bar, volt, meter, pascal etc.)
- Value Parameters.
  This section defines acceptable ranges or thresholds for measured values. For example:
   i. Minimum and maximum expected readings.
   ii. Operational limits of the sensor.
- Device Location Map.
  At the bottom of the page, a map view displays the last reported location of the device. Map features include:
   i. A geographic marker showing the device's position
   ii. Zoom controls to view local or wider areas
- Sample controls and actions
  Below the graph, users can see quick-access buttons such as:
   i. Calibrate.
      The Calibration section allows users to adjust how raw sensor data from a device is converted into meaningful values. Calibration ensures that sensor readings are accurate, standardized, and aligned with real-world measurements. This page is typically accessed by clicking Calibrate from the Device Details page. The Calibration page is a form-based interface divided into logical sections. Users can scroll down to view and configure all available calibration settings.
      - Parameter: This dropdown allows you to select the specific sensor parameter you want to calibrate. Selecting a parameter tells the system which sensor value you want to adjust. Examples of parameters include:
        - Pressure
        - Water level
        - Signal or voltage readings

- Unit: This field displays the measurement unit associated with the selected parameter (for example, bar, volt, meter, etc.). The unit ensures that calibrated values are displayed correctly across graphs, alerts, and reports.
- Current Formula: This field shows the formula currently used to calculate the sensor value. It represents how the platform transforms incoming raw data into a readable measurement. For first-time users, this serves as:
  - A reference to understand the existing calculation.
  - A baseline before making changes.
- Add Button: The Add option allows users to introduce additional calibration points or conditions.
- Algorithm: This dropdown allows you to choose the calibration algorithm that will be applied to the selected parameter. Choosing the correct algorithm is important to ensure accurate data interpretation. Algorithms define how calibration is calculated, such as:
  - Linear conversion
  - Offset adjustments
  - Sensor-specific transformations (depending on device capability)
- Calibrate Button: Clicking Calibrate applies the selected algorithm and settings to the parameter. This action:
  - Updates how new incoming data is processed
  - Does not affect previously recorded historical data.
- New Formula: This field shows the updated calculation formula generated after calibration. Users can:
  - Review the new formula
  - Confirm it matches expectations
  - Validate sensor behavior.
- Save Button: Click Save to permanently apply the new calibration formula to the device. If you leave the page without saving, the calibration changes will not be stored.
- Calibration History: At the bottom of the page, the Calibration History section provides a record of previous calibration actions.

ii. Edit.

The Edit option allows users to modify device details, measurement definitions, and location details. This section is mainly used to keep device information accurate and aligned with real-world deployment.

The Edit page is divided into three tabs:

- Device Details
- Measurements
- Location

a. Device Details Tab

This tab contains basic identification information for the selected device.

- Name: Allows you to edit or update the device name. Using clear and meaningful names (e.g., based on location or function) makes it easier to identify devices across the platform.
- Note: A free-text field used to describe the device purpose or type. This information helps team members quickly understand what the device is used for.
- Save / Cancel: Save applies any changes made in this tab. Cancel discards changes and returns without updating.

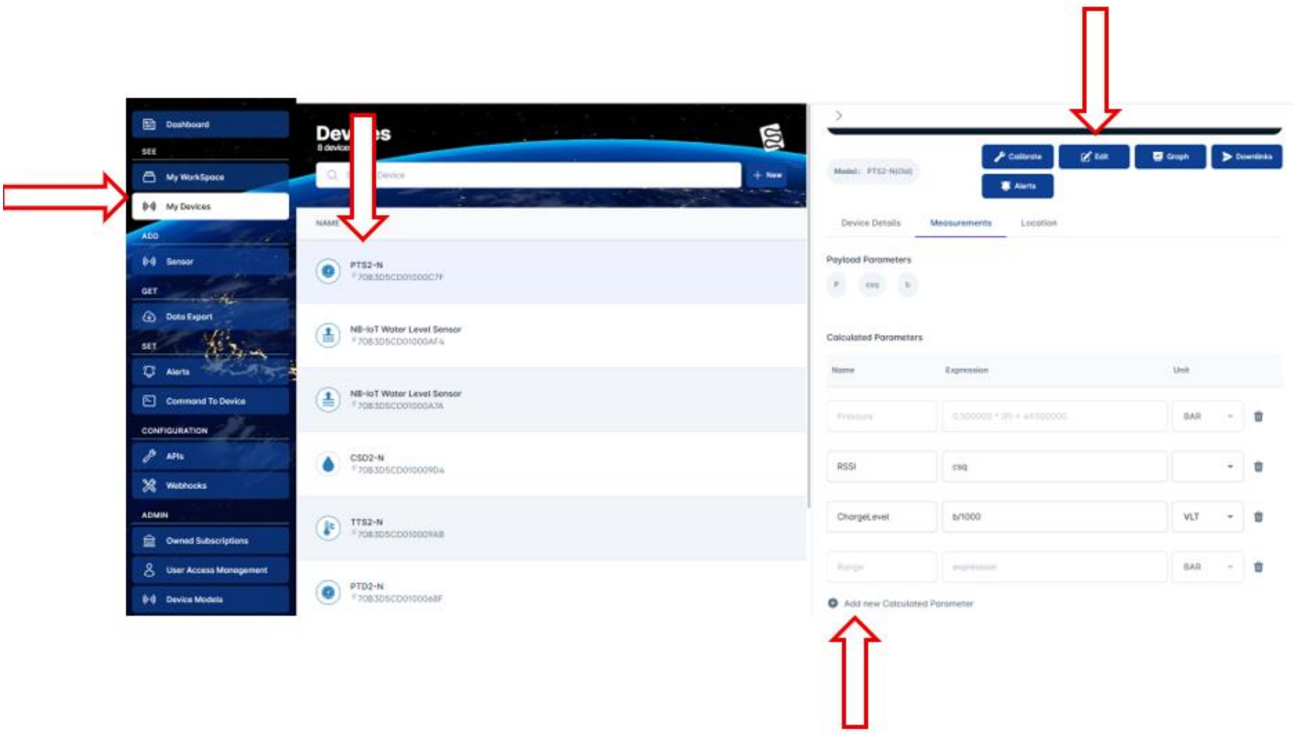
b. Measurements Tab

This tab defines how incoming device data is interpreted and displayed.

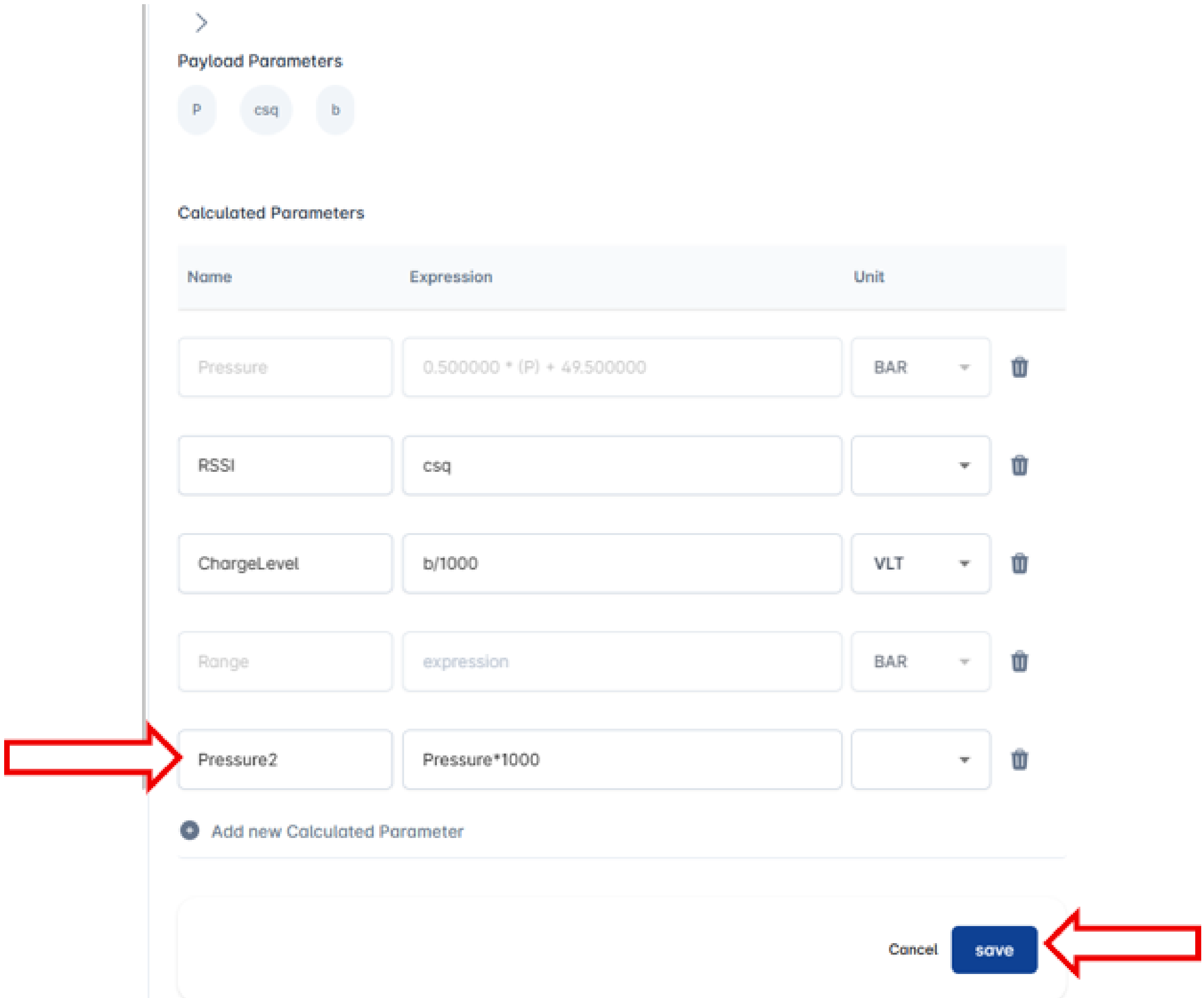
- Payload Parameters: This section lists the raw parameters received directly from the device payload. These are the base values sent by the device before any calculations. These parameters can not be changed by user access. You will Admin access to change these parameters.
- Calculated Parameters: Calculated parameters transform raw payload data into meaningful values. Each calculated parameter includes:
  - Name – Label shown in graphs and reports
  - Expression – Formula used to calculate the value
  - Unit – Measurement unit (e.g., BAR, VLT)

  Examples include:
  - Converting raw pressure values into bar
  - Representing signal quality as RSSI
  - Calculating charge or voltage levels
- Add New Calculated Parameter: The Add New Calculated Parameter option allows you to create a new calculated value by converting an existing measurement into a different output. This is useful when the device sends data in one unit, but you want to display or work with it in another unit. For example, if a device reports pressure in bar, you may want to display the same value in millibar (mbar).

  Step-by-Step Example: Converting Pressure from bar to mbar
  - Click Edit on the Device Details page
  - Navigate to the Measurements tab
  - Scroll down to the Calculated Parameters section



- Click the Add New Calculated Parameter button to create a new calculation row.
- In the Name field, enter a clear label for the new parameter. For example- Pressure2. This name will appear in graphs, data tables, and exports.
- In the Expression field, define how the value is calculated. If the original pressure value is already available (for example as Pressure in bar), use the conversion formula:
  Pressure * 1000
- Select the Unit: From the Unit dropdown, select mbar.
- Save the Configuration: After saving,
  - The original pressure value (in bar) remains unchanged
  - The new pressure value (in mbar) appears as an additional parameter
  - Both values update automatically as new data arrives.



c. Location Tab

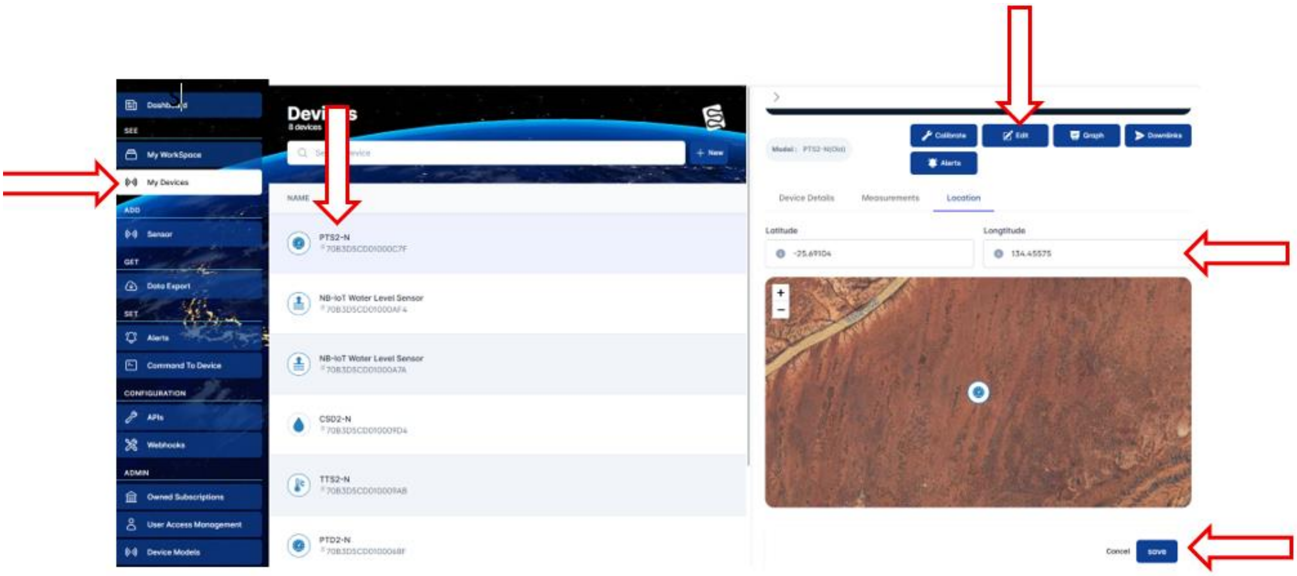
The Location tab defines where the device is physically installed. This information is used to display the device on maps and provide geographic context for monitoring and alerts.

- Automatic Location (GPS-Enabled Devices) : If the device is equipped with GPS, the location will be automatically updated by the platform once the device comes online and starts reporting data. This is ideal for mobile assets or devices that change location.
    - Latitude and longitude are populated automatically
    - The device position updates based on GPS reports
    - No manual input is required

- Manual Location (Stationary Devices): If the device is stationary or does not support GPS, you can manually enter the latitude and longitude values in this section. This approach is commonly used for fixed installations such as tanks, meters, or site-based sensors.
  - Pin the device to a fixed location on the map
  - Easily identify where the device is installed
  - Maintain location visibility even without GPS hardware.

d. Map View

The map below the coordinates provides a visual representation of the device's location. Users can zoom in and out to verify placement and ensure the device appears correctly on the platform's maps.



iii. Graph

The Graph section provides a visual view of device data over time. It helps users analyze trends, check performance, and review historical sensor readings in an easy-to-understand graphical format. This page is especially useful for monitoring device behaviour and identifying changes or anomalies.

a. Monitoring Dashboard Overview

At the top of the page, the Monitoring Dashboard displays:

- The selected device name and ID
- A main graph showing the chosen parameter over time
- Additional summary cards for key metrics such as signal quality and battery level.

This view gives a quick understanding of device performance.

b. Filters Panel

The Filters panel allows users to customize the data displayed in the graph.

- Parameter: Select the sensor parameter from the drop-down option which you want to analyze. (e.g., pressure, signal strength, battery level).
- From / To (Date Range): Defines the time period for the data shown on the graph.
- Aggregation: Controls how data is grouped or summarized over time. (for example, averaging values).
- Every: Defines the data sampling interval (how frequently data points are shown).
- Apply Button: Once filters are set, clicking Apply refreshes the graphs with the selected criteria.

c. View After Applying Filters

After applying filters:

- The graph updates to show only the selected parameter and date range
- A data list or table appears on the left, displaying:
  - Timestamped readings
  - Corresponding values

d. Main Graph View

The main graph displays the selected parameter as a time-series chart.

e. Summary Cards Below the Graph

Below the main graph, smaller cards provide quick insights into important device metrics:

- Signal (RSSI): Displays signal strength along with:
  - Latest reading
  - Trend visual

  This helps users assess connectivity quality.
- Battery Charge Level: Shows current battery voltage and recent behavior. This allows users to:
  - Monitor power health
  - Identify battery drain trends
  - Plan maintenance proactively

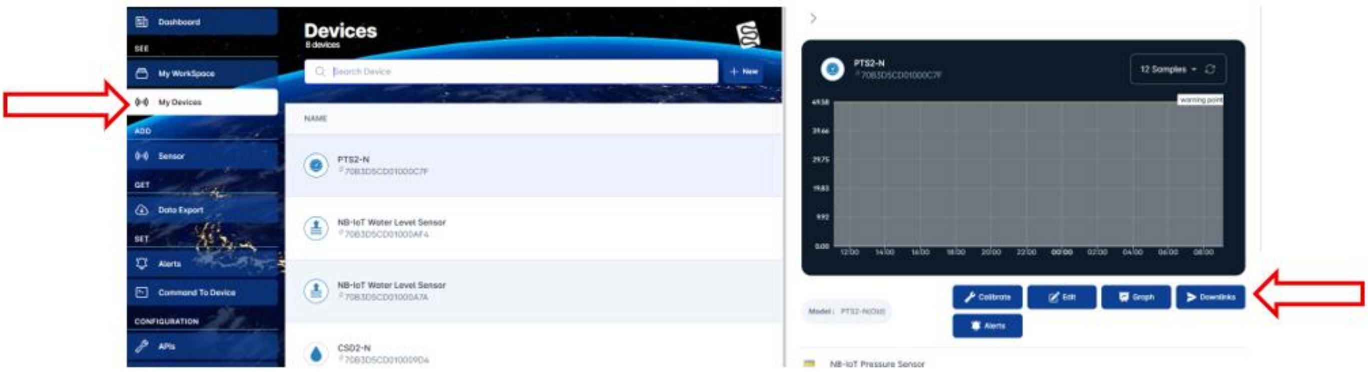
iv. Downlinks / Commands

The Downlinks section displays all commands that have been sent from the platform to a specific device. Downlinks are typically used to control device behavior, update configurations, or trigger device actions remotely. This page provides full visibility into command history, making it easier to track what was sent, when it was sent, and whether it was successfully delivered.

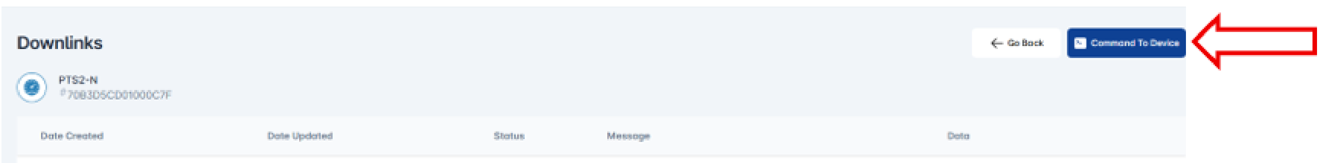
How to send downlinks to the device?

Example: Changing the Sampling/read and transmit interval.

- Go to My Devices
- Click on the required device or search the required device.
- From the device toolbar, click Downlinks. This opens the Downlinks page for the selected device.

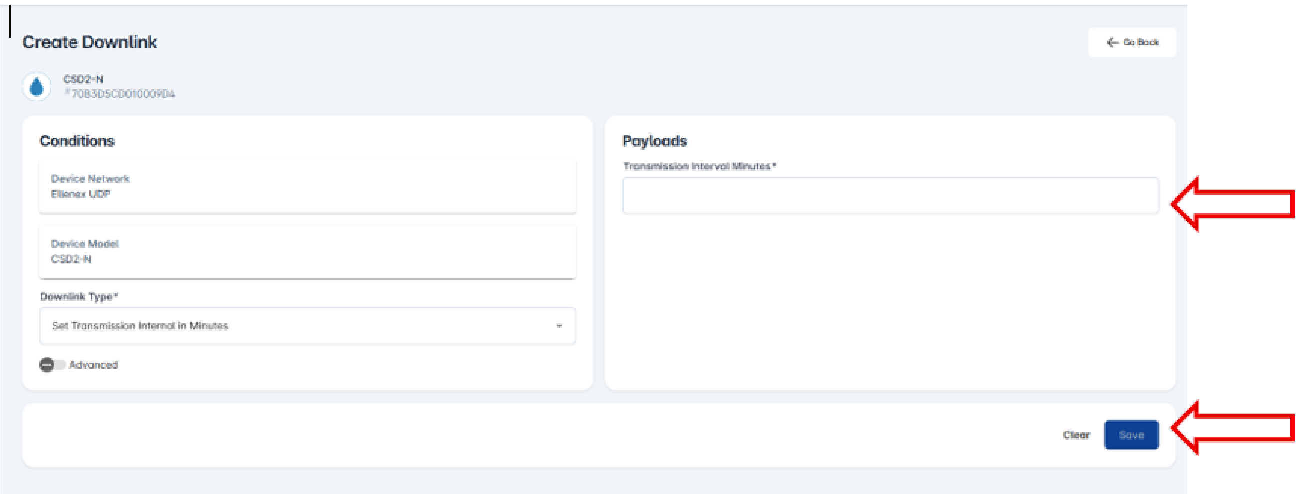


- On the Downlinks page, click the Command to Device button. This opens the Create Downlink screen.

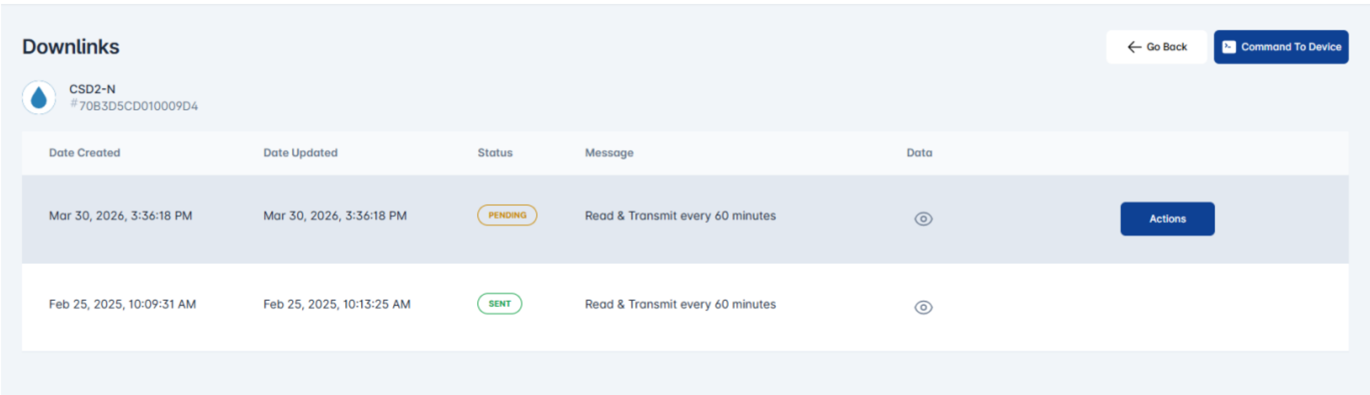


- The Create Downlink page has following sections:
  - Device Network: This field is automatically populated based on the device network: Ellenex UDP.
  - Device Model: Displays the model of the selected device.
  - Downlink Type: Select the type of command to send. For changing the reporting interval, choose: Set Transmission Interval in Minutes. This tells the platform you want to update how often the device sends data.
  - Advanced (Optional): This section is generally used by advanced users for additional configuration. This Can be left unchanged for standard commands.

- Transmission Interval Minutes: Enter the new interval value (in minutes). For example: 60, this means the device will read sensor data and transmit it every 60 minutes. **You can enter any value more than 1 minute, depending on use case and battery optimization requirements.**



- Save the Command: The platform will now send the downlink command to the device.
- Verify the Command Status: After saving, you will be redirected back to the Downlinks page. The new command appears in the command list as pending.



Please be mindful the platform will send the command in next cycle and will be effective after that cycle, so you must wait for the device to get the command and update it for 2 cycles to be able to see the new sampling interval.

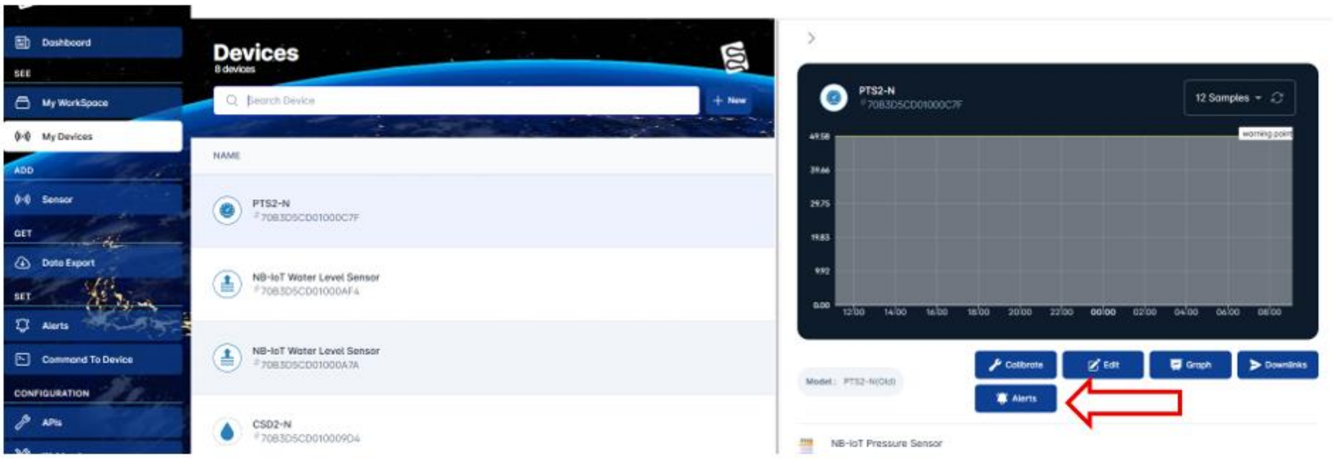
- Once the command is sent, the Status column shows the status as sent.
    - **Things to be remembered while or after sending the downlinks.**
        - The device must be online or reachable to receive the command.
        - Command execution depends on device network behavior: Device might not be able to receive the downlinks because of the poor network quality. In this case you might have to send the command couple of times or relocate the device.
        - Changes apply to future transmissions only.
        - Device will execute the last downlink command sent to the device.

v. Alerts

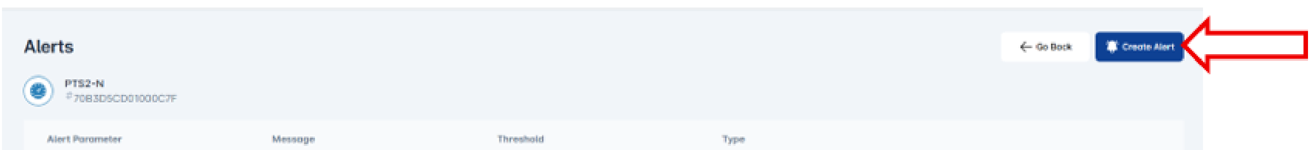
The Alerts section allows users to view and manage alerts that are specifically linked to an individual device. Alerts help you stay informed when certain conditions are met, such as abnormal sensor readings, device inactivity, or threshold breaches.

Step by Step Instruction to create an alert.

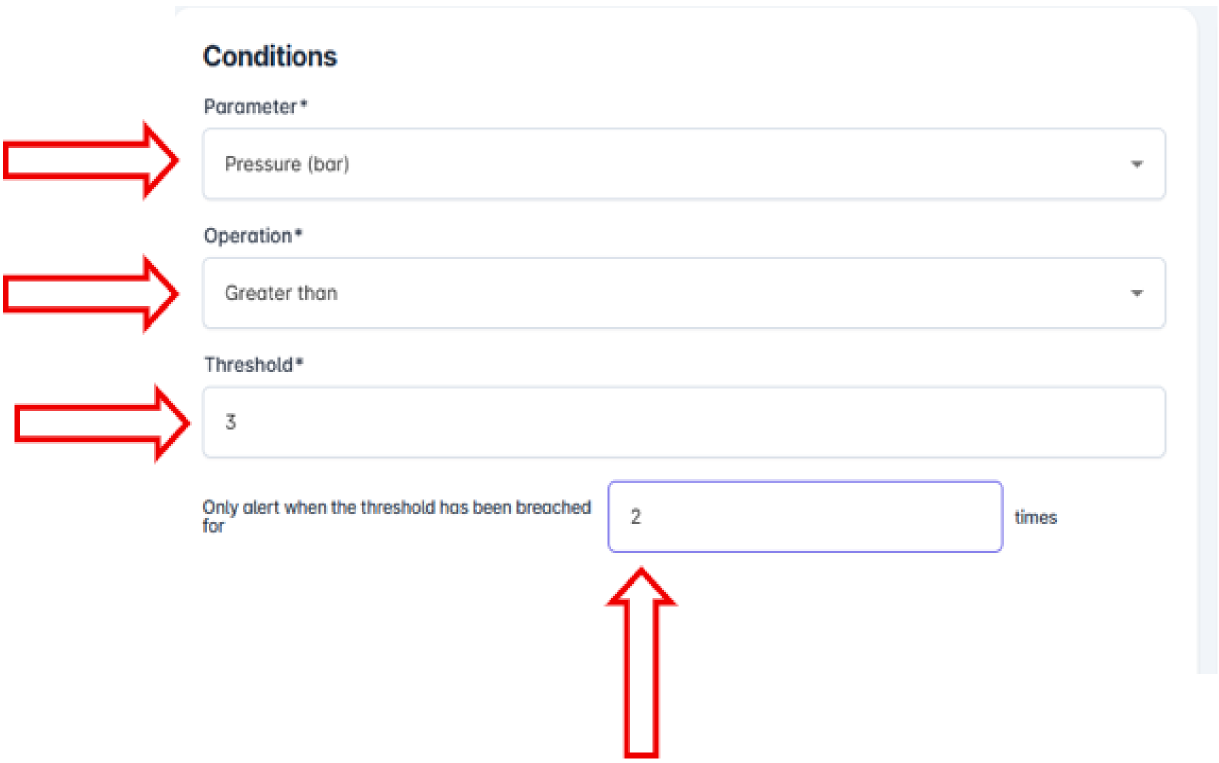
- Go to My Devices
- Click on the desired device
- Open the Alerts section



- Click Create Alert. You will now see the Create Alert configuration page.



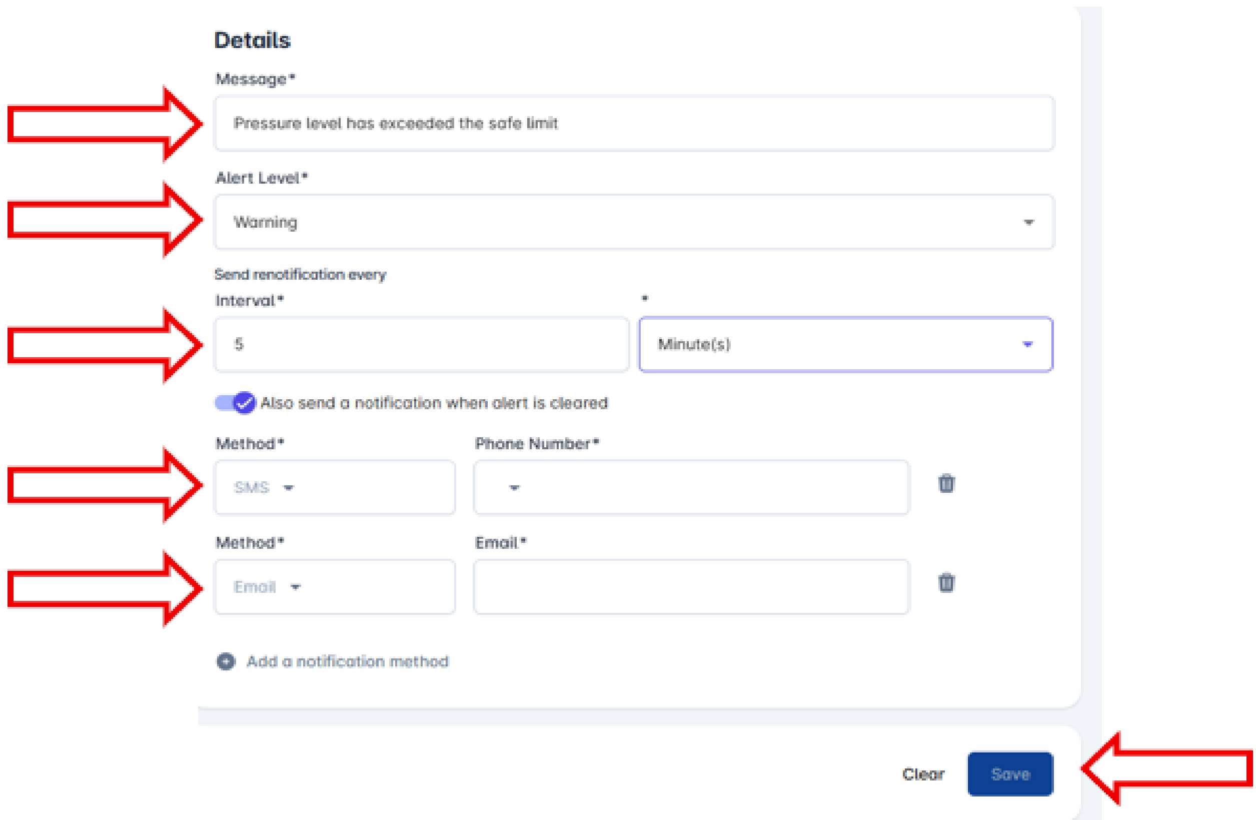
- There are following sections in this page.
    - Conditions: This section defines when the alert should trigger.
        a) **Parameter**: Select the device parameter you want to create an alert.
        b) **Operation**: Select the condition for triggering the alert.
            1. Less than
            2. Greater than
            3. Equal to
            4. Less than or equal to
            5. Greater than or equal to
            6. Missed data



c) **Threshold**: Enter the numeric value that will trigger the alert.
For example: Parameter= Pressure
Operation= Greater than
Threshold= 3bar
This means the alert will trigger when the pressure value goes above 3bar.

d) **Trigger After Repeated Breaches**: You can configure the alert to trigger only after the threshold has been breached multiple times. For example: Trigger only if the threshold is breached 3 times.

- Details: This section controls alert content and notification behaviour.
  a) **Message**: Enter a custom message for the alert. This message will be included in notifications sent to users. For example: Pressure level has exceeded the safe limit.
  b) **Alert Level**: Choose the severity of the alert. Two options available: Warning and Critical. This helps prioritize actions, especially when multiple alerts exist.
  c) **Send Notification** Every (Interval): Define how often notifications should be sent while the alert condition remains active. This prevents excessive notifications while ensuring continued awareness.

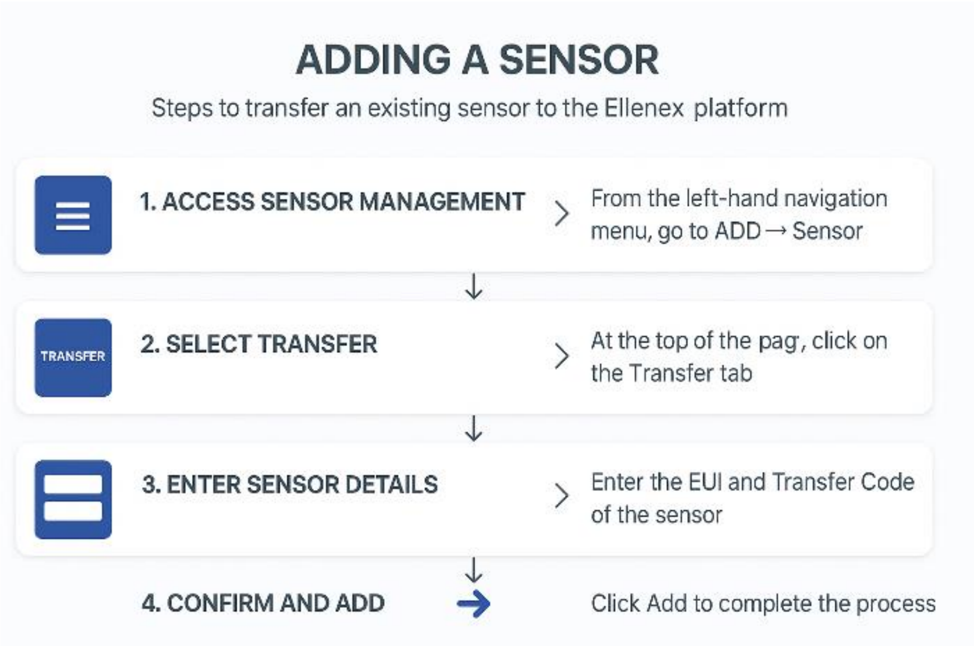


d) **Notify When Alert Is Cleared**: Enable this option if you want to receive a notification when the alert condition is no longer true. Useful for confirming that the issue has been resolved.
e) **Method**: Choose how you want to receive notifications. Options available are SMS and Email. If needed, click Add a notification method to notify multiple channels or recipients.

- Save the Alert: Please review all the alert settings and click save. The alert is now active and linked to the selected device.
- After the Alert Is Created and saved:
  - The alert appears in the device's Alerts list.
  - The platform continuously monitors the condition.
  - Notifications are sent automatically when triggered.

3. Adding a Sensor

Before you can view or interact with the dashboard, you must add a sensor to the Ellenex platform. The dashboard requires sensor data to display readings, graphs, and reports. Without at least one sensor, the dashboard will remain empty. Adding a sensor to the Ellenex platform is an essential step to begin monitoring and managing your IoT devices. The platform provides a secure and streamlined process for integrating sensors into your workspace.
When devices are shipped, transfer codes are automatically sent to customers via email. These codes are required to authorize the transfer of the sensor to your account.
The Transfer option is used when you want to move an existing sensor from another account or workspace into your current subscription. This ensures that ownership and data access are securely transferred without losing historical data. Follow the steps below to add a sensor:



Step 1: Navigate to the Sensor Addition Page

1. Log in to your account on the platform.
2. From the left-hand navigation menu, go to ADD → Sensor.

Note: This section is used solely to add sensors to your account. It does not list all your sensors. All added sensors will appear in My Devices.

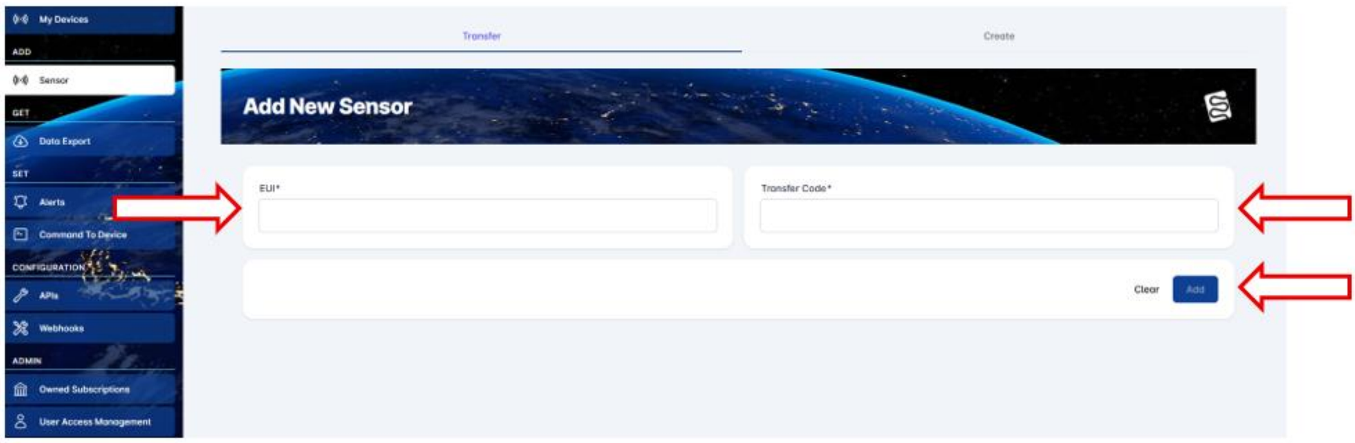
Step 2: Add a Sensor

1. Click the Transfer tab at the top of the page to open the transfer interface.
2. Enter the required information:
    - EUI (Extended Unique Identifier): The unique hardware identifier assigned to your sensor.
    - Transfer Code: A secure code sent to your email after the device is shipped. This authorizes the transfer of the sensor to your account.

Adding the sensor is mandatory. The sensor must be added to the platform to transmit data and appear in your account.

Step 3: Confirm Sensor Registration

1. After entering all details, click Add (or save, depending on the interface) to complete the process.
2. The platform will register the sensor and verify connectivity.
3. Once successfully registered, the sensor will appear in My Devices.
4. If you need to start over, click Clear to reset the fields.



Step 4: Access Sensor Data on the Dashboard

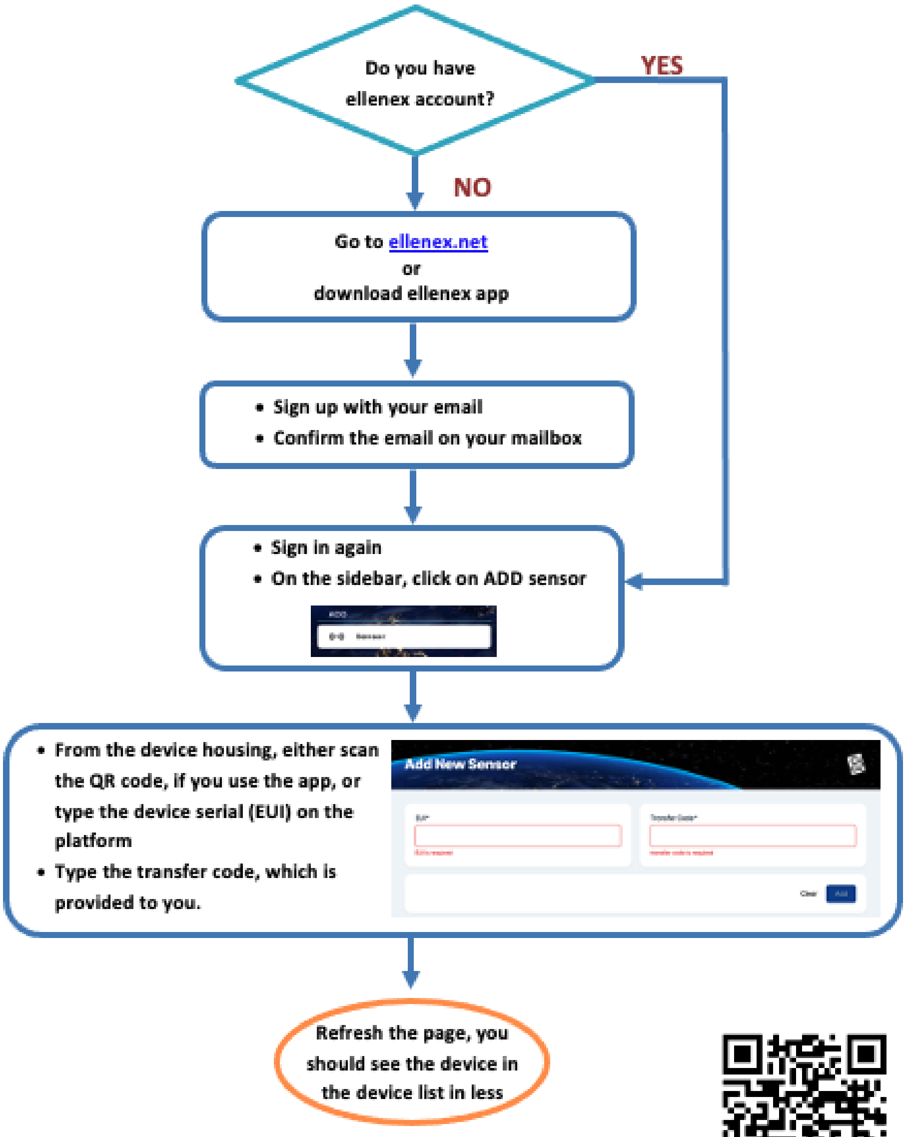
1. After the sensor appears in My Devices, please kindly turn on the device and it will start sending data to the platform.
2. Navigate to the Dashboard section to view sensor readings, graphs, and analytics.

Step 5: Troubleshooting

1. If the sensor does not appear in My Devices:
2. Double-check the Sensor ID/EUI and Transfer Code entered.
3. Ensure the sensor is powered on and within network coverage.
4. Refresh the page and wait a few minutes for the platform to complete registration.

Please follow the same steps for the Ellenex Asset Monitoring Application as well.

Flow Chart for adding the sensor

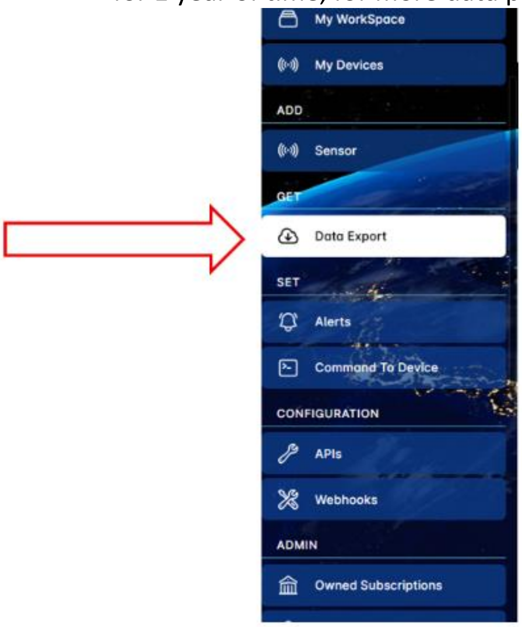


Scan the QR code for more information on the platform features and operation

4. GET Section – Data Export

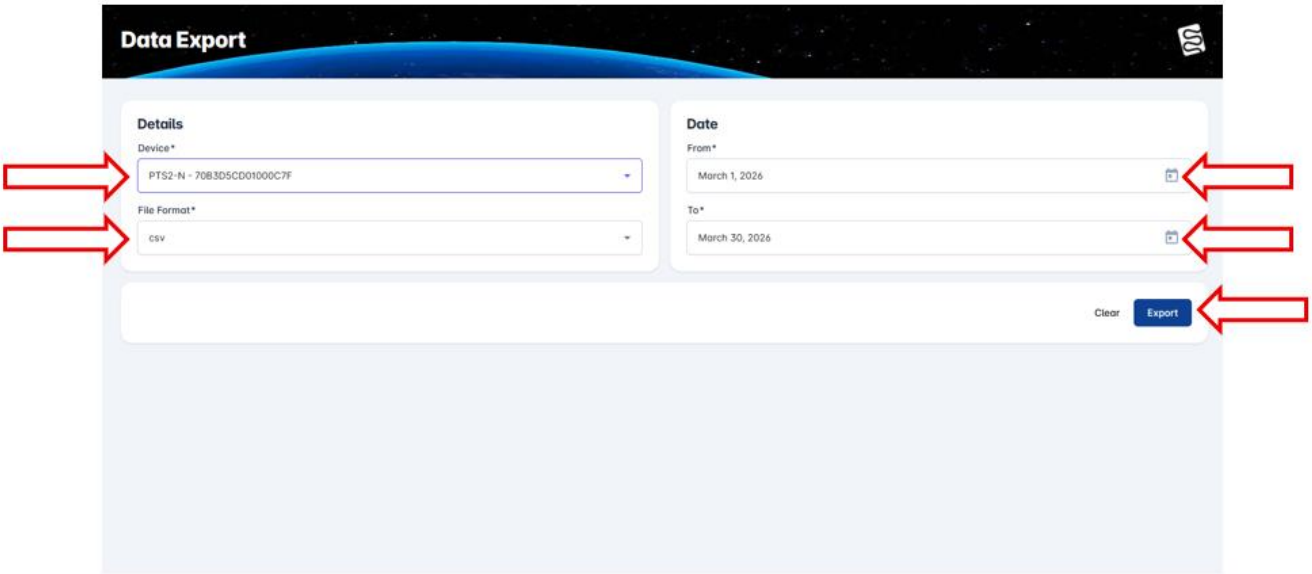
The Data Export feature allows users to download historical sensor data from the platform for offline analysis, reporting, or record keeping. This is useful when you need to share data, create reports, or perform further analysis outside the platform. The Data Export page is divided into two main sections:

- Details – Select the device and export format.
- Date – Define the time range for the data export. Platform will let you to access the data for 1 year of time, for more data please contact our support team.



Step by step instructions to export the sensor data.

- From the Dashboard, go to the GET section
- Click Data Export. You will be taken to the Data Export screen.
- Click the Device dropdown.
- Select the device whose data you want to export. Make sure you choose the correct device, as the exported data will only include readings from this device.
- In the File Format field, select the desired format. Commonly used format: CSV (recommended for spreadsheets and data analysis).
- Select the Date Range: Under the Date section:
    - From – Select the start date for the data export
    - To – Select the end date for the data export
- Review all selections (device, format, and date range).
- The platform will generate the file and download it to your system.



5. SET Alerts and Commands

The SET section is used to configure device behavior and monitoring rules. Unlike the GET section, which focuses on viewing and exporting data, the SET section allows users to act by sending commands to devices and defining alert conditions. This section includes:

- **Alerts:** The Alerts feature allows users to create automated rules that monitor device data and notify users when specific conditions are met. Using alerts, users can:
  - Monitor sensor thresholds
  - Detect abnormal device behavior
  - Receive notifications via email or SMS
  - Track when issues occur and when they are resolved.

  Note: A detailed, step-by-step guide for creating and managing device alerts is covered in the Device-Specific Alerts section above. Please refer to that section for complete instructions and examples.
- **Command To Device:** The Command to Device feature allows users to send commands from the platform directly to a device. This is commonly used to:
  - Change sampling or transmission intervals
  - Trigger device actions (such as reset or data transmission)
  - Remotely configure device behavior

  Note: Step-by-step instructions for sending commands—including changing the read and transmit interval—are explained in detail in the Downlinks / Commands section above.

6. Webhooks

The Webhook section allows the platform to send device data or events to external systems automatically. Webhooks are commonly used to integrate the platform with third-party applications such as monitoring tools, databases, analytics platforms, or custom backend services. When a webhook is configured, the platform sends data to the specified URL whenever the configured event occurs.

Create Webhook Page

Clicking on Webhooks opens the Create Webhook page, which is divided into two main sections:

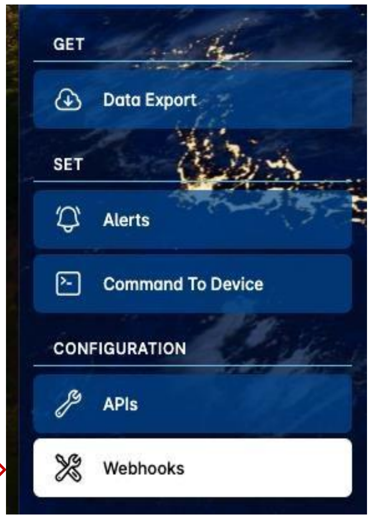
a. **Conditions**
   This section defines where and how webhook data is sent.
   i. URL
      The endpoint where the platform will deliver the webhook payload. This is typically an API endpoint on an external system.
   ii. Retries
      Specifies how many times the platform should retry sending the webhook if the initial delivery fails. This helps ensure reliable delivery even if the receiving system is temporarily unavailable.
b. **Headers**
   The Headers section allows users to add custom HTTP headers to the webhook request. This is commonly used for:
   i. Authentication tokens
   ii. API keys
   iii. Custom identifiers required by the receiving system

   Users can add one or more headers depending on integration requirements.

How to Activate Webhooks

Webhooks allow the platform to automatically send device data or events to an external system (such as your backend server, database, or third-party application). Follow the steps below to activate a webhook.

a) Step 1: Log in to the Platform
- Open the Ellenex Software Platform.
- Log in using your registered email address and password



b) Step 2: Navigate to Webhooks
- From the left-hand navigation menu
- Go to Configuration
- Click on Webhooks

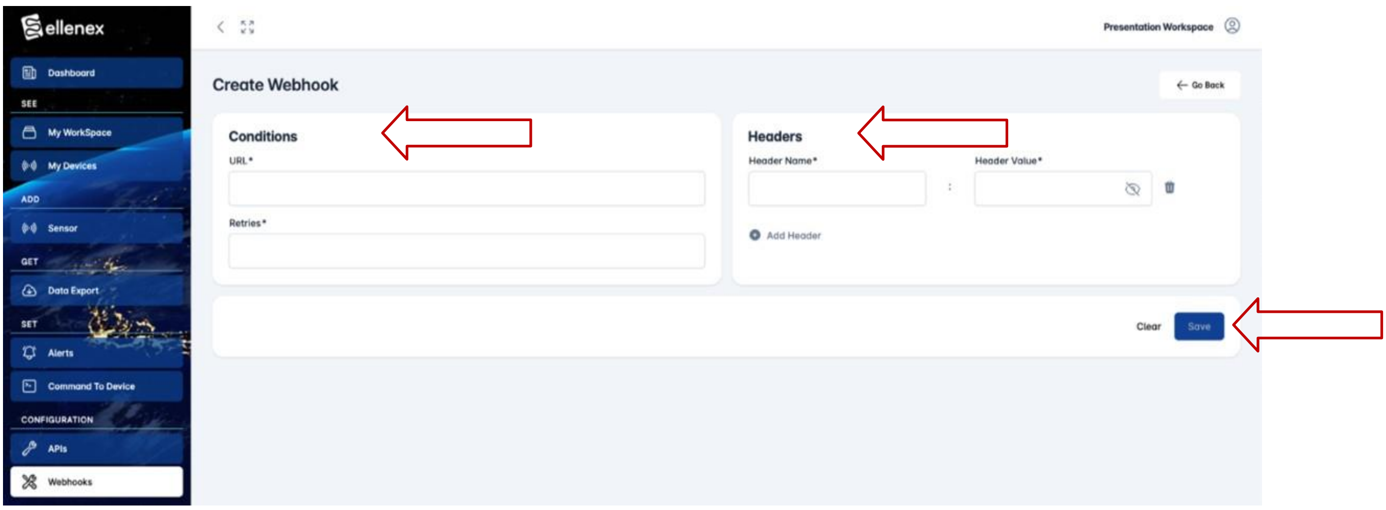
c) Step 3: Create a New Webhook
- Click the + Create Webhook button (top-right corner).

d) Step 4: Fill in Webhook Details
The Create Webhook page is divided into following sections.
- URL
  i. Enter the endpoint where the platform should send webhook data
  ii. This is usually an API endpoint on your external system
- Retries: Specify how many times the system should retry sending the webhook if delivery fails.
- Headers: Click Add Header if your endpoint requires authentication or custom headers.
  i. Header Name: The Header Name field defines the key of the HTTP header. This tells the receiving system what type of information is being sent. Common examples include:
     - Authorization
     - x-api-key
     - Content-Type
     - Accept

ii. Header Value: The Header Value field defines the value associated with the header name. Examples:
   - API keys
   - Access tokens
   - Authentication strings

- Add Header(optional): Click Add Header to include multiple headers if required. You can add more than one header depending on the integration needs
- Once activated:

i. The platform will automatically send data or events to the webhook URL
ii. Retries will be attempted if delivery fails
iii. Headers will be included with each request.



Device Location Map

For devices equipped with GPS or location reporting, the dashboard includes an interactive map that shows where your devices are located in real-time.
You can:

- Zoom in and out
- Click device markers to view details
- See clusters of devices in busy areas
- View devices spread across multiple sites or regions

This feature is especially valuable for:

- Asset tracking
- Field operations
- Logistics
- Monitoring geographically distributed deployments

It provides a visual understanding of how devices are positioned and whether any have moved unexpectedly.

Install the Product

Install your Ellenex device by following the **installation instructions available on our website**. Proper installation ensures reliable operation and accurate data collection.
You can **read or download the full installation guide** using the link we have shared with you. The guide includes details on mounting, powering the device, and important safety considerations.

Always install the device in the recommended position and environment to achieve the best signal strength and sensor performance.

Technical Support

For more detailed technical specifications, configuration options, and integration steps, please refer to the **Integration Guide** provided via email.
For any technical support or question about customized data format, please contact our technical support team: **SUPPORT@LPWAN.Group**

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