

edgeRX™ Starter Gateway & Sensor Installation Guide

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TDK SensEI edgeRX™ Starter

Gateway and Sensor Installation Guide

Version 3.1 – 10 April 2026

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1. Introduction

1.1 About This Guide

This installation guide provides step-by-step instructions for installing and configuring the TDK SensEI edgeRX™ Starter (Small and Medium Business). The Starter includes edgeRX™ Lynq sensors and an edgeRX™ Gateway for complete equipment health monitoring.

This guide covers:

- Unboxing and preparation
- Physical installation of sensors and gateway
- Network configuration (Ethernet, WiFi, LTE)
- Initial system setup
- Basic maintenance procedures

⚠ Note: This guide focuses on physical hardware installation. For dashboard software configuration and monitoring, refer to the **edgeRX™ Dashboard User Guide**.

1.2 Related Documentation

For complete system operation, please refer to the following documents:

Document	Model Number	Contents
edgeRX™ Gateway User Manual	SE5100204G-01	Detailed gateway hardware specifications, LED indicators, advanced troubleshooting
edgeRX™ Lynq Sensor User Manual	SE1111101G-01	Detailed sensor hardware specifications, LED indicators, advanced troubleshooting
edgeRX™ Dashboard User Guide	V3	Software navigation, monitoring, data analysis, and configuration

These documents can be obtained from your TDK SensEI representative.

2. Safety Precautions

 **READ ALL SAFETY PRECAUTIONS BEFORE INSTALLATION**

2.1 General Safety

- DO NOT recharge the battery inside the edgeRX™ Lynq sensor node.
- DO NOT install edgeRX™ system in locations that reach ambient temperatures above 85°C.
- TDK SensEI DOES NOT take responsibility for damages caused by the use of devices outside the standards defined in this manual and technical datasheet.
- Pay attention to any conditions of use expressed in the certificate.

2.2 Sensor Safety

- Do not put sensors into water, open flame, or heat above 85°C.
- Do not open, modify, puncture, damage, or disassemble the sensor.
- Handle sensors with care to avoid dropping or impact.
- The battery is not user-replaceable during normal operation.

2.3 Gateway Safety

- Ensure proper electrical grounding when connecting to power sources.
- Do not touch the gateway or power cord with wet hands.
- Avoid rain or moisture on the gateway and its accessories.
- If the power adapter, casing, or power cord is damaged, stop using it immediately.

2.4 Installation Safety

- Review and follow all manufacturer's instructions and safety precautions when using tools (drills, adhesives, etc.).
- Wear appropriate personal protective equipment (PPE) when drilling or using adhesives.
- Ensure proper ventilation when using adhesives.

3. Product Information

3.1 Introduction to edgeRX™ System

The edgeRX™ Lynq sensor node is designed to monitor ambient temperature and humidity, as well as sense object vibration. After collecting data, the node transmits it via Bluetooth Low Energy (BLE). This data supports analysis for predictive maintenance and condition monitoring applications.

The edgeRX™ industrial gateway is an IoT-based platform that enables remote management of sensor devices and assets. It provides comprehensive functionalities, including data acquisition, analysis, alerts, and data visualization. Raw data can also be stored locally on a microSD card when required. For convenient deployment, the gateway supports both DIN rail and wall-mounted installation.

3.2 Starter Package Contents

The edgeRX™ Starter includes the following components:

Quantity	Item	Description
1	edgeRX™ Gateway	Model SE5100204G-01 with mounting bracket
2	Antennas	BLE and 4G/WiFi antennas
10	edgeRX™ Lynq Sensors	Model SE1111101G-01 with batteries
1	Gateway to Power Adapter Cord	M12 to DC connector
1	Gateway to Ethernet Adapter Cord	M12 to RJ45 connector
1	Power Adapter	Compatible with local power standards
1	Mounting Hardware	Double-sided tape, screws (for gateway)
1	Quick Start Guide	Basic setup instructions

3.3 Product Overview

3.3.1 edgeRX™ Lynq Sensor Overview

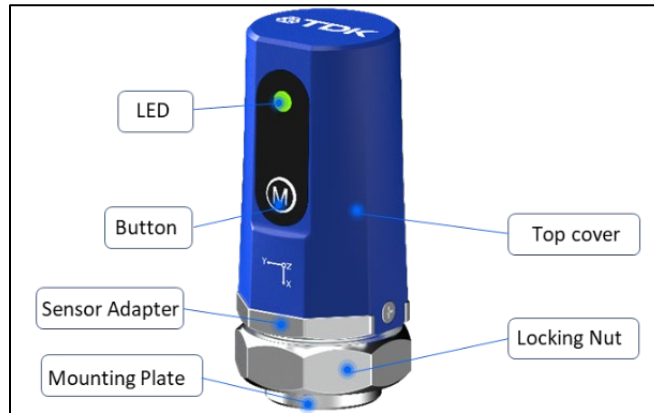


Figure 1: Sensor exterior

Key Components:

Component	Location	Function
LED Indicator	Top surface	Status indication (Red/Blue/Green)
Button	Side	Factory reset (long press >5s), BLE pairing (short press)
Internal Power Switch	Inside (requires opening)	Battery on/off
Sensor ID / MAC Address	Back label	Unique identifier for dashboard configuration
X, Y, Z Axis Reference	Side marking	Orientation reference for vibration measurement

LED Indicator Functions:

LED Color	Status	Meaning
Red	Flashing	Machine in alarm state
Blue	Flashing	BLE pairing in progress
Green	Flashing	BLE connection established

⚠ CAUTION: Do not press the button while LED light is blinking.

3.3.2 edgeRX Gateway Overview

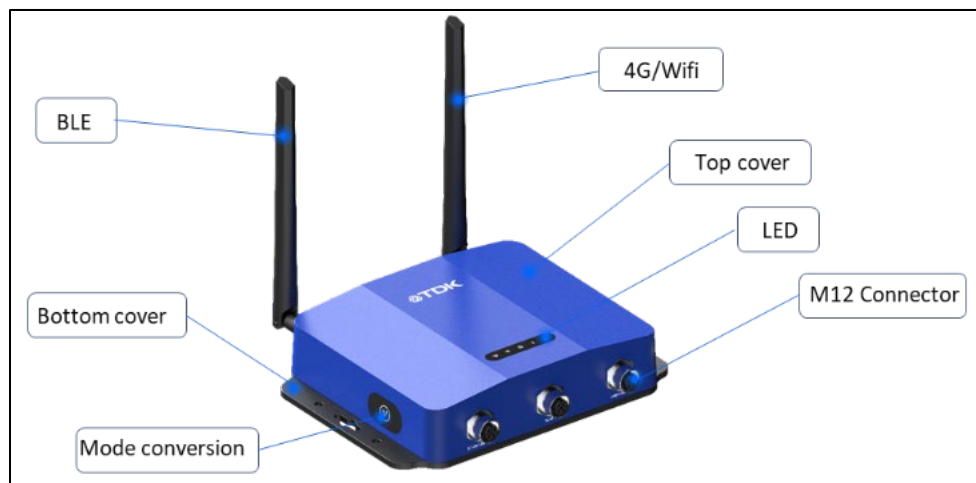


Figure 2: Gateway exterior

LED Indicators:

LED	On	Flashing	Off
4G LED	4G module ready	Data transmission via 4G	4G not connected/damaged
WiFi LED	WiFi module ready	Data transmission via WiFi	WiFi not connected/damaged
Ethernet LED	Ethernet module ready	Data transmission via Ethernet	Ethernet not connected/damaged
Bluetooth LED	Bluetooth module ready	Data transmission via Bluetooth	Bluetooth not connected/damaged
RS-485 LED	RS-485 module ready	Data transmission via RS-485	RS-485 not connected/damaged

Physical Connection Ports (Left to Right):

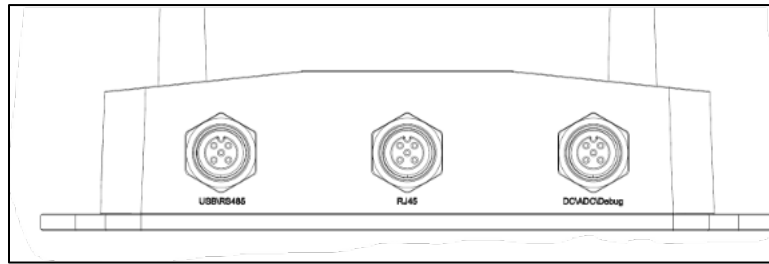


Figure 3: Gateway connection ports

Port	Type	Function	Compatible Adapter Cord
Port 1	M12 Female (8-pin)	USB/RS485 connection	Included adapter cord
Port 2	M12 Female (8-pin)	RJ45/Ethernet + RS485	Included adapter cord
Port 3	M12 Female (4-pin)	DC Power + ADC/Debug	Included adapter cord

Gateway Dimensions:

- Length: 179.0 mm
- Width: 174.0 mm
- Height: 187.5 mm
- Weight: 560g

4. Preparation

4.1 Unboxing the Starter

1. Carefully open the Starter packaging.
2. Verify all components against the package contents list (Section 3.2).
3. Inspect all items for shipping damage.
4. Keep all packaging materials until installation is complete.

4.2 Additional Tools Required

Depending on your installation method, you will need:

For All Installations:

- Ethernet cable (for initial gateway setup using a computer)
- Computer with Ethernet port and web browser

For Sensor Adhesive Installation:

- LOCTITE AA330 Adhesive and LOCTITE SF7387 Activator (or equivalent industrial adhesive)
- File or coarse sandpaper
- Degreaser or isopropyl alcohol
- Clean, dry cloth
- Safety gloves and safety glasses

For Sensor Mechanical (Screw) Installation:

- Torque wrench
- Drilling tools (for creating M6×5 screw holes)
- M6×5 mounting screws
- Safety equipment (gloves, safety glasses, ear protection)

For Gateway Installation:

- Screwdriver (if using wall-mount screws instead of tape)
- Wall anchors (if mounting on drywall or masonry)
- Level (optional, for ensuring proper alignment)

4.3 Recommended Sensor Installation Locations

To detect abnormalities in machine components, mount sensors in all locations where temperature and vibration can be measured effectively.

Best Practices:

☑ DO:

- Mount the sensor directly onto the housing of the target component
- Minimize the length of the vibration transmission path (distance between vibration source and sensor)
- Install sensors on non-rotating parts
- Choose locations as close to the vibration source as possible for maximum signal quality
- Install sensors on rigid, load-bearing surfaces

✗ DO NOT:

- Install sensors on rotating components
- Mount sensors on flexible or vibrating mounting surfaces
- Install in locations with ambient temperature above 85°C
- Place sensors where they may be exposed to direct water spray or submersion

4.4 edgeRX™ Lynq Sensor Initialization

Follow these steps to initialize each edgeRX™ Lynq Sensor before installation:

Steps:

- 1. Press the power button to wake up the sensor:**
 - a. Press and hold the button on the side of the sensor for **5 seconds**.
 - b. Release the button.
 - c. Observe the LED indicator - it should flash, indicating the sensor is active.
- 2. Record the Sensor ID (MAC Address):**
 - a. The Sensor ID is printed on the back label of the sensor.
 - b. Take a photo or write down the Sensor ID for later use in dashboard configuration.

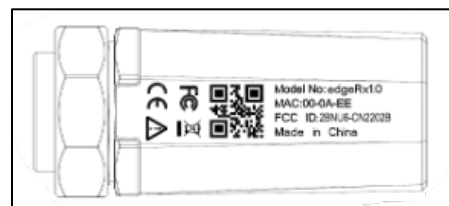


Figure 4: Sensor MAC address

⚠ **Note:** The sensor is now ready for physical installation and dashboard configuration.

4.5 edgeRX™ Gateway Initialization

Follow these steps to initialize the edgeRX™ Gateway:

Steps:

- 1. Remove the gateway and components from packaging:**
 - a. Remove any protective covers from the gateway and antennas.
- 2. Record the Gateway ID (MAC Address):**
 - a. The Gateway ID is printed on the back label of the gateway.
 - b. Take a photo or write down the Gateway ID for later use in dashboard.

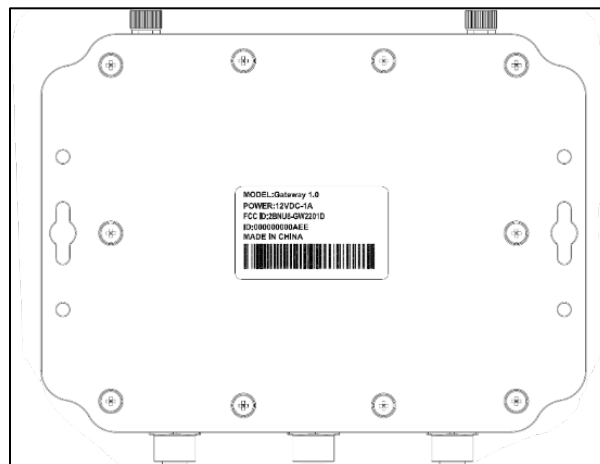


Figure 5: Gateway with MAC address

- 3. Attach the antennas:**
 - a. Screw the BLE antenna onto the antenna port.
 - b. Screw the 4G/WiFi antenna onto the other antenna port.
- 5. Connect the Power Adapter cord:**
 - a. With the gateway unit facing up, connect the Power Adapter cord (M12 connector) to the **leftmost port** (Port 3 - DC/ADC).
- 6. Connect the Ethernet Adapter cord:**
 - a. Connect the Ethernet Cable Adapter cord (M12 connector) to the **middle port** (Port 2 - RJ45/Ethernet).
- 7. Connect the power adapter:**
 - a. Attach the power adapter connector to the loose end of the Power Adapter cord.
- 8. Identify the gateway installation location:**
 - a. Choose a location with:
 - i. Accessible power outlet
 - ii. Ethernet connection
 - iii. Within 100 meters (line of sight) of the edgeRX™ sensors to be installed
 - iv. Adequate ventilation
 - v. Protection from moisture and extreme temperatures

 **Note:** Do not power on the gateway yet. Complete physical installation first (Section 6.1).

5. edgeRX™ Lynq Sensor Installation

5.1 Sensor Hardware Preparation

Before installing sensors on the equipment, ensure each sensor is properly initialized (see Section 4.4).

Pre-Installation Checklist:

- Sensor power switch is ON
- Sensor LED flashes when button is pressed
- Sensor ID (MAC address) has been recorded
- Sensor cover is placed, and screws are tightened
- Sensor is placed near the gateway location (within 100 meters)

⚠ CAUTION: Do not press the sensor button while the LED light is blinking.

5.2 Surface Preparation and Cleaning

Proper surface preparation is critical for reliable sensor installation, whether using adhesive or mechanical mounting.

Steps:

1. Remove surface contaminants:

- a. Using a file or coarse sandpaper, remove solid particles, incrustations, and paint from the surface where the sensor will be installed.



Figure 6: Surface cleaning with sandpaper

2. Degrease the surface:

- a. Clean the area using a degreaser or isopropyl alcohol.
- b. Ensure no oil residue is present.

3. Dry the bonding area:

- a. Use a clean, dry cloth to thoroughly dry the installation surface.
- b. Wait for complete evaporation of cleaning solvents.

5.3 Mechanical Installation (Screw Mounting)

Use this method for permanent installation on machinery with rigid mounting surfaces.


Steps:

1. Mark the drilling location:

- a. Position the sensor mounting plate on the cleaned surface.
- b. Mark the center point for the M6×5 screw hole.

2. Drill the mounting hole:

- a. Using appropriate drilling tools, create an M6×5 screw hole.

 **CAUTION:** Review and follow all manufacturer's instructions and safety precautions when using drilling tools. Wear appropriate PPE.

3. Mount the sensor:


- a. Set the torque wrench to **3 N·m**.
- b. Align the sensor mounting plate with the drilled hole.
- c. Insert the M6×5 screw and tighten to 3 N·m using the torque wrench.

4. Verify installation:

- a. Ensure the sensor is firmly attached and does not move when gently pressed.
- b. Verify the sensor orientation matches the required X, Y, Z axis alignment.

5.4 Adhesive Installation

Use this method when screw mounting is not feasible or when a non-invasive installation is preferred.

 **CAUTION:** Review and follow all manufacturer's instructions and safety precautions when using adhesives. Wear gloves and safety glasses. Ensure adequate ventilation.

Materials Required:

- LOCTITE SF7387 Activator
- LOCTITE AA330 Adhesive
- Clean application tools
- PPE (gloves, safety glasses)

Steps:

1. Apply activator to equipment surface:

- a. Coat the LOCTITE SF7387 Activator to the cleaned motor/equipment surface.
- b. Apply an even, thin layer covering the entire bonding area.



Figure 7: Activator applied on surface

2. Apply adhesive to sensor base:

- a. Coat the LOCTITE AA330 Adhesive (catalyst) to the edgeRX Lynq Sensor mounting base.
- b. Apply an even layer covering the entire bonding surface.



Figure 8: Activator applied on sensor base

3. Position the sensor:

- a. Carefully align the sensor on the prepared equipment surface.
- b. Ensure proper orientation (check X, Y, Z axis markings).



Figure 9: Sensor applied on surface

4. Apply pressure:

- a. Press the sensor firmly against the surface.
- b. Hold steady pressure for **2 to 3 minutes**.

5. Allow full cure time:

- a. After initial pressure application, allow the adhesive to fully cure according to manufacturer's specifications (typically 24 hours for full strength).
- b. Do not disturb the sensor during curing.



Figure 10: Sensor applied on surface

6. Verify installation:

- a. After cure time, verify the sensor is firmly bonded and does not move.
- b. Gently test the bond strength (do not apply excessive force).

6. edgeRX™ Gateway Installation and Network Configuration

6.1 Physical Gateway Installation

The edgeRX™ Gateway can be mounted using three methods:

1. **Wall mounting with screws** (most secure)
2. **Double-sided tape** (temporary or non-permanent installation)
3. **Flat surface placement** (for testing or temporary setups)

The method you choose depends on the mounting surface material and permanence requirements.

6.1.1 Method 1: Wall Mounting with Screws (Recommended)

Steps:

1. **Position the mounting bracket:**
 - a. Hold the mounting bracket against the wall at the desired location.
 - b. Use a level to ensure the bracket is straight.
 - c. Mark the screw hole locations.
2. **Install wall anchors (if needed):**
 - a. If mounting on drywall or masonry, drill pilot holes and insert wall anchors.
3. **Attach the mounting bracket:**
 - a. Align the bracket with the marked holes/anchors.
 - b. Insert screws and tighten securely.
4. **Mount the gateway:**
 - a. Align the gateway mounting slots with the bracket.
 - b. Slide the gateway onto the bracket with Ethernet cable ports facing downward.
 - c. Ensure the gateway is securely seated on the bracket.

6.1.2 Method 2: Double-Sided Tape Installation

Steps:

1. **Clean the mounting surface:**
 - a. Ensure the wall or surface is clean, dry, and free of dust.
2. **Apply double-sided tape:**
 - a. Apply the included double-sided tape to the back of the mounting bracket.
 - b. Press firmly to ensure good adhesion.
3. **Position and press:**
 - a. Position the bracket at the desired location.
 - b. Press firmly for 30 seconds to ensure strong bond.
 - c. Wait 24 hours before mounting the gateway for maximum adhesive strength.
4. **Mount the gateway** as described in Method 1, Step 4.

6.1.3 Method 3: Flat Surface Placement

1. Simply place the gateway on a stable, flat surface near power and Ethernet connections.
2. Ensure adequate ventilation around the gateway.

6.2 Connecting the edgeRX™ Gateway

Once the gateway is physically installed, connect power and network cables.

Steps:

1. Connect Ethernet cable:

- a. Plug one end of an Ethernet cable into the RJ45 connector on the Ethernet adapter cord (already attached to the gateway).
- b. Connect the other end to your network switch or router.

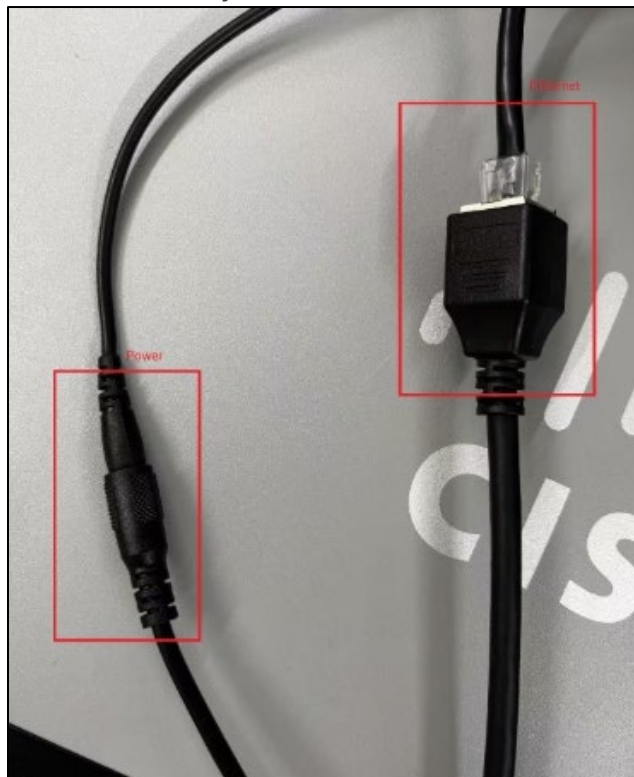


Figure 11: Ethernet cable connected to gateway

2. Connect power supply:

- a. Plug the power adapter into a power outlet.
- b. Ensure the power adapter is properly connected to the Power Adapter cord (already attached to the gateway).



Figure 12: Gateway with power connected

3. Verify LED indicators:

- a. Check that the **Power LED** (green light on left) is **ON** - indicates power supply is normal.
 - b. Check that the **Ethernet LED** (green light in middle) is **ON** - indicates Ethernet module is working.
4. **Gateway is now operational** and ready for network configuration.

6.3 Gateway Network Configuration

The edgeRX™ Gateway supports three network connection methods:

- **Ethernet** (default, recommended for initial setup)
- **WiFi** (see Section 6.4)
- **LTE/4G** (see Section 6.5)

Accessing the Gateway Configuration Page

There are two methods to access the gateway's web configuration interface:

6.3.1 Method 1: Connecting to Gateway using WiFi

Steps:

1. **Connect to Gateway using the following WiFi credentials**
 - a. SSID: EdgeRx_Gateway_<last 6 of Mac Address>
 - b. Password: setup-<last 6 of Mac Address>
2. **Access the Web Config Page: 192.168.4.1 using the following credentials**
 - a. username: admin
 - b. Password: last 6 of mac address

6.3.2 Method 2: Direct Connection to PC

Steps:

1. Configure PC Ethernet to static IP:

Windows:

- Right-click the network status in the lower right corner of the desktop.
- Click **"Network and Internet settings"**.
- Click **"Advanced network settings"**.
- Select your Ethernet adapter.
- Click **"Properties" > "Internet Protocol Version 4 (TCP/IPv4)" > "Properties"**.

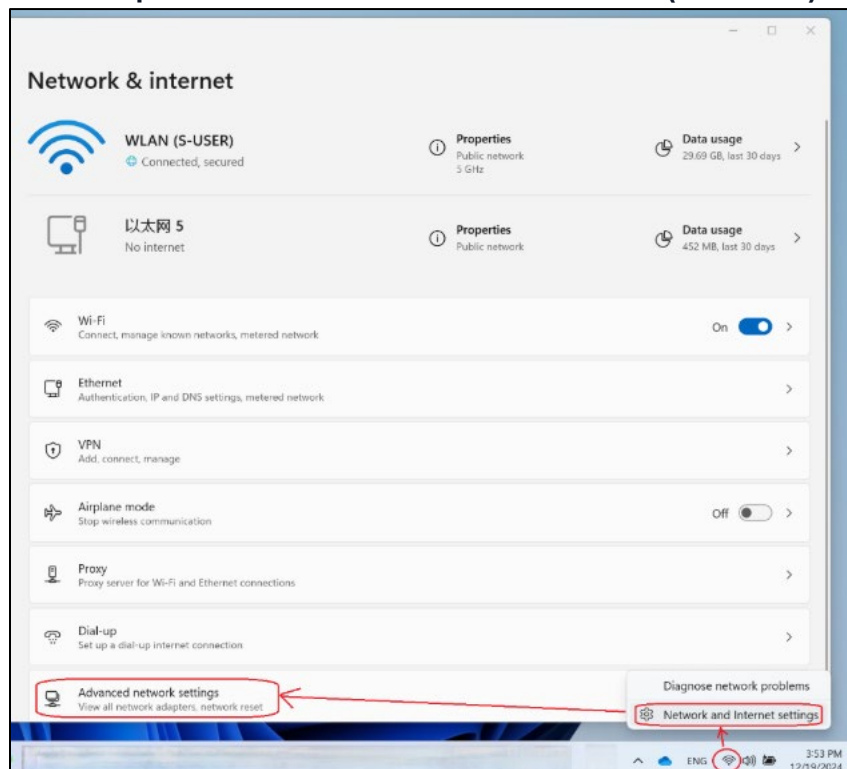


Figure 13: Windows settings page

- Select **"Use the following IP address"**.
- Enter:
 - IP address: **192.168.73.1**
 - Subnet mask: **255.255.255.0**
 - Default gateway: (leave blank)
- Click **"OK"**.

macOS:

- Go to **System Preferences > Network**.
- Select your Ethernet adapter.
- Configure IPv4: **Manually**.
- Enter:

- IP Address: **192.168.73.1**
- Subnet Mask: **255.255.255.0**
- Click **"Apply"**.
- 2. Connect PC to Gateway:**
 - a. Connect an Ethernet cable directly from your PC to the gateway's Ethernet adapter cord.
- 3. Access the configuration page:**
 - a. Open a web browser (Chrome, Firefox, Edge, or Safari).
 - b. Enter the IP address: <http://192.168.73.254>
 - c. Press Enter.
- 4. Login:**
 - a. Username: **admin**
 - b. Password: **last 6 characters of the MAC address**
- 5. Configuration page loads successfully.**

6.3.3 Method 3: Network Connection via Router

If the gateway is already connected to your local network:

- 1. Find the gateway's IP address:**
 - a. Check your router's DHCP client list for a device named "edgeRX Gateway" or with the MAC address matching your gateway.
- 2. Access the configuration page:**
 - a. Open a web browser.
 - b. Enter the gateway's assigned IP address (e.g., <http://192.168.1.100>).
- 3. Login** as described in Method 1, Step 4.

6.4 WiFi Configuration

If WiFi connectivity is required, configure the gateway's WiFi settings.

Steps:

- 1. Access the gateway configuration page** (see Section 6.3).
- 2. Navigate to WiFi settings:**
 - a. Click on the **"WiFi"** menu or tab in the navigation.

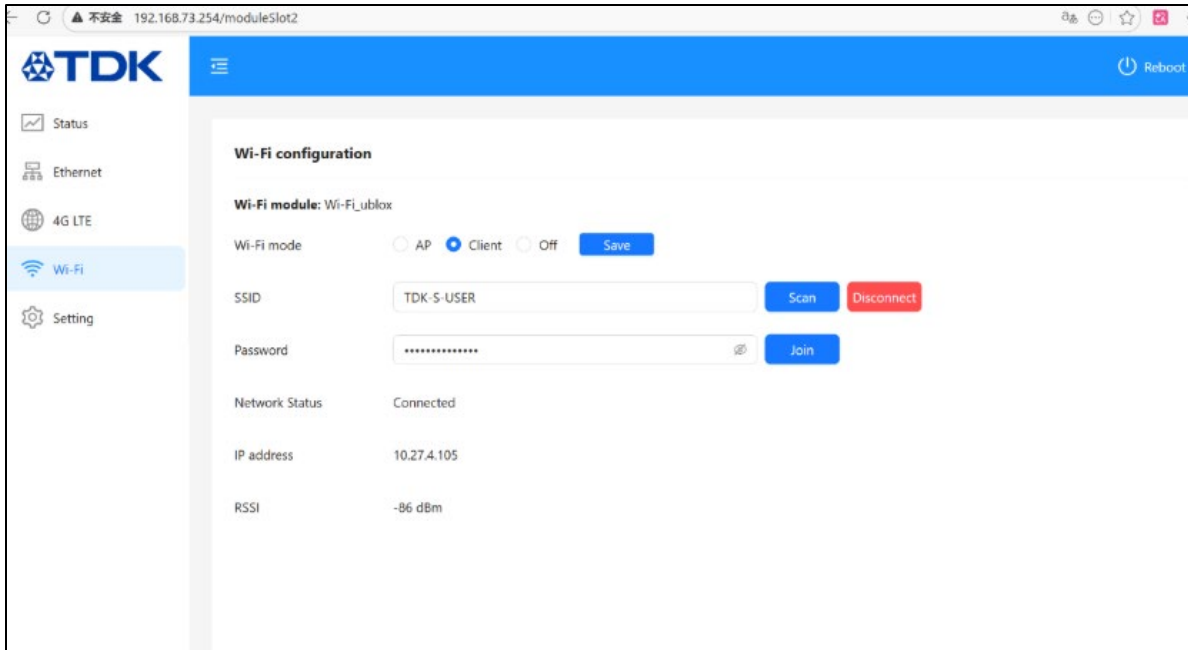


Figure 14: Gateway as client mode

3. **Select WiFi mode:**
 - a. Select "**Client**" as the WiFi mode.
 - b. Click "**Save**".
4. **Scan for available networks:**
 - a. Click the "**Scan**" button.
 - b. Wait for the gateway to scan for available WiFi networks.
5. **Select your WiFi network:**
 - a. A pop-up window will display available WiFi networks.
 - b. Select your desired WiFi network name (SSID) from the list.
6. **Enter WiFi password:**
 - a. Enter the WiFi network password in the field provided.
 - b. Click "**Join**".
7. **Verify connection:**
 - a. Wait a moment for the gateway to connect.
 - b. If an IP address appears in the WiFi status section, the connection has been successfully established.
8. **Configuration complete:**
 - a. The gateway is now connected via WiFi.
 - b. You can disconnect the Ethernet cable if WiFi is the primary connection method.

6.5 LTE Configuration

If LTE/4G connectivity is required (optional module), follow these steps to install the hardware and configure the LTE connection.

⚠ Note: The LTE module is sold separately. Contact your TDK SensEI representative if you require 4G communication.

6.5.1 Hardware Installation of the LTE Module

Steps:

- 1. Power off and disconnect the gateway:**
 - a. Unplug the power adapter from the outlet.
 - b. Unplug the Ethernet cable.
 - c. Wait 30 seconds.
- 2. Remove the gateway rear cover:**
 - a. Using a screwdriver, remove the **10 screws** on the back of the gateway.
 - b. Carefully lift off the rear cover.
- 3. Locate the 4G module slot:**
 - a. Identify the 4G module position inside the gateway.

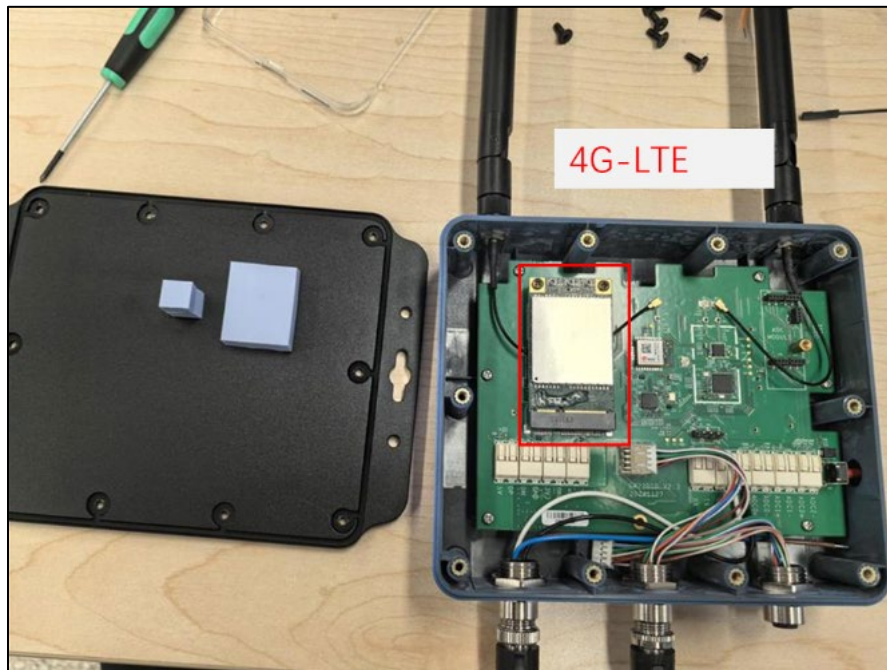


Figure 15: Gateway LTE module

- 4. Remove the 4G module (if pre-installed):**
 - a. Unscrew the two fixing screws holding the 4G module.
 - b. Carefully pull out the 4G module.
- 5. Insert the SIM card:**
 - a. Push the metal cover on the SIM card holder backward to unlock it.
 - b. Lift the metal cover up.
 - c. Insert the SIM card into the holder (ensure correct orientation).
 - d. Close the metal cover.
 - e. Push the cover forward to lock it in place.

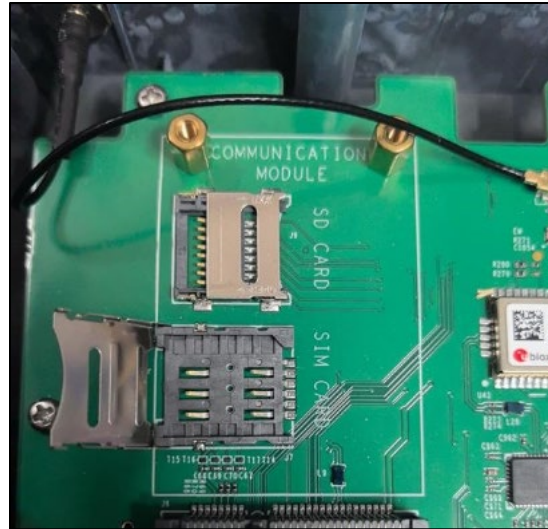


Figure 16: Gateway SIM card holder

6. Reinstall the 4G module:

- a. Carefully insert the 4G module back into the gateway.
- b. Align the module with the connector.
- c. Secure with the two fixing screws.

7. Replace the rear cover:

- a. Align the rear cover with the gateway body.
- b. Replace all 10 screws and tighten securely.

6.5.2 LTE Configuration

Steps:

1. Power on and connect the gateway:

- a. Reconnect the power adapter and Ethernet cable.
- b. Wait for the gateway to boot up (approximately 2 minutes).

2. Access the gateway configuration page (see Section 6.3).

3. Navigate to Module Slot 1:

- a. Click on the **"Module Slot 1"** menu or tab.

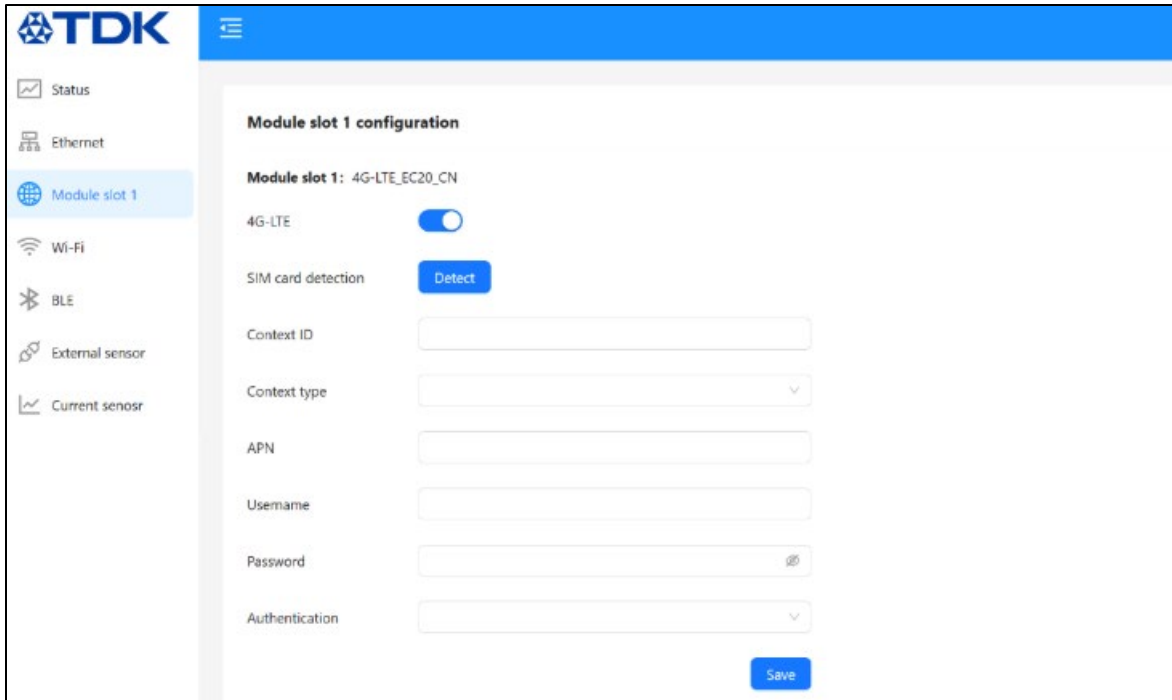


Figure 17: Gateway LTE page

4. Enable 4G-LTE:

- a. Turn the **4G-LTE** switch to **ON**.
- b. Click "**Save**".

5. Verify 4G connection:

- a. Return to the "**Status**" page.
- b. Verify that **4G-LTE** is no longer showing "OFF" status.
- c. The 4G network connection is successful when status shows "Connected" or displays signal strength.

7. Maintenance

7.1 edgeRX™ Lynq Sensor Battery Replacement

⚠ IMPORTANT: Battery replacement should only be performed when the sensor battery is depleted. Expected battery life expectancy is approximately 3 years under normal operating conditions.

Steps:

1. Remove the sensor cover:

- a. Using a screwdriver, remove the 2 screws from the sensor's side.
- b. Carefully pull off the cover.

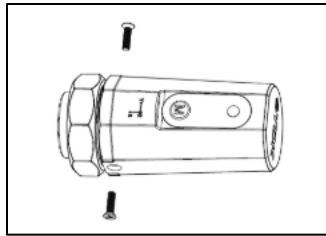


Figure 18: Sensor screw position

2. Disconnect the existing battery:

- a. With the cover open, carefully remove the existing battery from the holder.
- b. Disconnect the battery connector from the circuit board.

3. Install the new battery:

- a. Connect the new battery connector to the circuit board.
- b. Ensure the connector is fully seated.
- c. Secure the battery in the holder.

4. Replace the sensor cover:

- a. Align the cover with the sensor body.
- b. Replace the 2 screws and tighten securely (do not overtighten).

5. Verify operation:

- a. Press the sensor button.
- b. Observe the LED indicator to confirm the sensor is operational.


⚠ Note: For battery disposal, follow local regulations for lithium battery recycling. Do not dispose of batteries with normal household waste.

7.2 Powering Off the edgeRX™ Gateway

To safely power off the edgeRX™ Gateway, follow these procedures:

Steps:

1. **Power off the PoE network switch** (if applicable):
 - a. If the gateway is powered via PoE (Power over Ethernet), turn off the PoE switch first.
2. **Unplug the Ethernet cable:**
 - a. Disconnect the Ethernet cable from the gateway.
3. **Unplug the power adapter:**
 - a. Disconnect the power adapter from the power outlet.
4. **Wait 30 seconds:**
 - a. Allow the gateway to fully shut down before moving or servicing.

 **Note:** To power the gateway back on, reverse these steps (connect Ethernet first, then power).

8. Troubleshooting (FAQ)

Q1: How do I reset my edgeRX™ Lynq sensor?

Long press the button on the sensor for 5 seconds. The LED will flash indicating a factory reset is in progress. This will:

- Erase configuration data
- Reset the sensor to factory defaults
- Require re-pairing with the gateway

Q2: What if my sensor's LED light is not flashing even when I press the button?

Try the following troubleshooting steps:

1. Check the internal power switch:
 - a. Remove the sensor cover.
 - b. Verify the power switch is in the ON position.
2. Try to reset the sensor:
 - a. Long press the button for 5 seconds.
3. Check the battery:
 - a. The battery may be depleted.
 - b. Try replacing the battery (see Section 7.1).
4. Contact support:
 - a. If the above steps do not resolve the issue, the sensor may be damaged.
 - b. Contact TDK SensEI support for assistance.

Q3: The gateway LEDs are all off. What should I do?

Check the following:

1. Verify power connections:
 - a. Ensure the power adapter is plugged into a working outlet.
 - b. Check that the power adapter cord is properly connected to the gateway.
2. Check the power adapter:
 - a. The power adapter may be damaged.
 - b. Try using a different compatible power adapter (12V DC, 9-36V range).
3. Inspect cables:
 - a. Check for damage to power cables and connections.

Q4: I cannot access the gateway configuration page at 192.168.73.254

Verify the following:

1. PC Ethernet configuration:
 - a. Ensure your PC's Ethernet adapter is set to static IP 192.168.73.1.
 - b. Subnet mask should be 255.255.255.0.
2. Direct connection:
 - a. Verify the Ethernet cable is connected directly from your PC to the gateway.
3. Ethernet LED:
 - a. Check that the gateway's Ethernet LED is ON (indicating Ethernet module is working).
4. Browser cache:
 - a. Clear your browser cache or try a different browser.
5. Firewall/Antivirus:
 - a. Temporarily disable firewall or antivirus software that may block local network access.

Q5: WiFi configuration is not working. The gateway won't connect to my network.

Check the following:

1. Verify WiFi credentials:
 - a. Ensure you entered the correct WiFi network name (SSID) and password.
 - b. WiFi passwords are case-sensitive.
2. Check WiFi signal strength:
 - a. The gateway may be too far from the WiFi router.
 - b. Move the gateway closer to the router or use a WiFi range extender.
3. Verify WiFi network type:
 - a. The gateway supports 2.4GHz WiFi (2412-2472 MHz).
 - b. If your router has both 2.4GHz and 5GHz, ensure you're connecting to the 2.4GHz network.
4. Router settings:
 - a. Verify the router is not set to block new devices (MAC filtering disabled).
 - b. Check that DHCP is enabled on the router.

Q6: How many sensors can one gateway support?

Each edgeRX™ Gateway can support a maximum of up to 10 Lynq sensors. The exact number depends on:

- Sensor data transmission frequency
- Network conditions
- Distance between sensors and gateway

Q7: What is the maximum distance between sensors and the gateway?

The recommended maximum distance is 100 meters (line of sight). However, actual range may be affected by:

- Physical obstructions (walls, metal structures)
- Interference from other wireless devices
- Environmental conditions

For optimal performance, minimize obstructions between sensors and the gateway.

Q8: Can I move sensors after they are installed?

- **Screw-mounted sensors:** Yes, but you will need to remove the mounting screw and reinstall at the new location.
- **Adhesive-mounted sensors:** No. Adhesive-mounted sensors are intended for permanent installation. Removing them will likely damage the sensor or bonding surface.

⚠ Note: Changing sensor locations may affect monitoring performance. Consult the dashboard user guide for updating sensor locations in the software after physical relocation.

Q9: How do I know when sensor batteries need replacement?

Battery status can be monitored through the edgeRX™ Dashboard. The dashboard will display:

- Current battery voltage
- Battery life percentage
- Low battery warnings

Q10: What should I do if a sensor shows as offline in the dashboard?

See the edgeRX™ Dashboard User Guide for detailed troubleshooting steps. Quick checks:

1. Verify sensor power switch is ON
2. Check that sensor MAC ID was entered correctly in the dashboard
3. Ensure sensor is bound to the correct gateway and asset
4. Verify gateway is online
5. Check for physical obstructions between sensor and gateway

Appendix

A. Glossary of Terms

Term	Definition
BLE	Bluetooth Low Energy – wireless communication protocol used by sensors
Gateway	IoT device that collects sensor data and transmits to the cloud
MAC Address	Media Access Control Address – unique identifier for network devices (Gateway ID, Sensor ID)
PoE	Power over Ethernet – technology that allows Ethernet cables to carry electrical power
SSID	Service Set Identifier – WiFi network name
LTE	Long-Term Evolution – 4G mobile network technology
Starter Kit	Small and Medium Business Kit – complete edgeRX system package
Sensor ID	Unique identifier for each edgeRX™ Lynq sensor (MAC address)
Gateway ID	Unique identifier for the edgeRX™ Gateway (MAC address)

B. Related Information

For complete system information, refer to the following documents:

Document Title	Model Number	Description
edgeRX™ Gateway User Manual	SE5100204G-01	Detailed gateway specifications, LED descriptions, troubleshooting
edgeRX™ Lynq Sensor User Manual	SE1111101G-01	Detailed sensor specifications, LED descriptions, troubleshooting
edgeRX™ Dashboard User Guide	V3.0	Software navigation, monitoring, data analysis, and dashboard configuration
Starter Installation Guide (this document)	V3.0	Physical hardware installation and network configuration

These documents can be obtained from your TDK SensEI representative.

You can contact our support at qxo.support@tdk.com. When contacting support, please provide:

- Gateway ID (MAC address)
- Sensor ID(s) if applicable
- Description of the issue
- Screenshots (if applicable)
- Installation environment details