

EDGELINK-GM200

Industrial Edge IoT Gateway

User Manual



Item	Information
Name	IoT Gateway
Product Code	Edge link GM200
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Note: The screen content shown in product images is representative only and may vary according to the configured application profile.

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1. INTRODUCTION

The EDGELINK-GM200 is an industrial-grade Edge IoT Gateway designed to bridge field devices, industrial communication networks and cloud-based monitoring platforms. The gateway enables seamless acquisition, processing, protocol conversion and transmission of operational data from sensors, controllers, PLCs, meters and other industrial equipment.

Designed for modern Industrial IoT (IIoT) applications, the EDGELINK-GM200 supports local and remote connectivity through Ethernet, Wi-Fi, optional cellular network and industrial serial communication interfaces. The device acts as a reliable communication bridge between field-level automation systems and enterprise or cloud-based applications.

The gateway supports industry-standard communication protocols including Modbus RTU, Modbus TCP/IP, MQTT(S), HTTP(S), CoAP, OPC-UA and other configurable interfaces, enabling integration with SCADA systems, Building Management Systems (BMS), Energy Management Systems (EMS), OEM equipment and cloud platforms such as Linked IoT.

In addition to protocol conversion, the EDGELINK-GM200 provides edge computing capabilities including local data buffering, store-and-forward functionality, event-based data transmission, alarm generation, remote diagnostics and centralized device management. These features help ensure reliable operation even in environments with unstable network connectivity.

This manual provides information regarding installation, wiring, configuration, communication setup, cloud integration, commissioning, troubleshooting and maintenance of the EDGELINK-GM200 Industrial Edge IoT Gateway.

2. PRODUCT OVERVIEW

The EDGELINK-GM200 is a compact DIN-rail mounted industrial gateway used to collect data from field devices and transmit it to local systems or cloud platforms. It is suitable for applications where multiple field instruments, meters or controllers must be monitored remotely through a single communication gateway.

Typical field devices include temperature and humidity sensors, pressure transmitters, energy meters, gas detectors, PLCs, controllers and remote I/O modules. The gateway collects data over RS485/Modbus and publishes the data through Ethernet, Wi-Fi or optional 4G LTE connectivity.

The device is designed for panel mounting and continuous industrial operation. It provides status indications for power, communication activity, cloud connection and signal strength to simplify installation and field diagnostics.



Figure 1: EDGELINK-GM200 product overview

3. FEATURES, APPLICATIONS AND TECHNICAL SPECIFICATIONS

3.1 FEATURES

- Industrial Edge IoT Gateway
- Field Communication over RS-485
- Cloud Connectivity over Ethernet, Wi-Fi, GSM(4G)
- Field protocols: Modbus, Profibus, CoAP and OPC-UA
- Cloud protocols: MQTT(S) and HTTP(S)
- Inbuilt Data Storage for Network Loss Conditions
- Configuration Over Web-UI
- FOTA Support (Firmware over-the-air)
- DIN-rail mount design
- Industrial surge protection
- Linked IoT platform compatible

3.2 APPLICATIONS

- Industrial automation systems
- PLC and SCADA integration
- Remote equipment monitoring
- Energy monitoring systems
- Water and wastewater plants
- HVAC and building automation
- Cold storage and warehouses
- Smart utility monitoring
- OEM machine connectivity
- Solar and renewable energy systems
- Environmental monitoring
- Industrial IoT and Industry 4.0 applications
- Cloud-based remote monitoring solutions

3.3 TECHNICAL SPECIFICATIONS

Parameter	Specification
Mounting	DIN Rail Mount
Enclosure Material	Industrial grade ABS/PC
Supply Voltage	24 VDC
Operating Range	18 to 30 VDC
Power Consumption	< 5 W
Internal Memory	Onboard 4 GB Inbuilt Storage
Serial Port	1 x RS-485
Baud Rate	1200 to 38400 bps
Protocol	Primary Modbus RTU / TCP (Supported More than 300+ Field Protocols)
Ethernet Port	1 x 10/100 Mbps RJ45
Wi-Fi	2.4 GHz IEEE 802.11 b/g/n
IP Mode	DHCP / Static
Cellular Interface	4G LTE (Optional)
Cloud Protocols	MQTT(S), HTTP(S)
Remote Access	Supported
Data Logging	Supported
Store-and-Forward	Supported
Event-Based Reporting	Supported
Device Diagnostics	Supported
Configuration Method	Web UI
Firmware Upgrade	FOTA supported
Status LEDs	PWR, Cloud, TX, RX, Signal
Operating Temperature	0°C to +60°C
Storage Temperature	0°C to +80°C
Humidity	10 to 90% RH (Non-condensing)
Standards	CE, RoHS (model dependent)

4. PRODUCT IMAGES AND MECHANICAL DRAWINGS

4.1 PRODUCT LINE ILLUSTRATION

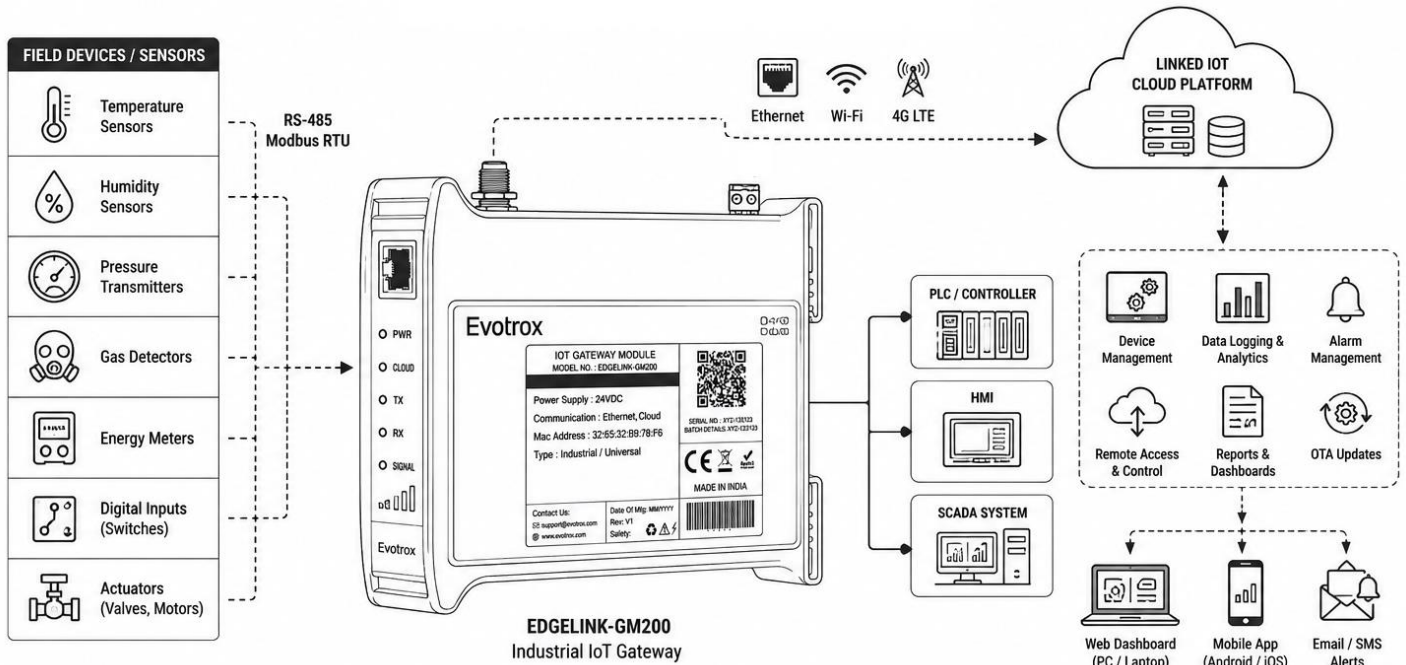
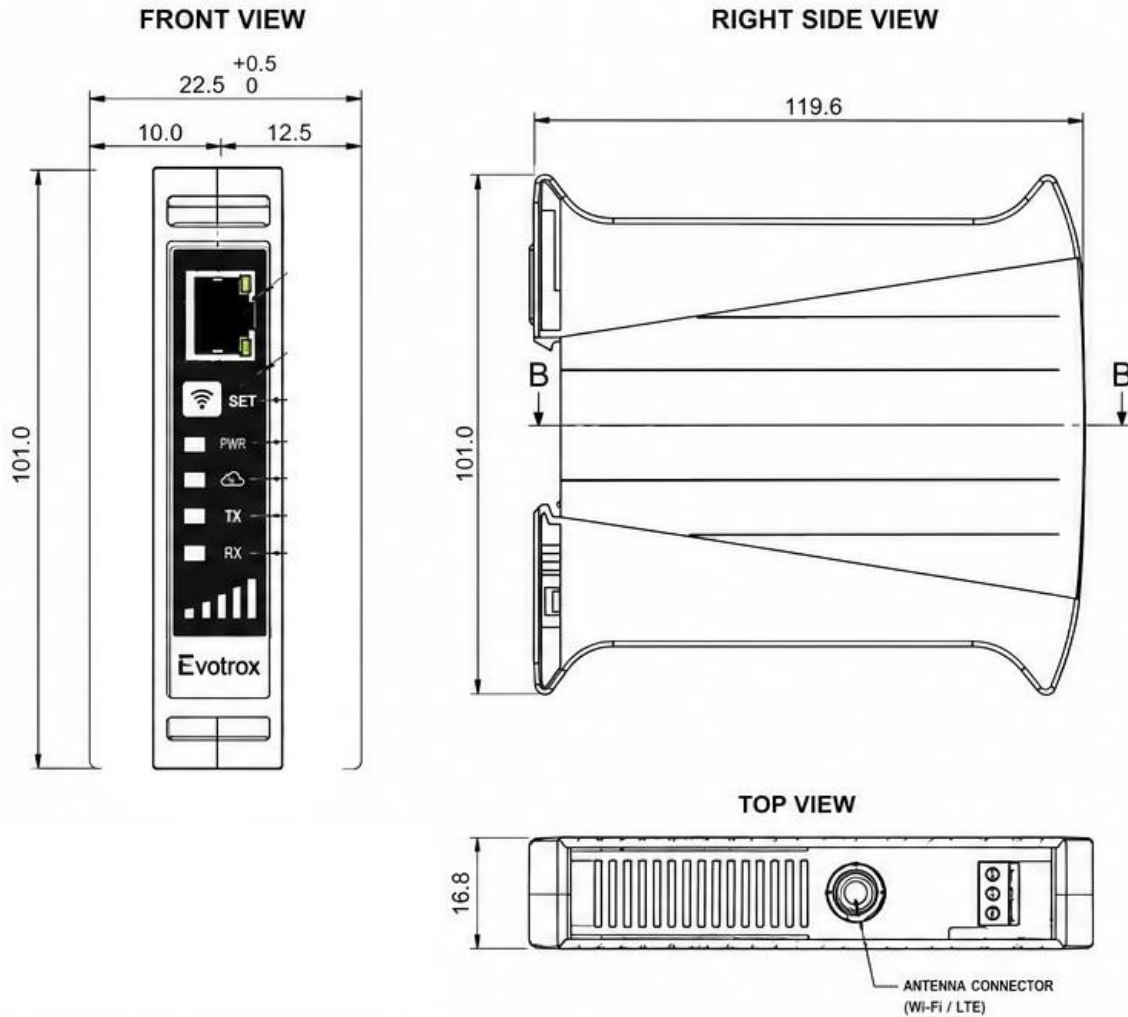


Figure 3: EDGELINK-GM200 line illustration

4.2 DIMENSIONAL AND INTERFACE DRAWING



DIMENSIONS TABLE (mm)	
PARAMETER	VALUE
Width (Overall)	22.5 +0.5 / 0
Height (Overall)	101.0
Depth (Overall)	119.6
Top/Bottom Height	16.8
Left/Right Face Width	22.5
Mounting	DIN Rail (35 mm)

NOTES:

1. All dimensions are in millimeters (mm).
2. Tolerance: ± 0.5 mm unless otherwise specified.
3. Mounting: 35 mm DIN Rail as per EN 60715.
4. Ensure adequate ventilation for optimum performance
5. Use 24V DC SELV/LPS power supply only.

LED INDICATIONS	
PWR	Power On
CLOUD	Cloud Connectivity Status
TX	Data Transmit
RX	Data Receive
SIGNAL STRENGTH (RSSI)	Wi-Fi / LTE Signal Strength

Figure 4: EDGELINK-GM200 dimensional and interface drawing

5. SAFETY PRECAUTIONS

- Installation, wiring, commissioning and servicing shall be performed by qualified personnel only.
- Disconnect power before touching wiring terminals or performing maintenance work.
- Use a regulated industrial 24 VDC power supply within the specified operating range.
- Ensure proper earthing and panel wiring as per site electrical standards.
- Do not install the device where it can be exposed to direct flame, heavy water jet, corrosive liquid splash or mechanical damage unless additional protection is provided.
- Do not modify the enclosure, terminals, antenna connectors, PCB assembly or sealing arrangements.
- Follow local industrial safety regulations, electrical codes and site safety procedures.
- Do not use the gateway as the only safety protection layer where regulations require certified safety systems, emergency shutdown or redundant protection devices.

Note: Communication availability depends on network quality, site wiring, field device condition and configuration settings. Critical safety functions should not depend only on cloud connectivity.

6. INSTALLATION GUIDELINES

Before installation, ensure that the gateway model, power supply, mounting location, network availability and communication wiring requirements are suitable for the intended application. Install the gateway in a clean, dry and well-ventilated control panel away from excessive heat, vibration, moisture, corrosive gases and sources of electrical interference.

6.1 DIN-RAIL MOUNTING

1. Verify DIN rail size and mechanical stability.
2. Place the upper mounting hook of the gateway on the DIN rail.
3. Press the lower side of the gateway until the DIN clip locks properly.
4. Ensure the gateway is firmly fitted and has sufficient clearance for wiring and ventilation.

6.2 POWER WIRING

- Disconnect power before wiring.
- Use a regulated 24 VDC power supply.
- Verify terminal polarity before powering the device.
- Use ferrules and properly sized conductors.
- Separate power wiring from signal and communication wiring where possible.

6.3 RS485 COMMUNICATION CABLING

- Use shielded twisted-pair cable for RS485 communication.
- Maintain correct D+ and D- polarity as per the wiring diagram.
- Use 120 ohm termination resistors at the two ends of long RS485 networks where required.
- Avoid star wiring unless proper RS485 network design is followed.

6.4 ETHERNET, WI-FI AND CELLULAR INSTALLATION

- Use CAT5e or higher cable for Ethernet communication.
- Install Wi-Fi and LTE antennas properly to ensure adequate signal strength.
- Avoid placing antennas inside metal enclosures unless external antenna extension is provided.
- Verify SIM card, APN and network coverage when cellular communication is used.

6.5 GROUNDING AND PANEL PRACTICES

- Follow proper grounding practices.
- Route communication cables separately from high-voltage and power switching cables.
- Connect cable shield to earth at one end only unless site standards specify otherwise.
- Use industrial-grade Ethernet switches for panel installations.

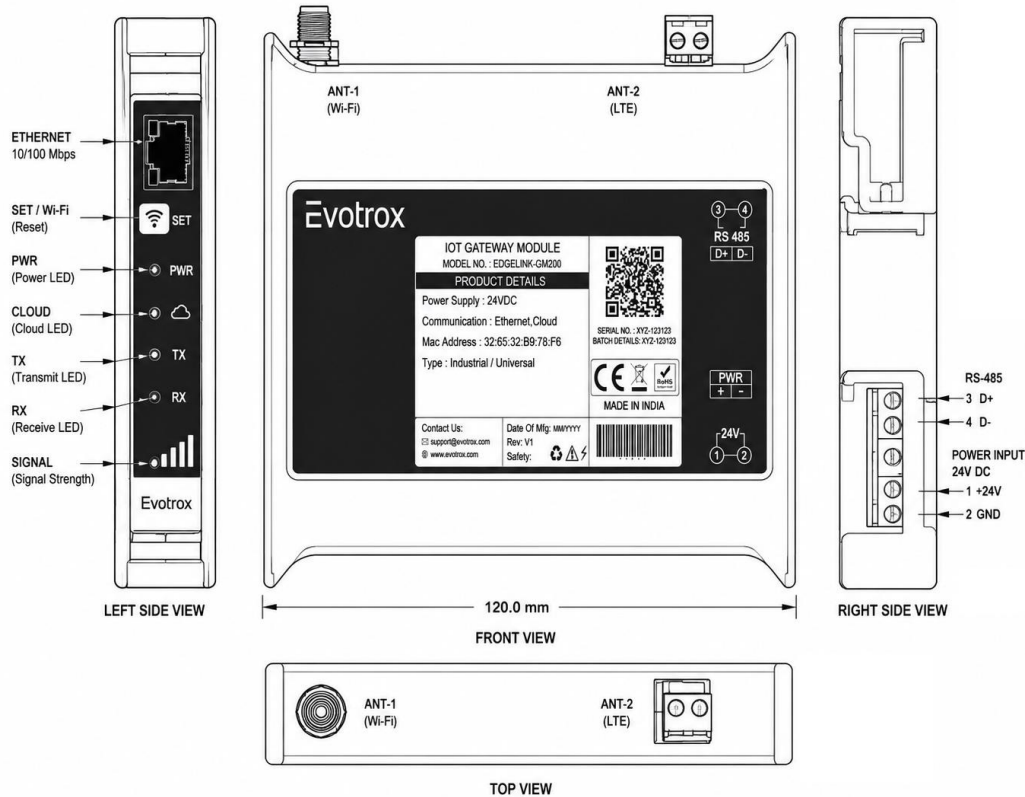
6.6 POWER-UP CHECK

- After installation, verify power indication, communication LED activity, network connection status and connected field device communication before placing the system into service.

7. STATUS INDICATORS AND DIAGNOSTICS

The gateway provides front LED indications for power, communication, cloud connection and signal status. These indicators help during installation, commissioning, fault diagnosis and regular maintenance.

LED / Indicator	Function	Typical Indication
PWR	Device power status	ON when power supply is available
Cloud	Cloud connection status	ON or blinking according to cloud connection state
TX	Transmit activity	Blinks during serial/network data transmission
RX	Receive activity	Blinks during serial/network data reception
SET / Wi-Fi	Configuration / reset function	Used to enable configuration mode or perform reset as per procedure



8. HARDWARE INTERFACES

Interface	Description	Application
Power Terminal	24 VDC input terminal	Gateway power supply
RS485 Terminal	D+ and D- communication terminals	Modbus RTU field device connectivity
Ethernet RJ45	10/100 Mbps Ethernet port	LAN, Modbus TCP, MQTT/HTTP cloud communication
Wi-Fi Antenna	ANT-1 antenna connector	Wi-Fi network connectivity
LTE Antenna	ANT-2 antenna connector	Cellular network connectivity where applicable
SET Button	Configuration/reset button	Enable Wi-Fi setup mode or reset action
Status LEDs	PWR, Cloud, TX, RX	Field diagnostics and commissioning

9. WIRING DIAGRAMS

The following wiring information is provided as a typical reference. Always verify the final product label, supplied connector pinout and site wiring standard before energizing the device.

Terminal / Interface	Connection	Description
Power	+24 VDC	Positive power input
	GND	Power supply ground
RS485	D+	RS485 positive / A line as per site notation
	D-	RS485 negative / B line as per site notation
Ethernet	RJ45	LAN / WAN / Modbus TCP / cloud connection
ANT-1	Wi-Fi antenna	2.4 GHz Wi-Fi antenna
ANT-2	LTE antenna	4G LTE antenna where applicable

10. WORK FUNCTION

After power-up, the gateway initializes its network interfaces, loads the configured device list, starts communication services and begins polling connected field devices. The collected data is processed locally and transmitted to the selected local or cloud destination according to the configured communication mode.

1. Initialize power, firmware and communication interfaces.
2. Establish RS485, Ethernet, Wi-Fi or cellular connectivity as configured.
3. Poll connected field devices according to the configured device list and polling interval.
4. Convert raw data into mapped tags and engineering values.
5. Apply event, alarm, logging and reporting rules where configured.
6. Transmit data to SCADA, PLC, HMI, MQTT broker or Linked IoT cloud platform.
7. Store data locally during network interruption and forward buffered data after reconnection.
8. Update diagnostic status for device health, communication and cloud connectivity.

11. COMMUNICATION REGISTERS / TAG MAPPING

The EDGELINK-GM200 works as a configurable gateway. Register mapping depends on the connected field devices and the application profile. Users shall configure device address, function code, register type, register address, data type, scaling and tag name according to the connected instrument or controller manual.

Field	Description
Device Name	User-defined connected device name
Slave ID	Modbus slave address from 1 to 247
Function Code	Modbus read/write function as required
Register Address	Source register address in the field device
Data Type	Integer, float, signed/unsigned or other supported type
Scaling	Engineering conversion factor and offset
Tag Name	Cloud/local tag name used for dashboard and logging
Polling Interval	Data acquisition interval for the tag or device

12. CLOUD DEVICE INTERFACE / IOT CONFIGURATION

The gateway supports cloud connectivity through the Linked IoT platform, enabling remote monitoring, alarm notifications, data logging, analytics and device management from anywhere.

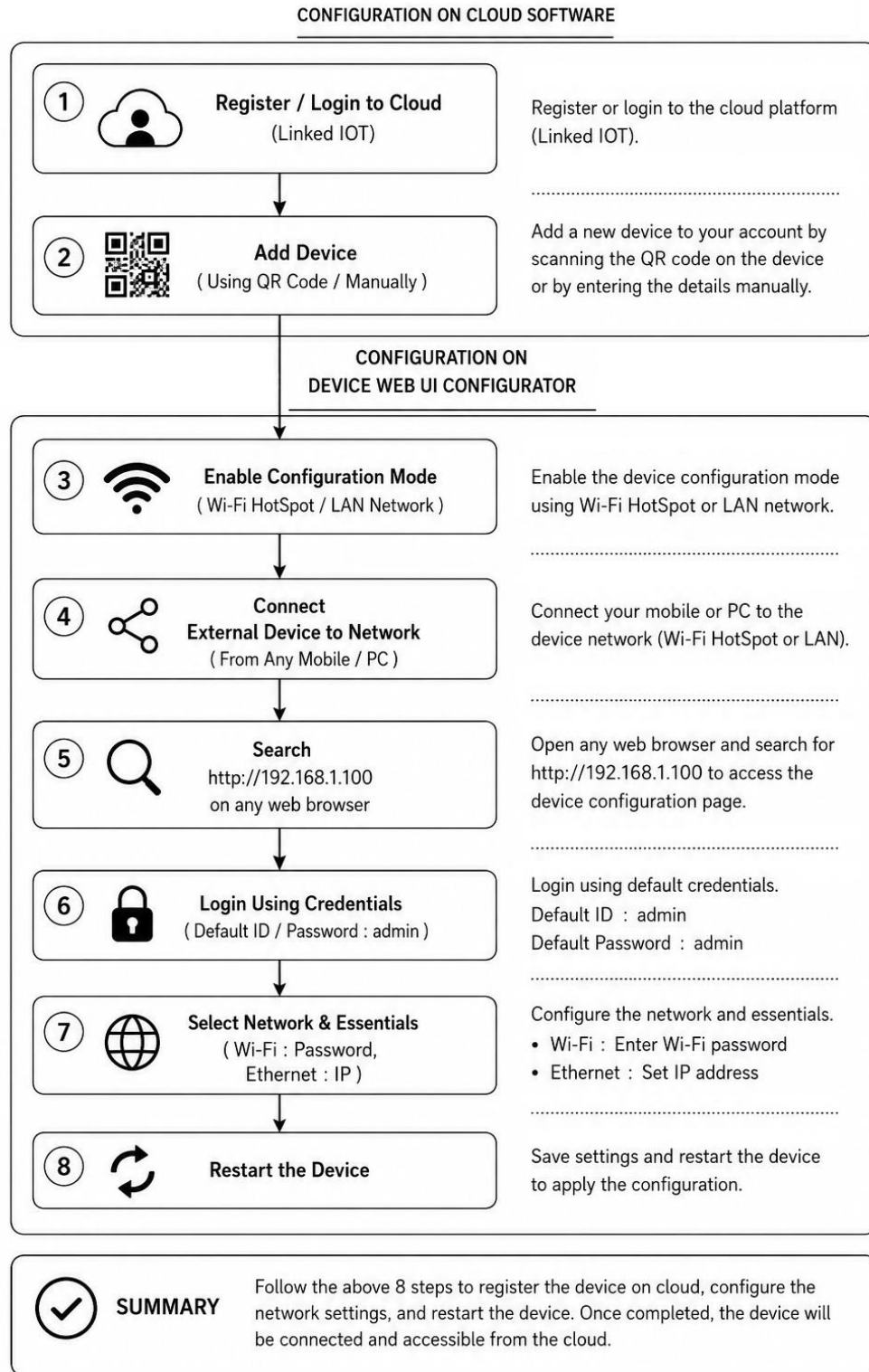


Figure 5: Cloud and Web UI configuration flow

12.1 STEPS TO CONNECT DEVICE

Cloud APP / Software

- Step-1 Register or login to Linked IoT cloud platform.
 Step-2 Add a new device using QR code or manual details.

Field Device

- Step-3 Enable device configuration mode from settings.
 Step-4 Connect mobile or PC to the device network using Wi-Fi Hotspot or LAN.
 Step-5 Open browser and search <http://192.168.1.100> to access device configuration page.
 Step-6 Login using default credentials. Default ID: admin. Default Password: admin.
 Step-7 Select network and essential settings: Wi-Fi password or Ethernet IP settings.
 Step-8 Save settings and restart the device to apply configuration.

12.2 PREREQUISITES

- The device variant must support IoT functionality.
- A stable Internet connection is available.
- A valid Linked IoT user account is available.
- The device is installed and powered correctly.

12.3 CLOUD CREDENTIALS

Access Type	Link
Web Portal	www.linkediot.com/login
Android Application	https://play.google.com/store/apps/details?id=com.linkediot
iOS Application	https://apps.apple.com/us/app/linkediot

12.4 NETWORK CONFIGURATION OPTIONS

Mode	Configuration Details
Wi-Fi Mode	Select available Wi-Fi network; enter Wi-Fi password; configure network priority.
Ethernet Mode	DHCP or static IP configuration; IP address; subnet mask; gateway; DNS server.
Cellular Mode (GSM)	APN settings; SIM configuration; network priority selection, depending on model variant.

12.5 NETWORK PRIORITY MANAGEMENT

When multiple communication interfaces are available, the device can automatically select the preferred network according to the configured priority sequence. This feature supports reliable cloud communication by switching to an available network when the primary connection becomes unavailable.

12.6 IMPORTANT NOTES

- Use a dedicated configuration network when accessing the Web UI Configurator.
- Ensure Internet connectivity is available on the selected communication interface.
- Change the default administrator password after commissioning for improved security.
- Network configuration parameters can be modified at any time through the Web UI Configurator.
- Successful cloud connection status can be verified from the device display and Linked IoT platform dashboard.
- status can be verified from the gateway LEDs and Linked IoT platform dashboard.

13. ORDERING INFORMATION

13.1 ORDERING CODE

LOGIC GM200 – I1 - AW1

Code Segment	Description
LOGIC GM200	Remote IO Module
EXTENSIONS	I1: GSM CARD
ANTENNA SELECTION	AW1: Direct Mount Antenna (Wi-Fi) (Default) AW2: Antenna with 1 Mtr Extension Cable (Wi-Fi) AG1: Direct Mount Antenna (GSM) AG2: Antenna with 1 Mtr Extension Cable (GSM)

* Note: If antenna is not specified than AW1 will be the default antenna delivered with device.

14. COMMISSIONING PROCEDURE

Follow the steps below after installation and wiring are completed.

1. Verify the gateway model, firmware version and hardware configuration.
2. Check power supply voltage, polarity and wiring before powering the device.
3. Verify RS485, Ethernet, Wi-Fi antenna and cellular antenna connections where applicable.
4. Insert and verify the SIM card if the cellular communication option is used.
5. Power ON the gateway and confirm PWR, TX, RX, Cloud and Signal LEDs are operating correctly.
6. Access the device configuration interface through Ethernet or Wi-Fi setup mode.
7. Configure communication parameters including Modbus settings, IP address, gateway, DNS server and cloud settings as required.
8. Configure connected field devices, polling intervals and data collection parameters.
9. Verify communication with connected PLCs, controllers, sensors or field instruments.
10. Verify successful communication with the Linked IoT cloud platform.
11. Confirm data transmission, dashboard updates and alarm notifications.
12. Record final network settings, device configuration and commissioning observations.

15. COMMUNICATION TROUBLESHOOTING

Issue	Possible Cause	Recommended Action
Device not responding	Power supply issue or incorrect wiring	Verify supply voltage, polarity and terminal connections
RS485 communication failure	Incorrect address, baud rate, polarity or wiring	Verify Modbus settings, device address, A/B polarity and termination
Field device not detected	Wrong communication settings or unsupported device configuration	Verify protocol settings and device communication parameters
Ethernet communication failure	Incorrect IP configuration or network issue	Verify IP address, subnet mask, gateway and Ethernet cable
Wi-Fi connection unavailable	Incorrect SSID or password	Verify wireless network settings and signal strength
Cellular network unavailable	SIM card issue, antenna problem or network coverage	Verify SIM card, APN settings, antenna connection and signal strength
MQTT communication failure	Broker settings incorrect or network unavailable	Verify broker address, port number, credentials and Internet connectivity
Cloud connection unavailable	Internet connection unavailable or cloud configuration incomplete	Verify network settings and cloud credentials
Data not updating on dashboard	Polling disabled or communication interruption	Verify polling configuration and communication status
Remote access unavailable	Firewall, VPN or network restriction	Verify network routing and security settings

16. MAINTENANCE AND PERIODIC CHECKS

The EDGELINK-GM200 is designed for continuous industrial operation with minimal maintenance. To ensure reliable long-term performance, follow the recommendations below:

- Periodically inspect power, communication and antenna connections.
- Verify proper operation of Ethernet, Wi-Fi and cellular communication interfaces.
- Ensure adequate signal strength for wireless communication.
- Keep the enclosure and surrounding panel free from dust, moisture and contaminants.
- Periodically review communication logs and cloud connectivity status.
- Backup configuration settings before major changes or firmware upgrades.
- Update firmware only using approved procedures and authorized firmware releases.
- Replace damaged cables, antennas, connectors or accessories immediately.
- Verify communication with connected field devices during scheduled maintenance activities.

Note: Network performance, cloud connectivity, polling intervals, data retention settings and remote access configuration should be reviewed periodically according to application requirements.

17. GENERAL TROUBLESHOOTING

If the gateway does not operate as expected, perform the following checks before contacting technical support.

Issue	Possible Cause	Recommended Action
No power indication	Power supply unavailable or incorrect wiring	Verify 24VDC supply and terminal wiring
Gateway not booting	Power issue, firmware issue or internal fault	Restart the device and verify supply voltage
RS485 communication error	Incorrect Modbus settings or wiring issue	Verify address, baud rate, parity and RS485 polarity
Ethernet communication failure	Network configuration issue	Verify IP settings, network switch and cable
Wi-Fi connection failure	Incorrect wireless configuration	Verify SSID, password and signal strength
Cellular communication failure	SIM card or network issue	Verify SIM card activation, APN settings and antenna connection
MQTT communication failure	Incorrect broker settings	Verify MQTT server, credentials and Internet connection
Cloud connection unavailable	Internet unavailable or cloud configuration incomplete	Verify Linked IoT settings and network availability
Data not updating	Device polling or communication failure	Verify field device communication and polling configuration
Dashboard showing stale data	Network interruption or cloud synchronization issue	Verify communication status and cloud connectivity

Note: If the issue persists, record the gateway serial number, firmware version, communication settings, connected device details and observed behavior before contacting authorized technical support.

18. WARRANTY AND SUPPORT

The EDGELINK-GM200 is covered by a limited warranty against manufacturing defects in materials and workmanship for the period specified in the product warranty policy. The warranty applies under normal operating conditions and does not cover damage resulting from improper installation, misuse, unauthorized modifications, electrical surges, accidents, environmental damage or operation outside specified limits.

For technical assistance, firmware updates, configuration support, documentation or service-related inquiries, contact EVOTROX Technical Support. When requesting support, provide the gateway model, serial number, firmware version, application details and a description of the issue.

19. COMPLIANCE INFORMATION

The EDGELINK-GM200 is intended for industrial communication, monitoring and IoT applications and shall be installed according to applicable electrical, safety and communication regulations. Product certification and compliance markings shall be verified against the final product label, declaration and certificate supplied with the product.

Compliance / Marking	Status / Note
CE	Applicable only if declared for supplied model
RoHS	Applicable only if declared for supplied model
EMC Compliance	Applicable only if declared for supplied model
Radio Compliance	Applicable for Wi-Fi / cellular variants
WEEE / Disposal	Dispose according to local electronic waste regulations
Site Safety Approval	To be verified by installer or end user

20. LEGAL NOTICE AND DISCLAIMER

Specifications are subject to change without prior notice. The user is responsible for ensuring proper installation, commissioning, operation and maintenance according to applicable industrial standards, electrical codes and communication regulations.

This product is intended for industrial communication, protocol conversion, data acquisition, remote monitoring and cloud connectivity applications. It is not intended to replace certified safety systems, emergency shutdown systems or regulatory safety equipment where such systems are required.

System performance depends on network quality, field device communication, environmental conditions, installation practices and configuration settings. Periodic verification and functional testing are recommended to ensure reliable operation.

21. CONTACT INFORMATION

Company	Details
Brand	EVOTROX
Location	Ahmedabad, Gujarat, India
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