

## Moxa ioLogik E1210

# MOXA ioLogik E1210 User Manual

Ethernet Remote I/O with 2-Port Ethernet Switch, 16 DIs

## 1. INTRODUCTION

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The MOXA ioLogik E1210 is an Ethernet remote I/O device designed for industrial applications. It features a 2-port Ethernet switch, allowing for daisy-chain topologies, and provides 16 digital inputs (DIs). This device supports various communication protocols including Modbus/TCP, EtherNet/IP, and RESTful API, making it versatile for integration into existing systems. Its robust design ensures reliable operation in demanding environments, including a wide operating temperature range and industrial certifications.

## 2. SAFETY INFORMATION

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Please read and understand all safety instructions before installing or operating the ioLogik E1210. Failure to follow these instructions may result in injury, damage to the device, or system malfunction.

- **Power Supply:** Ensure the power supply voltage is within the specified range (12 Volts DC). Incorrect voltage can damage the device.
- **Environment:** Operate the device within its specified temperature and humidity ranges. Avoid exposure to excessive moisture, dust, or corrosive substances.
- **Installation:** Installation should be performed by qualified personnel in accordance with local electrical codes and regulations. Ensure proper grounding.
- **Maintenance:** Disconnect power before performing any maintenance or cleaning.
- **Certifications:** This device holds Class I Division 2 and ATEX Zone 2 certifications, indicating its suitability for hazardous locations. Adhere to all guidelines related to these certifications during installation and operation.

## 3. PRODUCT OVERVIEW

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The MOXA ioLogik E1210 is a compact and robust remote I/O unit. Below is an image of the device and a description of its key features.



**Figure 3.1:** MOXA ioLogik E1210. This image displays the front and side view of the MOXA ioLogik E1210, a rectangular industrial device with a black and silver casing. The front panel features a series of terminal blocks for digital inputs, status indicator LEDs, and the MOXA logo. A connector is visible at the top, and the overall design is compact and suitable for DIN-rail mounting.

### Key Features:

- User-definable Modbus/TCP Slave addressing
- Supports EtherNet/IP and RESTful API
- 2-port Ethernet switch for daisy-chain topologies
- Supports SNMPv1/v2c
- Easy mass deployment and configuration with ioSearch utility
- Friendly configuration via web browser
- Class I Division 2, ATEX Zone 2 certification
- Wide operating temperature range: -40 to 75°C (-40 to 167°F)
- Active communications with MX-AOPC UA Server

## 4. SETUP

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### 4.1. Installation

The ioLogik E1210 is designed for industrial environments and can typically be mounted on a DIN-rail. Ensure adequate ventilation around the device to prevent overheating.

1. Securely attach the device to a standard DIN-rail in a control cabinet or suitable enclosure.
2. Ensure all connections are made before applying power.

### 4.2. Wiring Connections

Connect power and Ethernet cables to the appropriate ports on the device.

1. **Power Connection:** Connect a 12V DC power supply to the power input terminals. Observe correct polarity.
2. **Ethernet Connection:** Use standard RJ45 Ethernet cables to connect the device to your network. The ioLogik E1210 features a 2-port Ethernet switch, allowing for direct connection to another device or network segment in a daisy-chain configuration.
3. **Digital Inputs:** Connect your digital input signals to the designated DI terminals. Refer to the device's pinout diagram for specific wiring details.

## 5. OPERATING

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### 5.1. Initial Configuration

The ioLogik E1210 can be configured via a web browser or using the ioSearch utility.

1. **Using ioSearch Utility:** Download and install the ioSearch utility from the Moxa website. This utility helps in discovering and configuring multiple ioLogik devices on the network, facilitating mass deployment.
2. **Web Browser Configuration:** Once the device is powered and connected to the network, open a web browser and enter

the device's IP address. The default IP address can be found in the device's quick installation guide or discovered using ioSearch. Log in with the default credentials (if applicable) to access the configuration interface.

## 5.2. Protocol Configuration

Configure the desired communication protocols based on your application requirements.

- **Modbus/TCP:** Set up user-definable Modbus/TCP Slave addressing through the web interface.
- **EtherNet/IP:** Enable and configure EtherNet/IP communication as needed for integration with compatible PLCs or control systems.
- **RESTful API:** Utilize the RESTful API for custom software integration and data access.
- **SNMP:** Configure SNMPv1/v2c for network management and monitoring.

## 6. MAINTENANCE

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The MOXA ioLogik E1210 is designed for low maintenance. However, periodic checks can help ensure optimal performance and longevity.

- **Cleaning:** Gently clean the exterior of the device with a soft, dry cloth. Do not use liquid or aerosol cleaners.
- **Firmware Updates:** Periodically check the Moxa website for firmware updates. Applying updates can improve performance, add features, or address security vulnerabilities. Follow the provided instructions carefully when updating firmware.
- **Connection Integrity:** Ensure all power and data cable connections remain secure and free from corrosion.

## 7. TROUBLESHOOTING

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If you encounter issues with your ioLogik E1210, consider the following troubleshooting steps:

- **No Power:** Verify the power supply connection and ensure the voltage is correct. Check power indicator LEDs on the device.
- **No Network Connection:** Check Ethernet cable connections. Verify network settings (IP address, subnet mask, gateway) are correct. Use the ioSearch utility to detect the device on the network.
- **Digital Input Issues:** Ensure input signals are within the specified voltage range. Verify wiring to the DI terminals.
- **Device Unresponsive:** Try power cycling the device. If the issue persists, a factory reset might be necessary (refer to the full manual for factory reset procedures).
- **Performance Issues:** Check for network congestion or conflicts. Ensure the device firmware is up to date.

For more complex issues, consult the comprehensive user manual available on the Moxa support website or contact Moxa technical support.

## 8. SPECIFICATIONS

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The following table details the technical specifications of the MOXA ioLogik E1210:

| Attribute      | Value         |
|----------------|---------------|
| Model Number   | ioLogik E1210 |
| Platform       | Web Browser   |
| Voltage        | 12 Volts (DC) |
| Case Material  | Plastic       |
| Interface Type | RJ45          |

| Attribute            | Value                  |
|----------------------|------------------------|
| Manufacturer         | Moxa Inc.              |
| UPC                  | 613739924303           |
| Package Dimensions   | 7.4 x 5.4 x 1.6 inches |
| Item Weight          | 8.6 ounces             |
| Number of Ports      | 2                      |
| Color                | white                  |
| Compatible Devices   | Desktop                |
| Switch Type          | Rotary                 |
| Date First Available | January 9, 2018        |

## 9. WARRANTY AND SUPPORT

For information regarding product warranty, technical support, and additional resources, please visit the official Moxa website or contact your local Moxa distributor. Ensure you have your product model number (ioLogik E1210) and serial number ready when seeking support.

### ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

**Name**

Anonymous

**Email**

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

**Question**

Example: How do I reset this device or fix this error?

**Details**

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

