E-link LNK-IMC3012-POE

E-link Mini Industrial 2-Port Gigabit PoE Media Converter User Manual

Model: LNK-IMC3012-POE

1. Introduction

This manual provides instructions for the installation, operation, and maintenance of the E-link Mini Industrial 2-Port Gigabit PoE Media Converter. This device is designed for converting Ethernet signals to fiber optic signals while providing Power over Ethernet (PoE) to compatible devices. Its robust design makes it suitable for industrial environments.

2. Safety Information

- Ensure the power supply voltage is within the specified range (12-48V DC).
- Do not expose the device to water or excessive moisture.
- Avoid placing the device in areas with high temperatures or direct sunlight.
- Do not attempt to open or repair the device yourself. Refer all servicing to qualified personnel.
- Use appropriate SFP modules for the intended fiber optic connection.

3. Package Contents

Please check the package contents upon receipt. If any items are missing or damaged, contact your vendor.

- E-link Mini Industrial 2-Port Gigabit PoE Media Converter (LNK-IMC3012-POE)
- 35mm DIN-rail Clip
- Wall mount accessories
- User Manual (this document)

4. Product Overview

The E-link Mini Industrial 2-Port Gigabit PoE Media Converter features two 10/100/1000Base-T Ethernet ports with PoE capabilities and one 100/1000Base-X SFP port for fiber optic connections. It supports a wide range of DC input voltages and is built with industrial-grade components for reliable operation in harsh environments.

Figure 4.1: Front Panel Layout and Indicators

This diagram illustrates the front panel of the media converter, highlighting the optical SFP port, two Gigabit Ethernet PoE ports (TP1, TP2), and various LED indicators (Act, PoE, FX, PWR). It also shows the dual redundant 12-48V DC power input terminals.

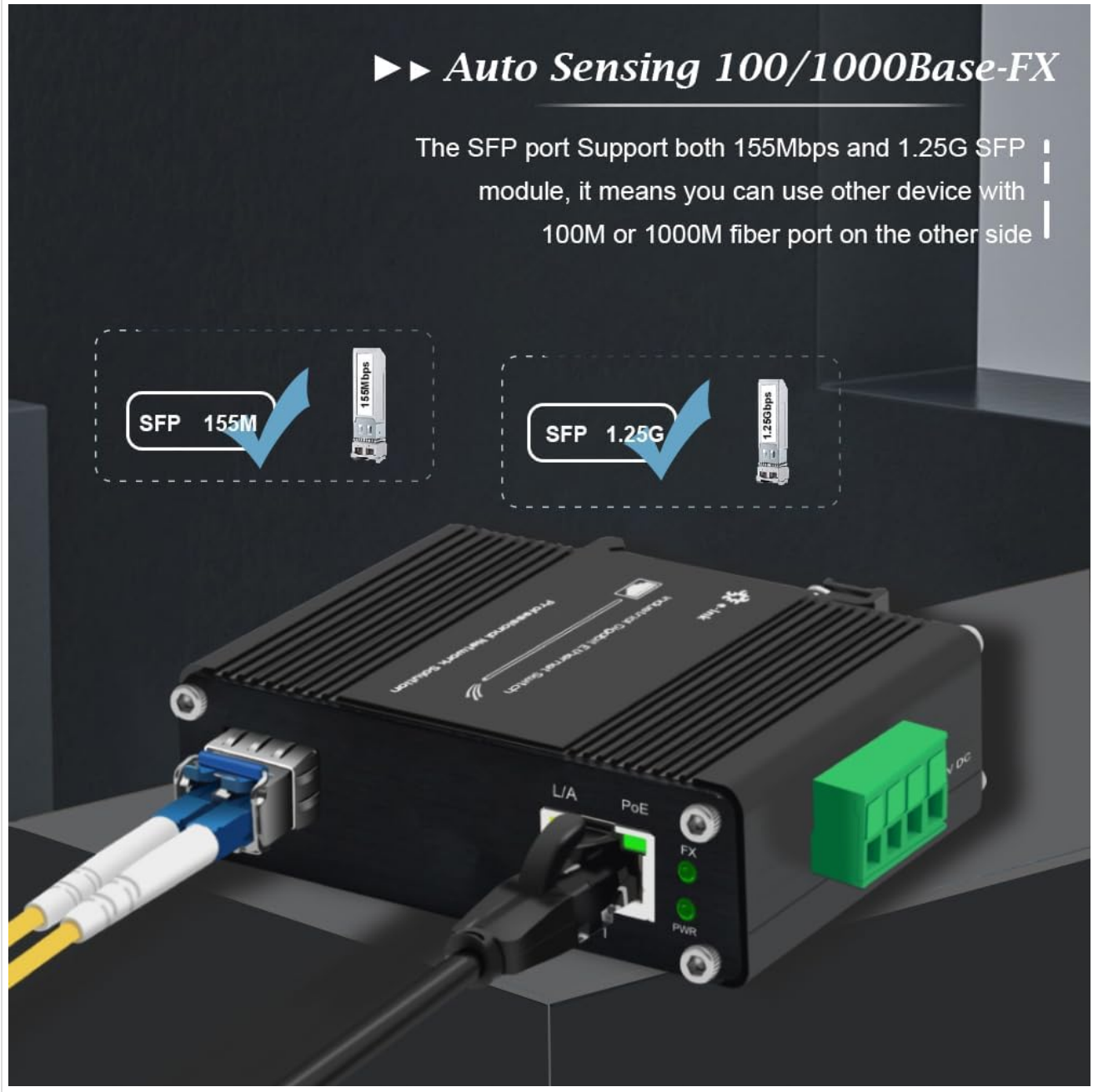

Figure 4.2: SFP Port Auto-Sensing Capability

The SFP port automatically detects and supports both 155Mbps and 1.25Gbps SFP modules, allowing compatibility with various fiber optic devices operating at 100M or 1000M speeds.

Figure 4.3: Mounting Options

The media converter includes accessories for both 35mm DIN-rail mounting and wall mounting, providing flexible installation options for industrial environments.

5. Specifications

The following table lists the technical specifications of the E-link Mini Industrial 2-Port Gigabit PoE Media Converter.

Feature	Specification
Brand	E-link
Model Number	LNK-IMC3012-POE
Hardware Interface	Ethernet, SFP
Ethernet Ports	2 x 10/100/1000M RJ45 PoE Ports
Fiber Optic Port	1 x 100/1000Base-X SFP Port

PoE Standard	IEEE802.3af (15.4W), IEEE802.3at (30W)
Input Voltage	12~48V DC (boosts to 48V PoE output)
Data Transfer Rate	1000 Megabits Per Second
Operating Temperature	-40°C to 75°C (-40°F to 167°F)
Housing Material	Aluminum
Mounting Options	DIN-Rail, Wall Mount
Product Dimensions	3.74"L x 3.74"W x 1.18"H
Item Weight	0.42 Kilograms

6. Setup and Installation

Follow these steps to set up your E-link Mini Industrial 2-Port Gigabit PoE Media Converter.

6.1. Power Connection

Connect the 12-48V DC power supply to the terminal block on the device. Ensure correct polarity (V+ to V+, V- to V-). The device supports dual redundant power inputs for enhanced reliability.

Figure 6.1: DC Power Input Terminals

This image shows the green terminal block for 12-48V DC power input, indicating the V+ and V- connections for dual redundant power.

6.2. Fiber Optic Connection

Insert a compatible 100/1000Base-X SFP module into the SFP slot. Connect the fiber optic cable to the SFP module. Ensure the fiber cable is securely connected and the SFP module is fully seated.

Figure 6.2: SFP Module Insertion

This image demonstrates the insertion of an SFP module into the dedicated SFP port on the media converter.

6.3. Ethernet Connection

Connect your Ethernet devices (e.g., IP cameras, VoIP phones, wireless access points) to the RJ45 PoE ports (TP1, TP2) using standard Ethernet cables (Cat5/5e/6). The device will automatically detect and provide power to IEEE802.3af/at compliant PoE devices.

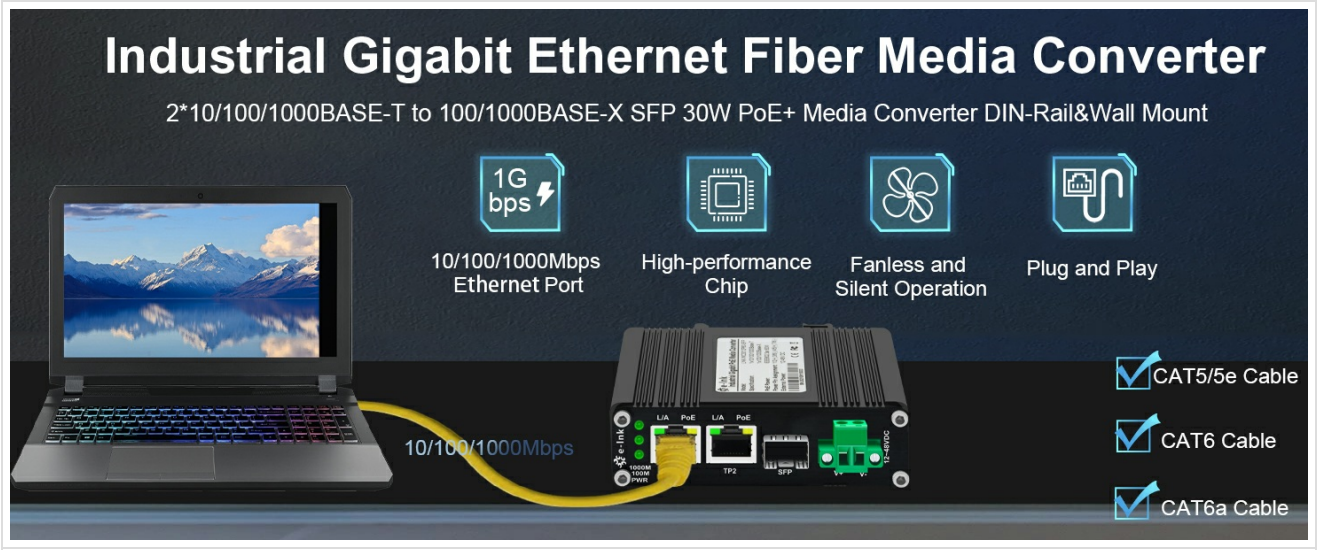

Figure 6.3: Ethernet Port Connectivity

This diagram illustrates connecting a laptop to the Ethernet port of the media converter using a Cat5/5e/6 cable, showing the 10/100/1000Mbps capability.

6.4. Mounting

The media converter can be mounted on a 35mm DIN-rail or directly to a wall using the provided accessories. Ensure the mounting location is stable and allows for proper ventilation.

Figure 6.4: Mounting the Device

This image shows how the media converter can be attached to a DIN-rail or mounted on a wall using the included brackets.

7. Operation

Once all connections are made and power is supplied, the media converter will begin operation.

7.1. LED Indicators

Monitor the LED indicators on the front panel to verify proper operation:

- **PWR (Power Indicator):**
  - Lighting: Device is powered on.
  - Un-Light: No power.
- **Act (Data Lamp for Ethernet Ports):**
  - Lighting: Data transmission is active.
  - Un-Light: No data transmission or disconnect.

- **PoE (PoE Indicator for Ethernet Ports):**
  - Lighting: PoE power is being supplied.
  - Un-Light: No PoE power.
- **FX (Fiber Optic Port Indicator):**
  - Lighting: Fiber optic link is connected.
  - Flashing: Data transmission is active on the fiber link.

7.2. Product Overview Video

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Video 7.1: E-link Mini Industrial Gigabit PoE Media Converter Overview

This video provides a visual overview of the E-link Mini Industrial Gigabit PoE Media Converter, demonstrating its features and potential applications.

8. Maintenance

The E-link Mini Industrial 2-Port Gigabit PoE Media Converter is designed for minimal maintenance.

- Keep the device clean and free from dust. Use a soft, dry cloth for cleaning.
- Ensure proper ventilation around the device to prevent overheating.
- Regularly check cable connections for secure fit.
- In industrial environments, periodically inspect the device for any signs of physical damage or corrosion.

9. Troubleshooting

This section provides solutions to common issues you might encounter.

9.1. No Power

- **Symptom:** PWR LED is off.
- **Possible Cause:** No power supply or incorrect connection.
- **Solution:** Verify the DC power supply is connected correctly and providing 12-48V DC. Check the power cable and terminal block connections.

9.2. No Ethernet Link

- **Symptom:** Act LED for an Ethernet port is off.
- **Possible Cause:** Ethernet cable issue, connected device off, or incompatible device.
- **Solution:** Check the Ethernet cable connection between the media converter and the connected device. Ensure the connected device is powered on and functioning. Try a different Ethernet cable.

9.3. No PoE Output

- **Symptom:** PoE LED for an Ethernet port is off, but Act LED is on.
- **Possible Cause:** Connected device is not PoE compliant (IEEE802.3af/at) or exceeds 30W power budget.
- **Solution:** Ensure the connected device is a standard PoE (802.3af/at) Powered Device (PD). Check the power requirements of the PD; if it exceeds 30W, it will not be powered by this converter.

9.4. No Fiber Optic Link

- **Symptom:** FX LED is off.

- **Possible Cause:** SFP module not inserted correctly, fiber cable issue, or incompatible SFP module/remote device.
- **Solution:** Re-seat the SFP module. Check the fiber optic cable for damage or improper connection. Ensure the SFP module is compatible with the remote fiber device (e.g., 100M SFP with 100M, 1G SFP with 1G).

10. Warranty and Support

E-link products are covered by a limited warranty. Please refer to the warranty card included with your product or visit the official E-link website for detailed warranty information and terms and conditions.

For technical support, product inquiries, or service requests, please contact E-link customer support through their official channels. Keep your product model number (LNK-IMC3012-POE) and purchase information readily available when contacting support.

E-link Official Website: www.e-linkchina.com (Example link, actual link may vary)