

IMC-150LI

Long Reach Ethernet over UTP/Coaxial Extender

Overview

Injecting data and power together, the IMC-150LI is brand new leading product which break the 100 meters limitation to greater Ethernet transmission distances. Supports 10/100Mbps Ethernet over twisted pair cable (CAT-5e, UTP).

Provides user configurable DIP switch selection of LFPT feature and force speed setting. Flexible and freely extends existing Ethernet networks to reach remote IP devices.

The IMC-150L extender provides combo twisted pair cable (CAT-5e, UTP) and Coaxial cable, which transmit data up to 1 km via Coaxial cable.

The IMC-150L series are simply equipped and effective point to point Ethernet extenders, the best solution for commercial buildings, harsh environment, airport or anywhere that need Ethernet transmission over 100 meters.

Packing List

Before installation, please make sure that you have received the following:

- 1 x IMC-150LI Extender
- 1 x Wall-mount kit
- 1 x Din-rail
- Startup Manual

If anything is missing or damaged, contact your distributor or sales representative immediately.

Datasheet Documents

The Startup manual and product data sheet can be download on the Advantech's website.

Notes

For more information on this and other Advantech products, please visit our websites at:

<http://www.advantech.com/products>

For technical support and service:

<http://www.advantech.com/support/>

This startup manual is for IMC-150LI

P/N: 2049150L10

1st Edition

December, 2019

Specifications

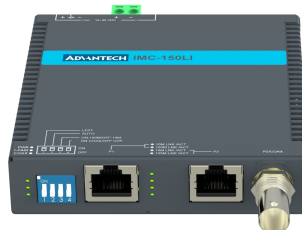
- **Compatibility:** IEEE 802.3, 802.3u, 802.3x
- **LAN:** 10/100Base-T(X)
- **Connectors:**
 - 1 x 10/100Mbps RJ-45
 - 1 x 10/100Mbps Combo UTP/COAX
- **LED Indicators:** PWR, 1-PAIR, COAX
- **DIP Switch:** LFPT, AUTO-Nego, Speed
- **Power:**
 - Power Consumption: 2.401W
 - Power Input: 12-48VDC
 - Connectors: 2P Pluggable Terminal Block, DC Jack
- **Dimensions (W x H x D):**
92.58 x 21.08 x 98.04 mm (3.65 x 0.83 x 3.86 in.)
- **Enclosure:** IP30
- **Operating Temperature:** -40 ~ 75°C (-40~167°F)
- **Storage Temperature:** -40 ~ 80°C (-40 ~ 176°F)
- **Humidity:** 0 ~ 95% (non-condensing)
- **Railway Trackside:** EN 50121-4
- **EMC:** CE, FCC

Panel View

Front Panel View



Top Panel View



Rear Panel View



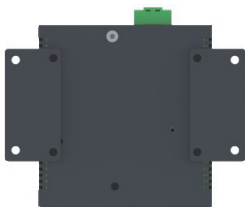
Wall Mounting

The wall-mount kit should already be fixed to the back panel of the IMC-150LI. If you need to attach the attachment plate, follow the steps as shown in the figures below.

1. Loosen the screw and reverse the direction of the attachment wall-mount kit.

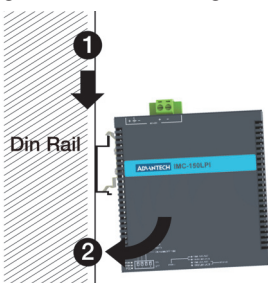


2. Tightening the wall-mount kit with 2 screws

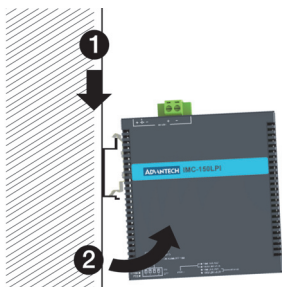


Din-rail Mounting (Optional Accessory)

1. Installing the DIN-Rail Mounting Kit.



2. Removing the DIN-Rail.

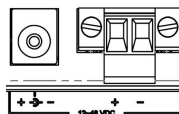


3. Once the screws are fixed in the wall, insert the screw heads then slide the IMC-150LI. Make sure the IMC-150LI is tight on the wall.

Power Connection

The terminal block connector is used for IMC-150LI AC/DC inputs. See below figures for wiring the redundant power.

1. Insert the positive and negative wires into the V+/V- contacts on the terminal block connector.
2. Tighten the wire-clamps screws to prevent the DC wires coming loose.



Warning: This is a Class A product. In domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

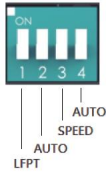
Avvertimento: Ceci est un produit de classe A. Dans un environnement domestique, ce produit peut provoquer des interférences radio, auquel cas l'utilisateur peut être tenu de prendre les mesures adéquates.

Warning: 1) an UL Listed Class II power adapter suitable for use at T_{ma} 50 degree C whose output meets ES1 (or SELV), PS2 (or LPS) and is rated 12-48VDC 0.2A min., or 2) an UL Listed Class II DC power source suitable for use at T_{ma} 85 degree C whose output meets ES1 (or SELV), PS2 (or LPS) and is rated 12-48VDC, 0.2A min.

Avvertimento: 1) un adaptateur secteur de classe II, répertorié UL, approprié pour une utilisation à 50 degrés Celsius, dont la sortie est conforme aux normes ES1 (ou SELV), PS2 (ou LPS) et une tension nominale de 12-48Vcc 0.2A min. ou 2) une source d'alimentation CC de classe II répertoriée UL pouvant être utilisée à une température de 85 degrés Celsius dont la sortie est conforme à ES1 (ou SELV), PS2 (ou LPS) et d'une puissance nominale de 12-48Vcc, 0.2A min

DIP Switch Settings

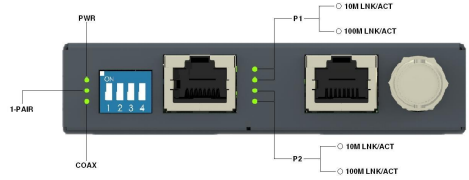
The default setting for each DIP switch is ON. Please see the following table for detail configuration.



DIP Switch	Name	Setting	Description
PIN 1	LFPT	ON	LFPT feature enabled. The default value.
		OFF	LFPT feature disabled.
PIN 2	AUTO	ON	Auto-Nego enabled. The default value.
		OFF	Auto-Nego disabled and change to force speed. Configure PIN 3 to select connection speed.
PIN 3	SPEED	ON	100Mbps The default value.
		OFF	10Mbps
PIN 4	AUTO	ON	COAX
		OFF	UTP

LED Indicators

The LED definition is described in the table below.



LED	Color	State	Description
PWR	Green	ON	Multiple power input. DC jack, terminal block and PD.
		OFF	No powered.
1-PAIR	Green	ON	When link with 1-PAIR cable.
		OFF	When link with 2-PAIR cable.
COAX	Green	ON	Link / active
		OFF	No link
P1 10M LNK/ACT	Green	ON	Link / active at 10Mbps
		OFF	No link.
P1 100M LNK/ACT	Green	ON	Link / active at 100Mbps
		OFF	No link.
P2 10M LNK/ACT	Green	ON	Link / active at 10Mbps
		OFF	No link.
P2 100M LNK/ACT	Green	ON	Link / active at 100Mbps
		OFF	No link.

Installation Instructions

1. Set LFPT function and data rate via DIP Switch

Keep the default values on the device, or locate the LFPT function or data rate via DIP switches.

Note: The data rate should be configured the same on both local and remote side.

2. Connect the power

Power input through the followings:

- Local Power: 12-48VDC input via DC Jack or 12-48VDC via terminal block

Approximate Maximum Extended Distances

IMC-150LI Data Range

RATE	UTP 1-PAIR	UTP 2-PAIR
10Mbps	800m	250m
100Mbps	300m	500m



ATTENTION:

Make sure the AC/DC power source voltage is stable, and do not plug the IMC-150LI via the same power source to avoid generating power circuit looping damage.