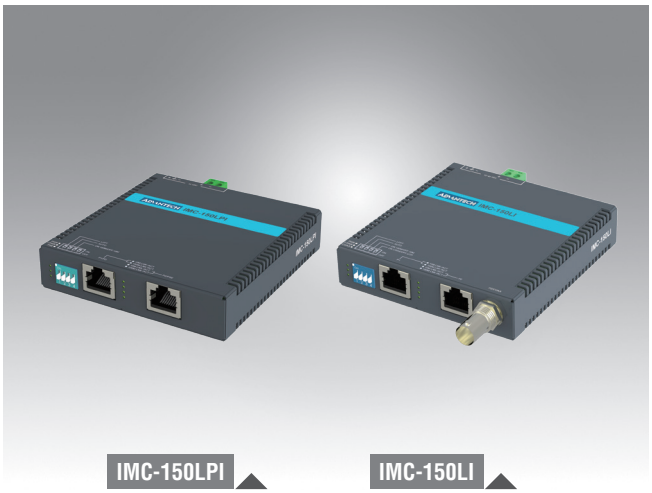
IMC-150L

Industrial Long Reach Ethernet over UTP/Coaxial Extender



Features

- Extends Ethernet up to 800m at 10 Mbps or 500m at 100 Mbps over UTP cable
- Extends Ethernet up to 1km at 10 Mbps or 500m at 100 Mbps over Coaxial cable (IMC-150LI)
- Railway Trackside EN 50121-4
- Features Link Fault Pass Through (LFPT)
- Switch-selectable for configuring LAN rate and connection type
- Dual design with PoE+ PD/PSE (IMC-150LPI)

Introduction

Injecting data and power together, the IMC-150L series offers brand new leading products which break the 100-meter limitation for greater Ethernet transmission distances. The series supports 10/100Mbps Ethernet over twisted pair cable (CAT-5, UTP) or coaxial cable. It provides a user configurable DIP switch selection of LFPT features, force speed setting, and is flexible and freely extends existing Ethernet networks to reach remote IP devices.

The IMC-150LPI PoE+ extender is compliant with the IEEE 802.3at PoE+ standard and delivers data and power over Ethernet cable without the distance limitations of traditional copper wires. It can extend data and power transmission reach up to 800 meters. Acting as both power sourcing equipment (PSE) and a powered device(PD), the power source from the PoE+ switch or power with $48V_{DC}$ input reaches both local and remote sites. The IMC-150L extender provides a combo twisted pair cable (CAT-5, UTP) and coaxial cable which transmit data up to 1 km via coaxial cable. The IMC-150L series offers effective point-to-point Ethernet extenders; offering the best solution for commercial buildings, harsh environments, airports, and virtually anywhere that requires Ethernet transmission over 100 meters.

Specifications

Communications

- **Standard** IMC-150LPI IEEE 802.3, 802.3u, 802.3x, 802.3at/af
  IMC-150LI IEEE 802.3, 802.3u, 802.3x
- **LAN** 10/100Base-T(X)
- **Transmission Distances** See product startup manual
- **Transmission Speed** Up to 100 Mbps

Interface

- **Connectors** IMC-150LPI 1 x 10/100Mbps RJ-45 PD
  1 x 10/100Mbps RJ-45 PSE
  IMC-150LI 1 x 10//100Mbps RJ-45
  1 x 10/100Mbps Combo UTP/COAX
- **DIP Switch** LFPT, AUTO-Nego, Speed, UTP/COAX
  PIN 1 LFPT ON/OFF
  PIN 2 AUTO ON/OFF (OFF to take effect for PIN 3)
  PIN 3 SPEED ON:100Mbps / OFF:10Mbps
  PIN 4 ON:COAX / OFF:UTP (PIN 4 is only for IMC-150LI)
- **LED Indicators** IMC-150LPI:
  PWR, 1-PAIR, PSE
  P1/PD 10M LNK/ACT, 100M LNK/ACT
  P2/PSE 10M LNK/ACT, 100M LNK/ACT
  IMC-150LI:
  PWR, 1-PAIR, COAX
  P1 10M LNK/ACT, 100M LNK/ACT
  P2 10M LNK/ACT, 100M LNK/ACT

Power

- **Power Consumption** IMC-150LPI: 33W (Full load PoE+)
  IMC-150LI: 2.401W
- **Power Input** IMC-150LPI 48V DC
  IMC-150LI 12 ~ 48V DC
- **Power Output** 30W
- **Connectors** 2P Pluggable Terminal Block, DC Jack

Physical

- **Enclosure** IP30, Metal shell with solid mounting kits
- **Dimensions (W x H x D)** 92.58 x 21.08 x 98.04 mm (3.65 x 0.83 x 3.86 in.)
- **Mounting** DIN-Rail, Wall

Protection

- **Reverse Polarity** Present

Environment

- **Operating Temperature** -40 ~ 75°C (-40~167°F)
- **Storage Temperature** -40 ~ 85°C (-40~185°F)
- **Operating Humidity** 10 ~ 95% (non-condensing)
- **Storage Humidity** 10 ~ 95% (non-condensing)

Certification

- **EMI** CE, FCC
- **EMS** EN 61000-4-2
  EN 61000-4-3
  EN 61000-4-4
  EN 61000-4-5
  EN 61000-4-6
  EN 61000-4-8
- **Railway Trackside** EN 50121-4
- **Shock** IEC 60068-2-27
- **Freefall** IEC 60068-2-32
- **Vibration** IEC 60068-2-6
- **Patent** http://www.advantech.com/legal/patent

Ordering Information

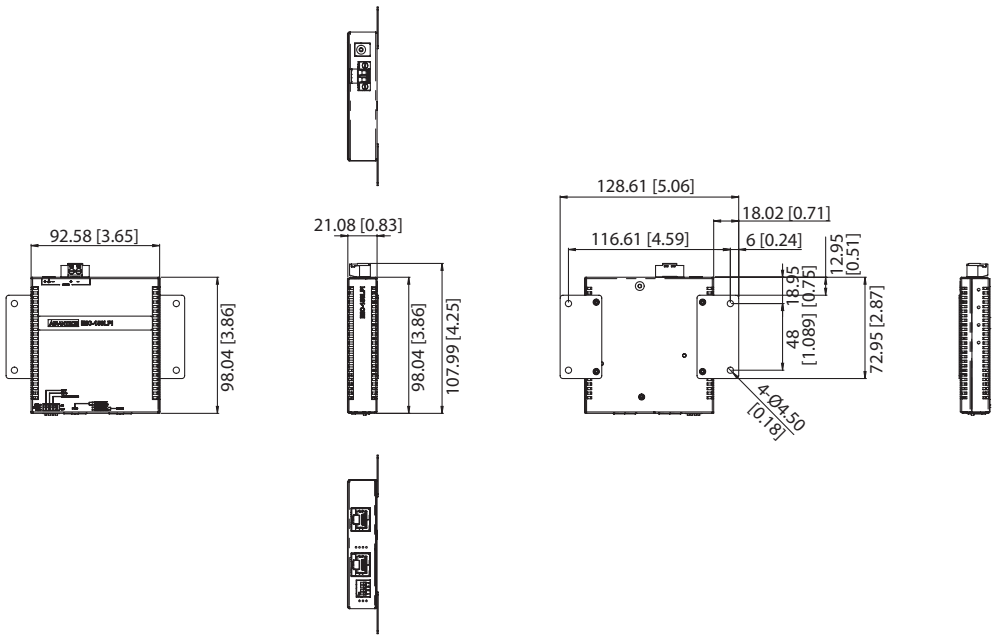
- **IMC-150LPI** Industrial Long Reach PoE+ Extender
- **IMC-150LI** Industrial Long Reach Ethernet over UTP/Coax Extender
- **XIMC-GST60A48-P1J** Power Adapter, 100~240V, 60W, 48V,1.25A (sold separately)

All product specifications are subject to change without notice.
Last updated: 18-Dec-2023

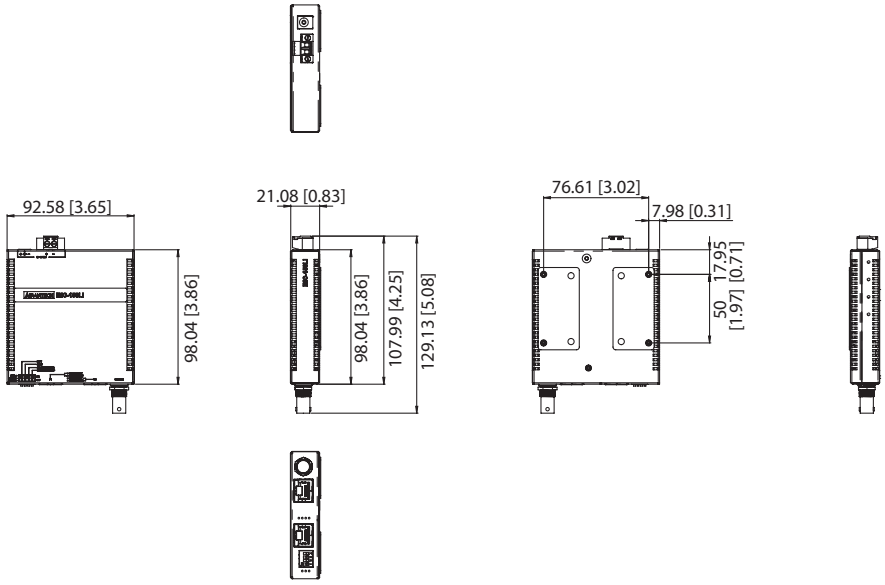
Dimensions

Unit: mm [inch]

IMC-150LPI



IMC-150LI



Panel Cut-out Dimensions (W x H x D): 92.58 x 21.08 x 98.04 mm (3.65 x 0.83 x 3.86 in.)