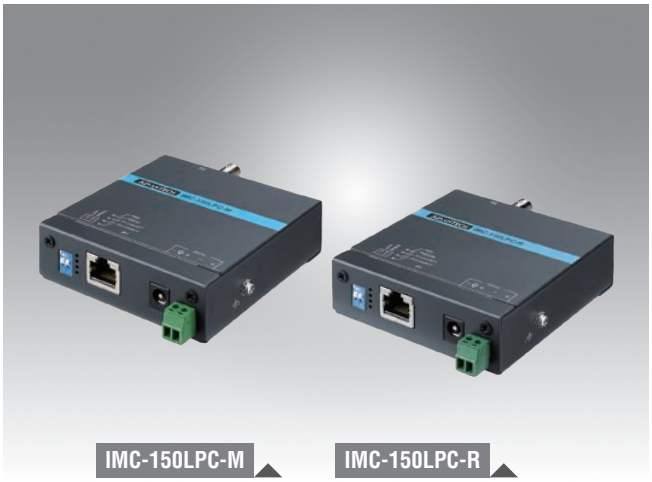
IMC-150LPC

Hardened PoE Long Reach Ethernet Extender via Coaxial



Features

- Delivers data up to 300 m (985 ft) at 100Mbps with power via coaxial cable
- Extends power >15.4 watt power with 300 m (985 ft) long coaxial cable
- Railway Trackside EN 50121-4 EMC certified
- Features copper-based Link Fault Pass Through (LFPT)
- Supports Remote PD power ON/OFF by disabling/enabling port via management switch

Vertrieb durch AMC
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Introduction

Advantech's IMC-150LPC-M and IMC-150LPC-R are designed to be used as a pair. IMC-150LPC-M is designed for use at a central site while IMC 150LPC-R is used at a remote site. Both devices are capable of extending data and power transmission by >15.4W at 300 m (985 ft) using extant coaxial cables. Indeed, this solution converts analogue cables into Ethernet connection cables while saving on installation/digitalization costs. IMC-150LPC-M and IMC-150LPC-R further support PD power-off via a management switch to enable users to control the unit remotely. This series is compliant with EN50121-4 standards for trackside installation and is capable of withstanding electromagnetic interference for rail networks.

Specifications

Communications

- **Standard** IEEE 802.3, 802.3u, 802.3x, 802.3at/af
- **LAN** 10BASE-T/100BASE-TX
- **Transmission Distances** *Up to 300 meter
- **Transmission Speed** Up to 100 Mbps

Interface

- **Connectors** 1 x 10/100Mbps RJ-45
1 x 10/100Mbps BNC Female
- **DIP Switch** PIN 1 LFPT ON/OFF
PIN 2 (reserved, no function)
- **LED Indicators** PWR/PoE
P1: LNK/ACT P2: LNK/ACT

Power

- **Power Consumption** *IMC-150LPC-M: 23.5W
- **Power Input** 54~57V_{DC}
- **Power Output** *IMC-150LPC-R: >15.4W
- **Connectors** 2P Pluggable Terminal Block, DC Jack

Physical

- **Enclosure** IP30, Metal shell with solid mounting kits
- **Dimensions (W x H x D)** 84 x 80 x 25 mm (3.3 x 3.15 x .984 in)
- **Mounting** 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)

Certifications

- **Safety** LVD EN62368
- **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-150LPC-M** Industrial Long Reach PoE+ Extender, Master
- **IMC-150LPC-R** Industrial Long Reach PoE+ Extender, Remote
- **IMC-150PS-120** Power Adapter, 100-240V,54V, 120W (Sold separately)

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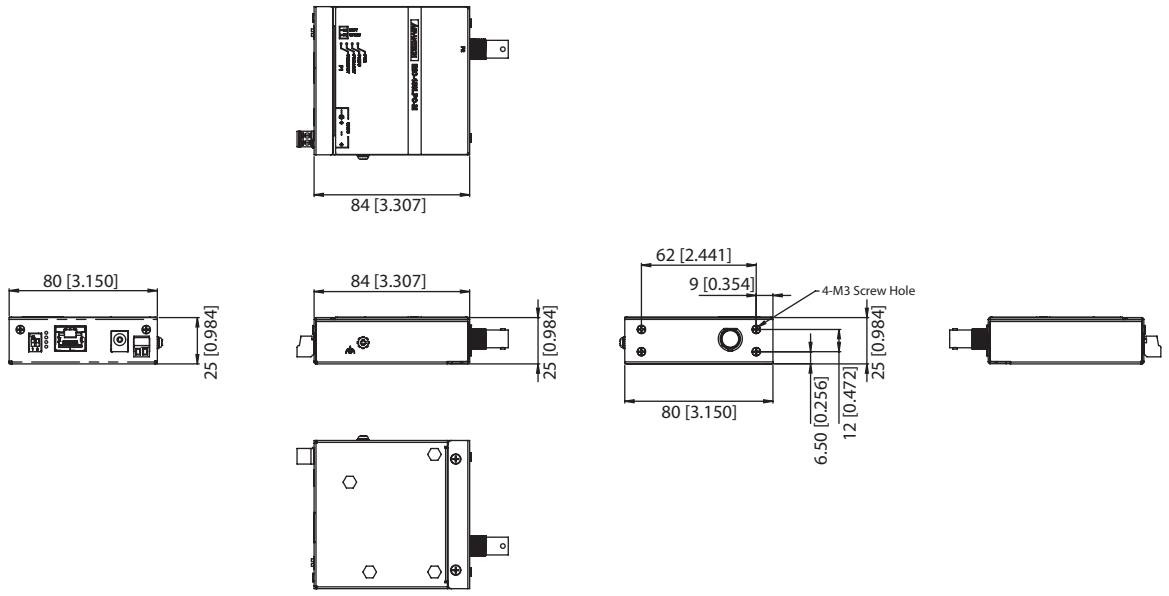
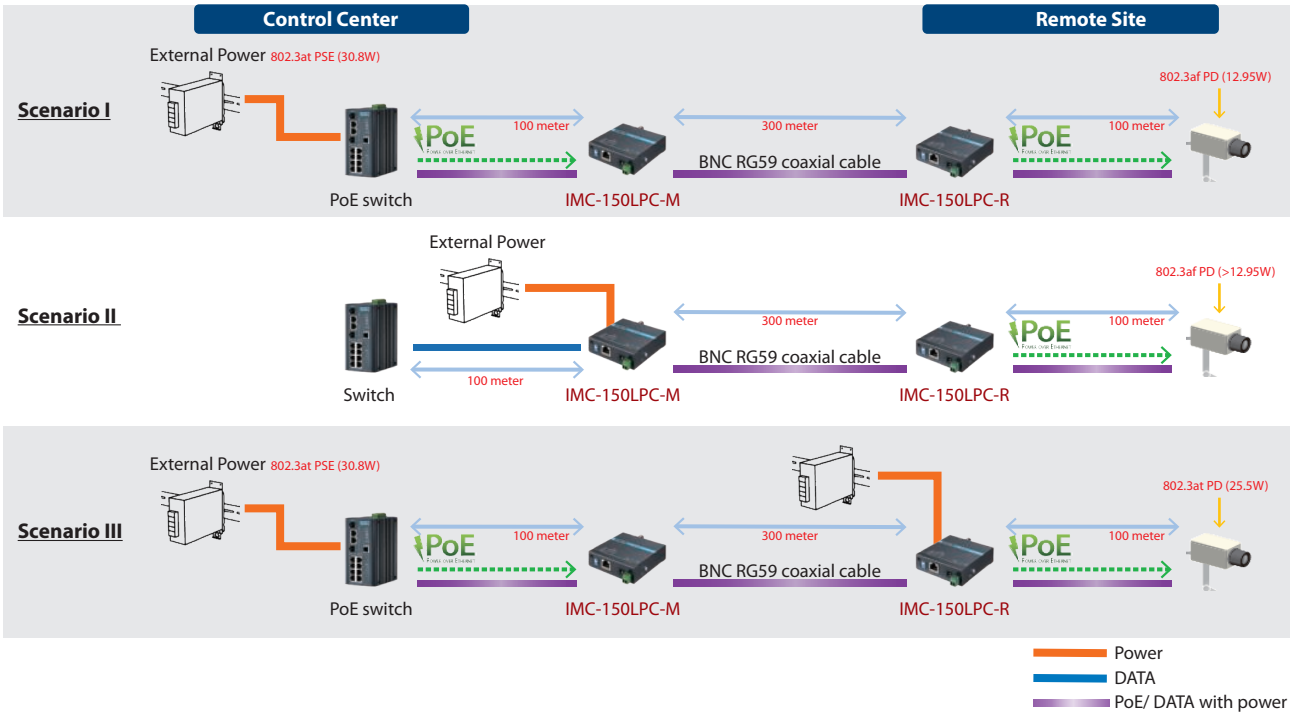
Dimensions

Unit: mm [inch]



Panel Cut-out Dimensions (W x H x D): 84 x 80 x 25 mm (3.307 x 3.15 x 0.984 in.)

Deployment



Note1: Advantech uses RG59 coaxial cables of Belden's 551945 010100, with the DCR conductor resistance value of 15 Ohm/1000ft to conduct tests. The transmitted output power and distance depends on resistance value of coaxial cables installed at field sites.
Note2: The power consumption and power output of IMC-150LPC-M depend on the PD load and the coaxial cable quality and length.