

EKI-1751I

Industrial Ethernet over VDSL2 (with M12)



Features

- Media and protocol converter 3 x 10/100BaseT ports to VDSL
- 2 x RJ45 Ethernet ports
- 1 x M12 Ethernet port
- Operates over existing CAT3 cabling or Coaxial (combo port)
- Supports VDSL, Band plans 997 and 998 (symmetrical and asymmetrical) transmission per ITU-T G.993.2 standard
- Extended operating temperature of -40 °C to +75 °C
- Provides over current and reverse polarity protection
- IP30 Rated enclosure

Introduction

The EKI-1751I is an Industrial Long Reach Ethernet Extenders to utilize existing copper cabling infrastructure (twisted pair or coaxial cable) extending Ethernet to up to 2000 meters over VDSL2. The EKI-1751I adds M12 Ethernet connector in addition to 2 RJ45 Ethernet connectors to offer the most flexibility possible to your project needs. M12 connector adds the option to deploy these easy to use plug-n-play devices into a more secure environments where reliability is the utmost priority.

The EKI-1751I is recommended to be used in pairs over a single pair of telephone-grade unshielded twisted pair (UTP) wire or a coaxial cable. EKI-1751I uses IP30 aluminum enclosures, ideal for industrial applications capable of handling wide range of temperatures -40 to +75 °C. A convenient DIP switch, provides easier configurations option to meet many deployment needs. Installer can select, VDSL2 'Band-Plans' (Asymmetric or Symmetric), SNR margin (6dB or 9dB). Abundant LEDs, offer quick snapshot of status and diagnostics.

Specifications

Interface

- **I/O Port**
 - 2 x 10/100Base-T/TX RJ-45
 - 1 x 10/100Base-T/TX M12
 - 1 Port VDSL2 Extender Combo Terminal Block or BNC
- **Power Connector**
 - 6-pin screw Terminal Block

Dip Switch

- **Pin 1**
 - Selectable Band plan (Symmetric or Asymmetric)
- **Pin 2**
 - Selectable target SNR margin (6dB or 9dB)
- **Pin 3**
 - Selectable CO or RT

Physical

- **Enclosure**
 - Metal Shell
- **Protection Class**
 - IP 30
- **Installation**
 - DIN-Rail
- **Dimensions (W x H x D)**
 - 62.5 x 135 x 106 mm (2.46" x 5.32" x 4.17")

LED Display

- **System LED**
 - PWR1, PWR2
- **Port LED**
 - Link / Speed / Activity

Environment

- **Operating Temperature**
 - 40 ~ 75°C (-40 ~ 167°F)
- **Storage Temperature**
 - 40 ~ 85°C (-40 ~ 185°F)
- **Ambient Relative Humidity**
 - 5 ~ 95% (non-condensing)
- **Humidity**
 - 5 ~ 95% (non-condensing)

Power

- **Power Input**
 - 12 to 48 V_{DC}, redundant dual power input
- **Power Consumption**
 - 5W

Certification

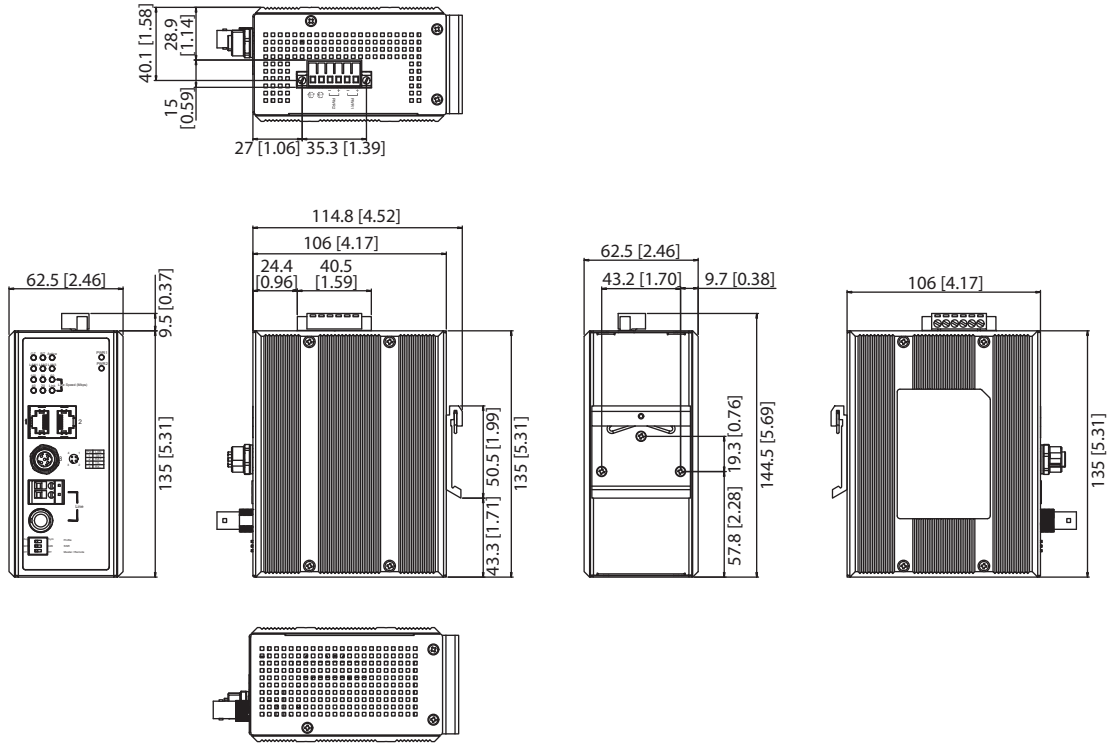
- **EMI**
 - CE, FCC Class A
- **Safety**
 - UL60950
- **EMC**
 - EN 61000-4-2
 - EN 61000-4-3
 - EN 61000-4-4
 - EN 61000-4-5
 - EN 61000-4-6
 - EN 61000-4-8
 - EN 61000-4-11
- **Shock**
 - IEC 60068-2-27
- **Freefall**
 - IEC 60068-2-32
- **Vibration**
 - IEC 60068-2-6

*= Compliant

- **Patent**
 - <http://www.advantech.com/legal/patent>

Dimensions

Unit: mm [inch]



Panel Cut-out Dimensions: 62.5 x 135 x 106 mm (2.46" x 5.32" x 4.17")

Ordering Information

- EKI-1751I-AE Industrial VDSL2 Ethernet Extender, M12