

EKI-17511

Industrial Ethernet Over VDSL2 with M12



Features

- Media and protocol converter 3 x 10/100BASE-T 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 as per the ITU-T G.993.2 standard
- Extended operating temperature of -40 ~ 75°C
- Provides overcurrent and reverse-polarity protection
- IP30-rated enclosure

Introduction

The EKI-17511 is an industrial long reach Ethernet extender that utilizes existing copper cabling infrastructure (twisted pair or coaxial cable) to extend Ethernet to up to 2000 m over VDSL2. The EKI-17511 adds an M12 Ethernet connector as well as 2 RJ45 Ethernet connectors to offer the most flexibility possible for your project needs. The M12 connector adds the option to deploy these user-friendly plug and play devices in secure environments where reliability is the utmost priority.

The EKI-17511 is recommended to be used in pairs over a single pair of telephone-grade unshielded twisted pair (UTP) wire or a coaxial cable. EKI-17511 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 configurability for to meet many deployment needs, giving you immediate control over VDSL2 band plans (asymmetric/symmetric) and the signal-to-noise ratio (6 or 9 dB). The LEDs also offer a quick view of the device status as well as diagnostics functions.

Specifications

Interface

- **I/O Port**
 - I/O Port 2 x 10/100BASE-T/TX RJ-45
 - 1 x 10/100BASE-T/TX M12
 - 1 x 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 (6 or 9dB)
- **Pin 3**
 - Selectable CO or RT

Physical

- **Enclosure**
 - Metal shell
- **Protection Class**
 - IP30
- **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

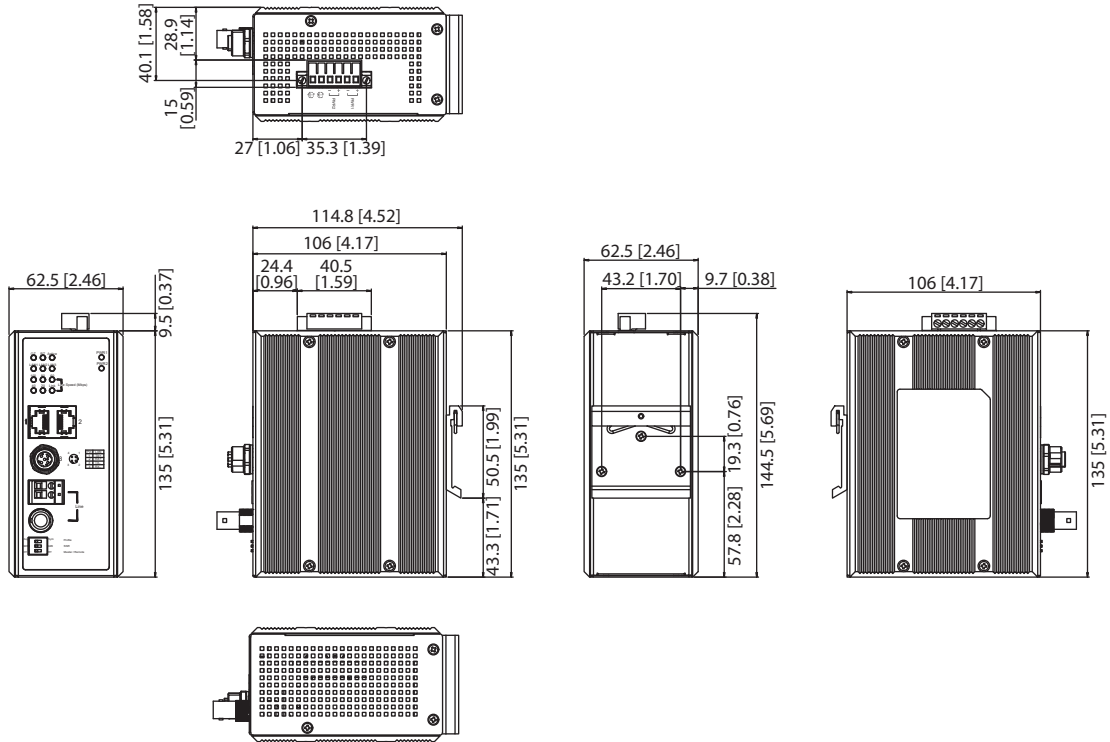
- **Power Input**
 - 12 ~ 48 V_{DC}, redundant dual power input
- **Power Consumption**
 - 5 W

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

Dimensions

Unit: mm [in.]



Panel Cutout 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