EKI-1751I

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-1751I 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-1751I 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-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 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

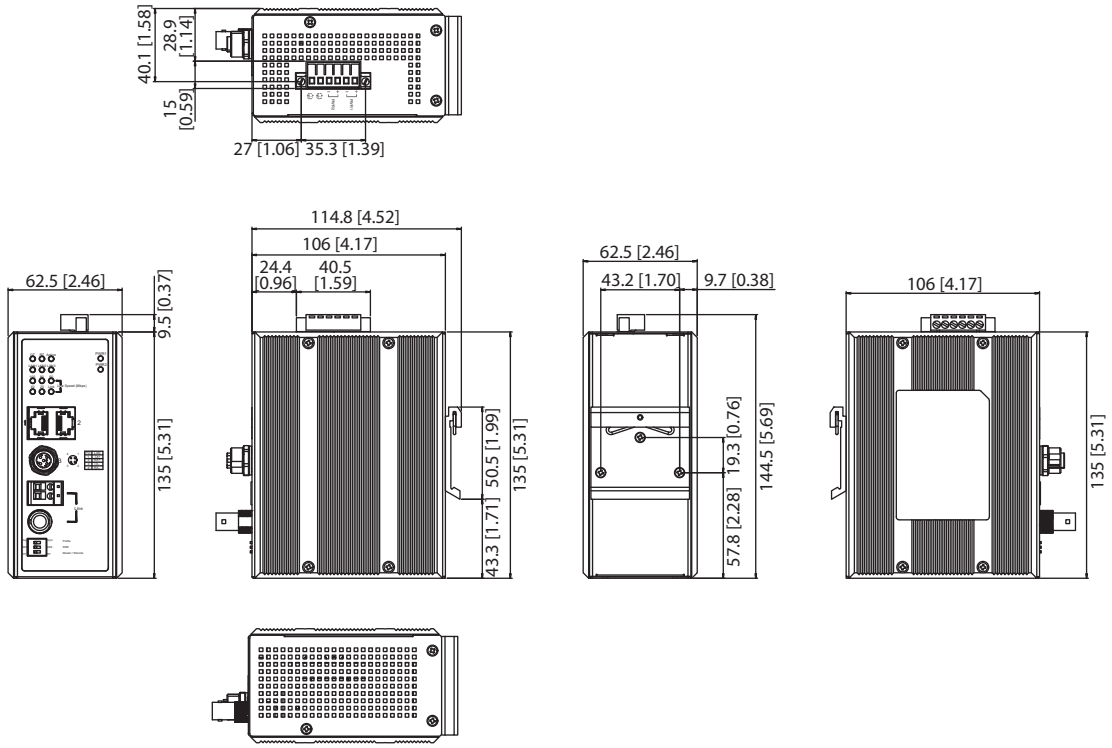
Power Input	12 ~ 48 V_{DC}, redundant dual power input
Power Consumption	5 W

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