



# EKI-2741XL Series

## 10/100/1000T (X) to Fiber Optic Gigabit Media Converters



EKI-2741FL

EKI-2741ML/SL



### Features

- 1 x 10/100/1000 Mbps Ethernet port with RJ45 connector
- 1 x 1000 Mbps fiber port with SC type connector for 1000Base-SX/LX device
- 1 x 100/1000 Mbps Ethernet port with SFP (mini-GBIC) type
- MDI/MDI-X auto crossover
- Supports auto-negotiation
- Cost-Effective

### Introduction

The EKI-2741 series is designed to convert Gigabit Ethernet networks to Gigabit fiber networks by transparently converting Ethernet signals to optic signals. Therefore, the EKI-2741 series is an ideal solution for "fiber to building" applications at central offices or local sites. EKI-2741 series supports MDI/MDIX auto detection, so you don't need to use crossover wires. EKI-2741 series is an enhanced gigabit Ethernet to fiber optic converter. Furthermore, the EKI-2741 series can work normally from 0 to 50°C and also is the most cost-effective solution for fiber optic media converter.

### Specifications

#### Communications

- **Standard** IEEE 802.3, 802.3u, 802.3ab, 802.3x, IEEE 802.3z
- **LAN** 10/100/1000Base-T (X), 1000Base-SX or 1000Base-LX
- **Transmission Distance** Ethernet: Up to 1000 m  
SFP: N/A (EKI-2741FL)  
Multi-mode: Up to 550 m (EKI-2741ML)  
Single-mode: Up to 10 km (EKI-2741SL)  
Up to 1000 Mbps
- **Transmission Speed**
- **Optical Fiber**
  - Multi-mode (EKI-2741ML)
    - Wavelength: 850 nm
    - Tx Power: -4/-9.5 dBm
    - Rx Sensitivity: -17 dBm
    - Parameters: 50/125 um, 62.5/125 um
  - Single-mode (EKI-2741SL)
    - Wavelength: 1310 nm
    - Tx Power: -3/-9.5 dBm
    - Rx Sensitivity: -20 dBm
    - Parameters: 9/125 um

#### Interface

- **Connectors**
  - 1 x RJ45
  - 1 x SC type fiber connector (EKI-2741ML/SL) or
  - 1 x SFP type fiber connector (EKI-2741FL)
- **LED Indicators**
  - EKI-2741ML/SL: FIBER, LAN, PWR
  - EKI-2741FL: Fiber: LINK/ACT, LAN: LINK/ACT, PWR

#### Power

- **Operating Current** 0.61A (EKI-2741ML/SL), 0.52A (EKI-2741FL)
- **Power Consumption** 3.5 W (EKI-2741ML/SL), 0.5 W (EKI-2701FL, w/o insert SFP transceiver)
- **Power Adapter** 5V DC, 1A external power adapter

#### Mechanism

- **Dimensions (W x H x D)** EKI-2741ML/SL: 75 x 22.6 x 101.2 mm (2.95" x 0.89" x 3.98")  
EKI-2741FL: 60.88 x 23 x 75.58 mm (2.4" x 0.91" x 2.98")
- **Enclosure** IP30

#### Protection

- **Reverse Polarity** Present

#### Environment

- **Operating Temperature** 0 ~ 50°C (32 ~ 122°F)
- **Storage Temperature** -40 ~ 70°C (-40 ~ 158°F)
- **Humidity** 5 ~ 90% (non-condensing)
- **MTBF** EKI-2741ML/SL: 1,269,493 hours  
EKI-2741FL: 1,031,686 hours

#### Certification

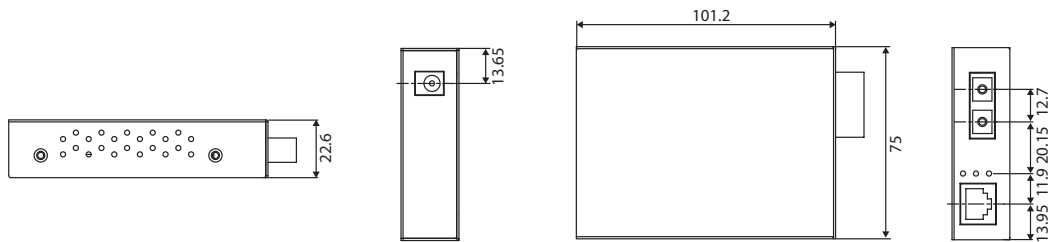
- **Safety** LVD
- **EMI** EN 55024/ EN 55032 Class A, FCC Part 15 Subpart B Class A
- **EMS** EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11
- **Freefall** IEC 60068-2-32
- **Vibration** IEC 60068-2-6



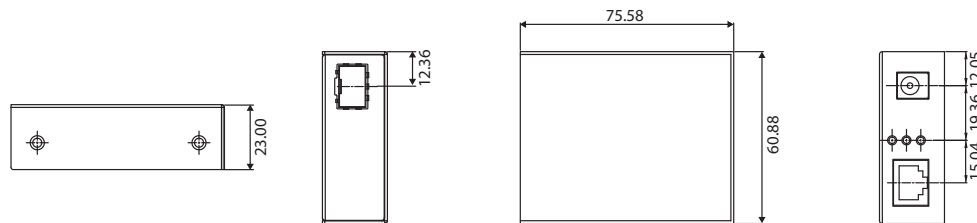
## EKI-2741XL Series

### Dimensions

Unit: mm



**EKI-2741ML/SL Panel Cut-out Dimensions: 75 x 22.6 x 101.2 mm (2.95" x 0.89" x 3.98")**



**EKI-2741FL Panel Cut-out Dimensions: 60.88 x 23 x 75.58 mm (2.4" x 0.91" x 2.98")**

### Ordering Information

Model Number	Description	Wavelength	Transmission Distance
EKI-2741ML-EU-AE	Giga Ethernet to 1000Base-SX Fiber Converter, Multi-mode, SC connector (EU Adapter)	850 nm	550 m
EKI-2741ML-UK-AE	Giga Ethernet to 1000Base-SX Fiber Converter, Multi-mode, SC connector (UK Adapter)	850 nm	550 m
EKI-2741ML-US-AE	Giga Ethernet to 1000Base-SX Fiber Converter, Multi-mode, SC connector (US Adapter)	850 nm	550 m
EKI-2741SL-EU-AE	Giga Ethernet to 1000Base-SX Fiber Converter, Single-mode, SC connector (EU Adapter)	1310 nm	10 km
EKI-2741SL-UK-AE	Giga Ethernet to 1000Base-SX Fiber Converter, Single-mode, SC connector (UK Adapter)	1310 nm	10 km
EKI-2741SL-US-AE	Giga Ethernet to 1000Base-SX Fiber Converter, Single-mode, SC connector (US Adapter)	1310 nm	10 km
EKI-2741FL-EU-AE	Giga Ethernet to SFP Fiber Converter (EU Adapter)	N/A	N/A
EKI-2741FL-UK-AE	Giga Ethernet to SFP Fiber Converter (UK Adapter)	N/A	N/A
EKI-2741FL-US-AE	Giga Ethernet to SFP Fiber Converter (US Adapter)	N/A	N/A

### Optional Accessories

Part Number	Description	Fiber Type	Range	Power Budget
<b>Optical Transceivers (SFP) - LC</b>				
808-38200	SM1310	LC	20 km	14 (db)
808-38201	MM850	LC	550 m	7.5 (db)
808-38203	SM1310/PLUS	LC	30 km	17 (db)
808-38204	SM1550/LONG	LC	40 km	17 (db)
<b>Optical Transceivers (SFP) - SC</b>				
808-38221	SSLX-SM1310/1550	SC	20 km	15 (db)
808-38222	SSLX-SM1550/1310	SC	20 km	15 (db)
808-38223	SSLX-SM1310/1550/PLUS	SC	40 km	20 (db)
808-38224	SSLX-SM1550/1310/PLUS	SC	40 km	20 (db)