

# EKI-2541ML

# EKI-2541SL

## 10/100T (X) to Multi-Mode SC Type Fiber Optic Media Converter

## 10/100T (X) to Single-Mode SC Type Fiber Optic Media Converter



### Features

- 1 x 10/100 Mbps Ethernet port with RJ45 connector
- 1 x 100 Mbps Multi-mode/Single-mode SC type fiber port
- Full/Half duplex flow control and Auto-negotiation
- MDI/MDI-X auto-crossover
- Cost-Effective

### Introduction

The EKI-2541ML/2541SL is designed to convert Ethernet networks to fiber networks by transparently converting Ethernet signals to optic signals. The advantages of fiber optics are wide bandwidth, EMI immunity and long-distance transmissions. Therefore, the EKI-2541ML/2541SL is an ideal solution for "fiber to building" applications at central offices or local sites. EKI-2541ML/2541SL supports MDI/MDIX auto detection, so you don't need to use crossover wires. Furthermore, the EKI-2541ML/SL 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, 802.3x
- **LAN** 10/100Base-T (X), 100Base-FX
- **Transmission Distance** Ethernet: Up to 100 m  
Fiber: Multi-mode: up to 2 km  
Fiber: Single-mode: up to 40 km
- **Transmission Speed** Up to 100 Mbps
- **Optical Fiber**
  - Multi-mode (EKI-2541ML)
    - Wavelength: 1310 nm
    - Tx Power: -14/-20 dBm
    - Rx Sensitivity: -32 dBm
    - Parameters: 50/125 um, 62.5/125 um
  - Single-mode (EKI-2541SL)
    - Wavelength: 1310 nm
    - Tx Power: -8/-15 dBm
    - Rx Sensitivity: -34 dBm
    - Parameters: 9/125 um

#### Interface

- **Connectors** 1 x RJ45  
1 x SC type fiber connector
- **LED Indicators** FIBER, LAN, PWR

#### Power

- **Operating Current** 0.31A
- **Power Consumption** 1.6 W
- **Power Adapter** 5V DC, 1A external power adapter

#### Mechanism

- **Dimensions (W x H x D)** 75 x 22.6 x 101.2 mm (2.95" x 0.89" x 3.98")
- **Enclosure** IP30

#### Protection

- **Reverse Polarity** Present

#### Environment

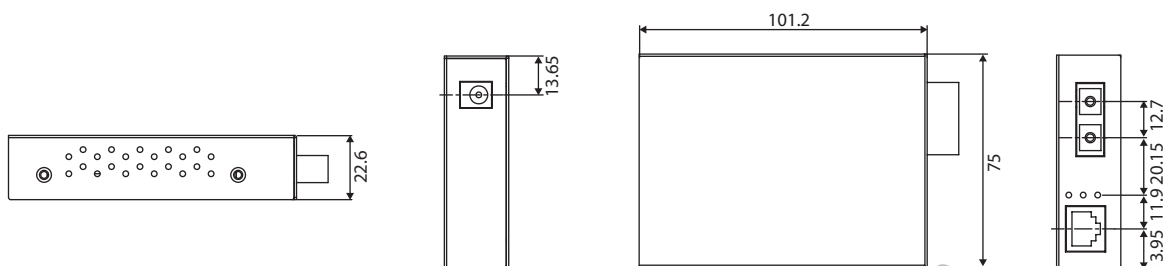
- **Operating Temperature** 0 ~ 50°C (32 ~ 122°F)
- **Storage Temperature** -40 ~ 70°C (-40 ~ 158°F)
- **Humidity** 5 ~ 90% (non-condensing)
- **MTBF** 1,776,203 hours

#### 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
- **Freefall** IEC 60068-2-32
- **Vibration** IEC 60068-2-6

## Dimensions

Unit: [mm]



**Panel Cut-out Dimensions: 75 x 22.6 x 101.2 mm (2.95" x 0.89" x 3.98")**

## Ordering Information

| Model Number     | Description   | Wavelength | Transmission Distance |
|------------------|---|------------|-----------------------|
| EKI-2541ML-EU-AE | 10/100T(X) to Fiber Converter, Multi-mode, SC connector (EU Adapter)  | 1310 nm    | 2 km                  |
| EKI-2541ML-UK-AE | 10/100T(X) to Fiber Converter, Multi-mode, SC connector (UK Adapter)  | 1310 nm    | 2 km                  |
| EKI-2541ML-US-AE | 10/100T(X) to Fiber Converter, Multi-mode, SC connector (US Adapter)  | 1310 nm    | 2 km                  |
| EKI-2541SL-EU-AE | 10/100T(X) to Fiber Converter, Single-mode, SC connector (EU Adapter) | 1310 nm    | 40 km                 |
| EKI-2541SL-UK-AE | 10/100T(X) to Fiber Converter, Single-mode, SC connector (UK Adapter) | 1310 nm    | 40 km                 |
| EKI-2541SL-US-AE | 10/100T(X) to Fiber Converter, Single-mode, SC connector (US Adapter) | 1310 nm    | 40 km                 |