# EKI-2741 Series

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

## Features

- Provides 1 x 10/100/1000 Mbps Ethernet port with RJ45 connector
- Provides 1 x 1000 Mbps fiber port with SC type connector for 1000Base-SX/LX device
- Provides 1 x 100/1000 Mbps Ethernet port with SFP (mini-GBIC) type
- Provides DIP switch for power alarm & LFP
- Supports MDI/MDI-X auto crossover
- Supports auto-negotiation
- Supports redundant 12 ~ 48 $V_{DC}$ power input
- Provides flexible mounting: DIN-rail and wall mount
- Provides Link Fault Pass-through (LFP)
- Jumbo Frame: 9216 bytes

Vertrieb durch AMC
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## Introduction

The EKI-2741 is designed to convert Gigabit Ethernet networks to Gigabit fiber networks by transparently converting Ethernet signals to optic signals. Therefore, the EKI-2741 is an ideal solution for “fiber to building” applications at central offices or local sites. EKI-2741 supports MDI/MDIX auto detection, so you don’t need to use crossover wires. Furthermore, the EKI- 2741 accepts a wide voltage range from 12 ~ 48 $V_{DC}$. EKI-2741 is an enhanced gigabit Ethernet to fiber optic converter. Aside from its standard features, the versatile the EKI-2741 also has the LFP (Link Fault Pass-through) feature. So when one side of the link fails and the other side continues transmitting packets, waiting for a response that never arrives from the disconnected side, EKI-2741 will force the link to shut down as soon as it has noticed the other link has failed, giving the application software a chance to react to the situation.

## 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 100 m<br>Fiber:<br>Multi-mode: Up to 550 m<br>Single-mode: Up to 10 km (EKI-2741LX) or up to 110 km (EKI-2741F)<br>SFP: Up to 110 km (EKI-2741F) |
| **Transmission Speed** | Up to 1000 Mbps |
| **Optical Fiber** | |
| Multi-mode (EKI-2741SX/SXI) | Wavelength: 850 nm<br>Tx Power: -4/-9.5 dBm<br>Rx Sensitivity: -18 dBm<br>Parameters: 50/125 um, 62.5/125 um |
| Single-mode (EKI-2741LX/LXI) | Wavelength: 1310 nm<br>Tx Power: -3/-9.5 dBm<br>Rx Sensitivity: -20 dBm<br>Parameters: 9/125 um |

### Interface

| | |
|---|---|
| **Connectors** | 1 x RJ45<br>1 x SC type fiber connector (EKI-2741SX/LX) or<br>1 x SFP type fiber connector (EKI-2741F)<br>6-pin removable screw terminal (power & relay) |
| **LED Indicators** | P1, P2, P-Fail<br>Fiber: LNK/ACT<br>Ethernet: 1000M, LNK/ACT |
| **DIP Switch** | Power alarm, LFP |

### Power

| | |
|---|---|
| **Power Consumption** | 3.5W |
| **Power Input** | 12 ~ 48 $V_{DC}$, redundant dual inputs |

### Mechanism

| | |
|---|---|
| **Dimensions (W x H x D)** | 30 x 140 x 95 mm (1.18" x 5.51" x 3.74") |
| **Enclosure** | IP30, metal shell with solid mounting kits |
| **Mounting** | DIN-rail, wall |

### Protection

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|---|---|
| **Power Reverse** | Present |
| **Overload current** | Present |

### Environment

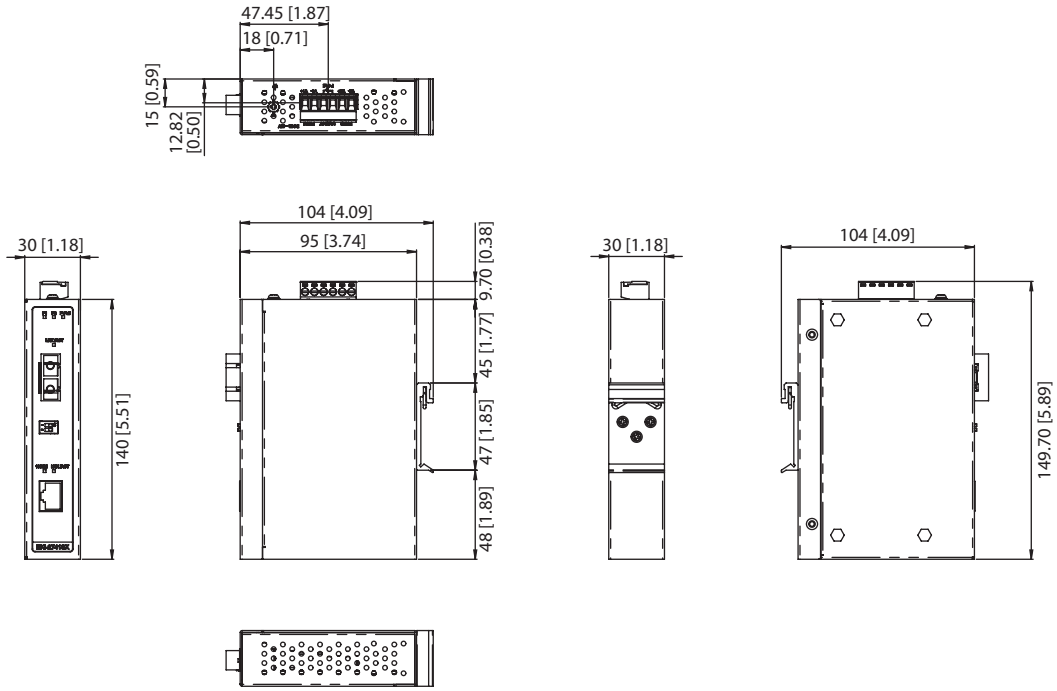
| | |
|---|---|
| **Operating Temperature** | -10 ~ 60 °C (14 ~ 140 °F) |
| Wide Temp Model | -40 ~ 75 °C (-40 ~ 167 °F) |
| **Storage Temperature** | -40 ~ 85 °C (-40 ~ 185 °F) |
| **Operating Humidity** | 10 ~ 95% (non-condensing) |
| **Storage Humidity** | 10 ~ 95% (non-condensing) |
| **MTBF** | TBD |

### Certification

| | |
|---|---|
| **Safety** | UL 60950 |
| **EMI** | CE, FCC Class A |
| **EMS** | EN 61000-4-2<br>EN 61000-4-3<br>EN 61000-4-4<br>EN 61000-4-5<br>EN 61000-4-6<br>EN 61000-4-8 |
| **Shock** | IEC 60068-2-27 |
| **Freefall** | IEC 60068-2-32 |
| **Vibration** | IEC 60068-2-6 |

## Dimensions

Unit: mm [inch]




**Panel Cut-out Dimensions: 30 x 140 x 95 mm (1.18" x 5.51" x 3.74")**

## Ordering Information

- **EKI-2741F-BE** Giga Ethernet to SFP fiber converter
- **EKI-2741FI-BE** Giga Ethernet to SFP fiber converter with wide temp.
- **EKI-2741SX-BE** Giga Ethernet to 1000Base-SX fiber converter
- **EKI-2741SXI-BE** Giga Ethernet to 1000Base-SX fiber converter with wide temp.
- **EKI-2741LX-BE** Giga Ethernet to 1000Base-LX fiber converter
- **EKI-2741LXI-BE** Giga Ethernet to 1000Base-LX fiber converter with wide temp.

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