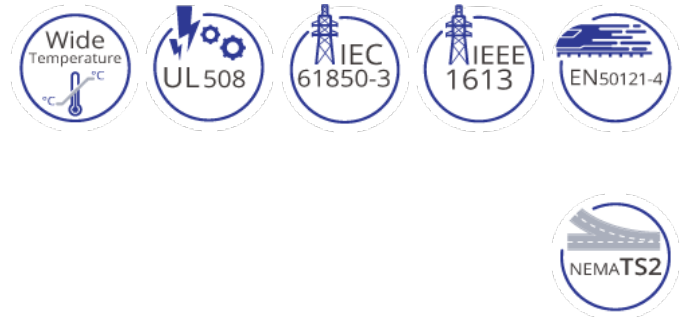


# EL1141 Series

Hardened-grade Fast Ethernet to Fiber Media Converter



## Overview

The EL1141 Series provides media conversion between 10/100BASE-T and 100BASE-SX-LX Fiber. Built specifically for mission-critical applications in harsh environments, the EL1141's hardened design features high shock and vibration resistance, electrical noise immunity, a wide operating temperature range from -40°C to 75°C, and ruggedized aluminum housing. EL1141 passes IEC61850-3/IEEE1613 certifications and is suitable for power substation applications. With triple power inputs, link down alarming, Link-Fault-Pass-Through and a wide range of fiber connectivity options the EL1141 is the ideal media converter for harsh environments.

EtherWAN — "When Connectivity is Crucial."

## Spotlight

### + EN 50121-4 Certification

Designed and tested for railway environment applications

### + IEC 61850-3/IEEE 1613 Certification

Meets standards for application in power substation automation

### + Wide Operating Temperature

-40°C to 75°C wide operating temperature range design is suitable for installation in outdoor cabinets

### + Link-Fault-Pass-Through (LFPT)

Provides constant monitoring of the links connected to the media converters

If a copper link fails, the media converter will pass the fail state on throughout the link, disabling the fiber link and the copper link on the opposite end

## Specifications

### + Technology

#### Standards

IEEE 802.3 10BASE-T  
IEEE 802.3u 100BASE-TX and 100BASE-FX  
IEEE 802.3x Full duplex and flow control

#### Forward and Filtering Rate

14,880pps for 10Mbps  
148,810pps for 100Mbps

#### Packet Buffer Memory

128K bits

#### Processing Type

Store-and-forward  
Auto Negotiation  
Half-Duplex back-pressure and IEEE 802.3x Full-Duplex flow control  
Auto MDI/MDIX

### + Interface

#### Ethernet Ports

10/100BASE-TX: 1 ports  
100BASE-FX: 1 ports

#### LED Indicators

Per Unit: Power 1, Power 2, Fault, Link-Fault-Pass-Through

Per port 10/100TX: Link/Activity, Full-duplex/Collision, Speed

Per port 100FX: Link/Activity, Full-duplex/Collision

#### Relay Contact

Relay contact rating with current 1A @ 30VDC, 0.5A @ 120VAC

### + Environment

#### Operating Temperature

-40 to 75°C (-40 to 167°F)

#### Storage Temperature

-40 to 85°C (-40 to 185°F)

#### Ambient Relative Humidity

5% to 95% (non-condensing)

## + Power

### Input

12 to 48VDC (Terminal Block)  
12VDC (DC Jack)

### Power Consumption

12 to 48VDC, 0.24 to 0.06A  
2.88W Max.

### Protection

Overload Current Protection  
Reverse Polarity Protection

## + Mechanical

### Casing

Aluminum Case  
IP30

### Dimensions

50mm (W) x 110mm (D) x 135mm (H)  
(1.97" (W) x 4.33" (D) x 5.31" (H))

### Weight

0.8Kg (1.76lbs.)

### Installation

DIN-Rail (top hat type 35mm) or panel mounting

## + Regulatory Approvals

### ISO

Manufactured in an ISO 9001 facility

### Safety

UL508  
UL62368-1

### EMI

FCC Part 15B Class A  
EN 55022  
EN 61000-6-4  
EN 55022  
EN 61000-3-2  
EN 61000-3-3

### EMS

EN 61000-6-2  
• EN 61000-4-2 (ESD Standards)  
• EN 61000-4-3 (Radiated FRI Standards)  
• EN 61000-4-4 (Burst Standards)  
• EN 61000-4-5 (Surge Standards)  
• EN 61000-4-6 (Induced RFI Standards)  
• EN 61000-4-8 (Magnetic Field Standards)

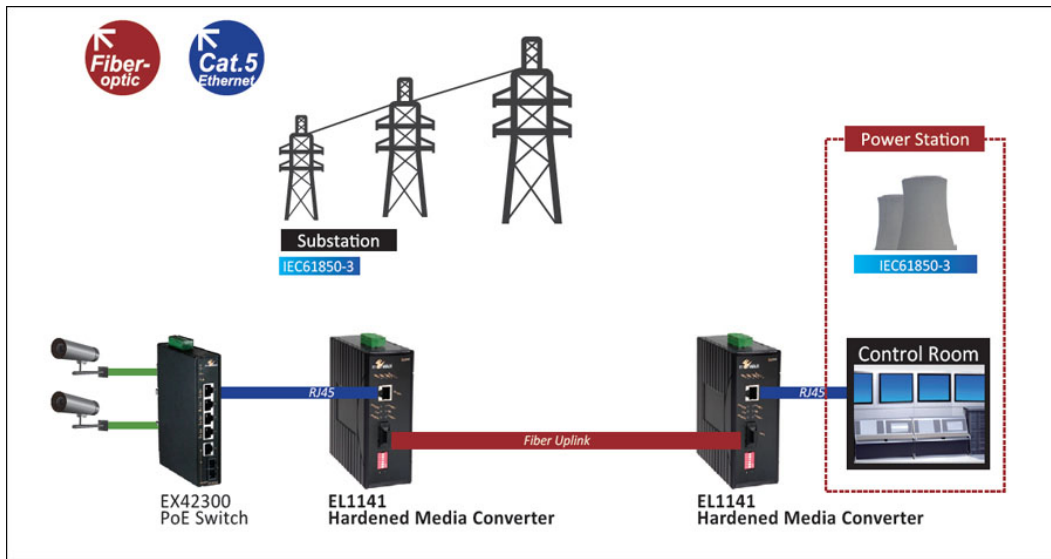
### Environmental Test Compliances

IEC 60068-2-6 Fc (Vibration)  
IEC 60068-2-27 Ea (Shock)  
FED STD 101C Method 5007.1 (Free fall w/ package)

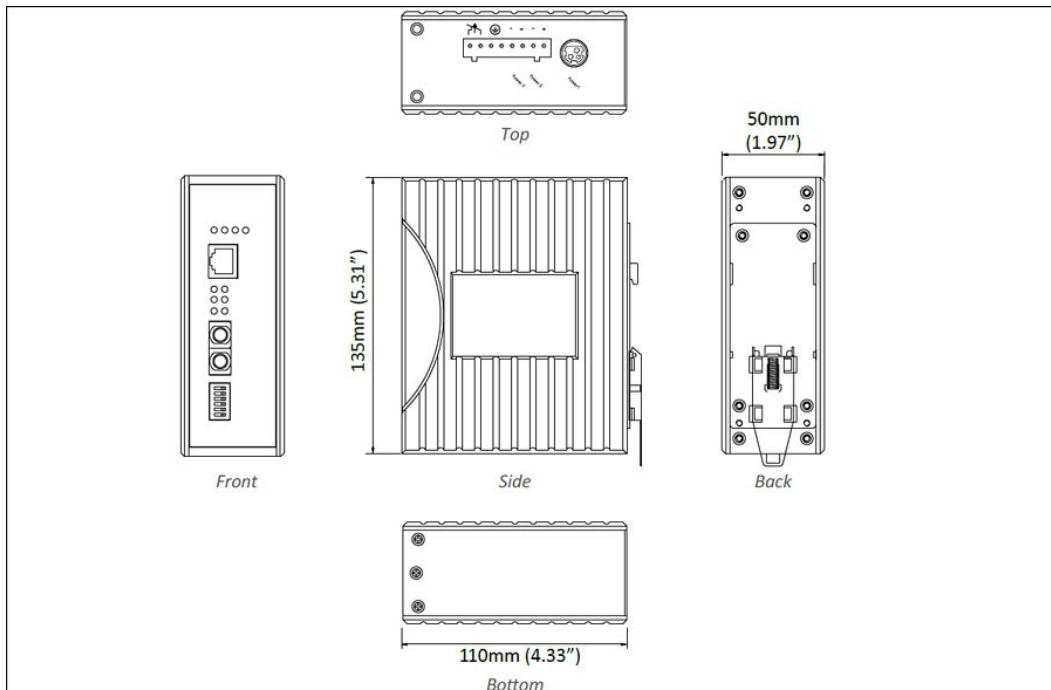
### Industrial Compliance

IEC61850-3 / IEEE1613  
EN50121-4  
NEMA TS2

# Application



# Dimensions



## Ordering Info

### + Model

<b>EL1141-X0B</b>	10/100BASE-TX to 100BASE-FX Hardened Media Converter
-------------------	--

\* DIN-Rail mounting kit included.

### + 100FX Fiber Options (X)

<b>1</b>	Multi Mode (SC) - 2Km (1310nm)
<b>2</b>	Multi Mode (ST) - 2Km (1310nm)
<b>A</b>	Single Mode (SC) - 20Km (1310nm)
<b>B</b>	Single Mode (SC) - 40Km (1310nm)
<b>H</b>	Single Mode (ST) - 20Km (1310nm)
<b>6</b>	Multi Mode (SC) WDM-TX: 1310nm/RX: 1550nm-2Km
<b>7</b>	Multi Mode (SC) WDM-TX: 1550nm/RX: 1310nm-2Km
<b>8</b>	Multi Mode (SC) WDM-TX: 1310nm/RX: 1550nm-5Km
<b>9</b>	Multi Mode (SC) WDM-TX: 1550nm/RX: 1310nm-5Km
<b>P</b>	Single Mode (SC) WDM-TX: 1310nm/RX: 1550nm-20Km
<b>Q</b>	Single Mode (SC) WDM-TX: 1550nm/RX: 1310nm-20Km
<b>R</b>	Single Mode (SC) WDM-TX: 1310nm/RX: 1550nm-40Km
<b>S</b>	Single Mode (SC) WDM-TX: 1550nm/RX: 1310nm-40Km

\* More 100FX Fiber options also available upon request.

### + Optional Accessories

<b>KP-AA96-480</b>	Panel mounting kit
<b>HDR-30-24</b>	30W/1.5A DIN-Rail 24VDC Industrial Power Supply
<b>HDR-60-24</b>	60W/2.5A DIN-Rail 24VDC Industrial Power Supply
<b>EDR-75-24</b>	75W/3.2A DIN-Rail 24VDC Industrial Power Supply
<b>EX41-145046-X</b>	Power Supply 45W 12VDC with Open Wire (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA

