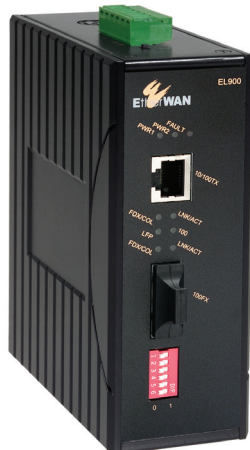


# EL900 Series

Hardened 10/100BASE-TX to 100BASE-FX Media Converter



## Overview

The EL900 Series provides media conversion between 10/100BASE-T and 100BASE-SX-LX Fiber. Built specifically for mission-critical applications in harsh environments, the EL900's hardened design features high shock & vibration resistance, electrical noise immunity, wide operating temperature range from -40°C to 75°C, and ruggedized aluminum housing. With triple power inputs, link down alarming, Link-Fault-Pass-Through and a wide range of fiber connectivity options, the EL900 is the ideal media converter for harsh environments.

EtherWAN – “When Connectivity is Crucial”.

## Spotlight

### • ISA12.12.01 Certification

- Highly qualified for explosive environmental applications and certified by UL with ISA12.12.01 Class I, Division 2 classified for use in hazardous locations

### • Wide Operating Temperature

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

### • Link-Fault-Pass-Through (LFPT)

- LFPT function let network operators be aware of network connection status
- When fiber link is down, LFPT function will turn down Ethernet port to inform connected device that the link is down and vice versa

# Hardware Specifications

## Technology

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### Standards

- IEEE802.3 10BASE-T
- IEEE802.3u 100BASE-TX and 100BASE-FX
- IEEE802.3x 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 IEEE802.3x full-duplex flow control
- Auto MDI/MDIX

## Power

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### Input Voltage

- 10 to 48VDC (DC Terminal Block)
- 12VDC (DC Jack) or 24VAC, 0.185A (AC Terminal Block)

### Power Consumption

- 4.32W MAX. 0.36A @ 12VDC, 0.09A @ 48VDC

### Protection

- Overload current protection
- Reverse polarity protection

## Mechanical

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### 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), Panel, or Rack mounting

## Interface

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### Ethernet Port

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

### LED Indicators

- Per Unit: Power, LFPT
- Per 10/100TX Port: Link/Activity, Full-duplex/Collision, Speed
- Per 100FX port: Link/Activity, Full-duplex/Collision

### Relay Contact

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

## Environment

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### Operating Temperature

- 40°C to 75°C (-40°F to 167°F)  
Tested @ -40°C to 85°C (-40°F to 185°F)

### Storage Temperature

- -40°C to 85°C (-40°F to 185°F)

### Ambient Relative Humidity

- 5% to 95% (non-condensing)

## Regulatory Approvals

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### ISO

- Manufactured in an ISO 9001 facility

### Safety

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#### ISA12.12.01

- Class 1, Division 2 group A, B, C & D for hazardous locations

#### UL 60950-1

#### EN 60950-1

#### IEC 60950-1

### EMI

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#### FCC Part 15B Class A

#### VCCI Class A

#### EN55022

#### EN61000-3-2

#### EN61000-3-3

#### EN61000-6-3

### EMS

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#### EN 61000-6-2

- EN 61000-4-2 (ESD Standards)
- EN 61000-4-3 (Radiated RFI 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 Compliance

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#### IEC 60068-2-6 Fc (Vibration Resistance)

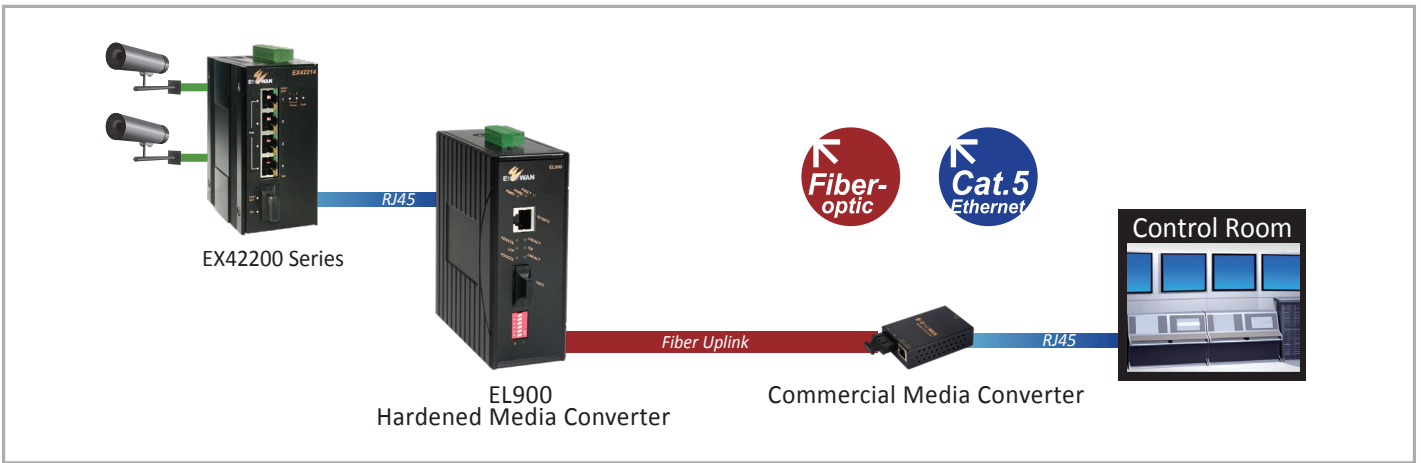
#### IEC 60068-2-27 Ea (Shock)

#### FED STD 101C Method 5007.1 (Free fall w/ package)

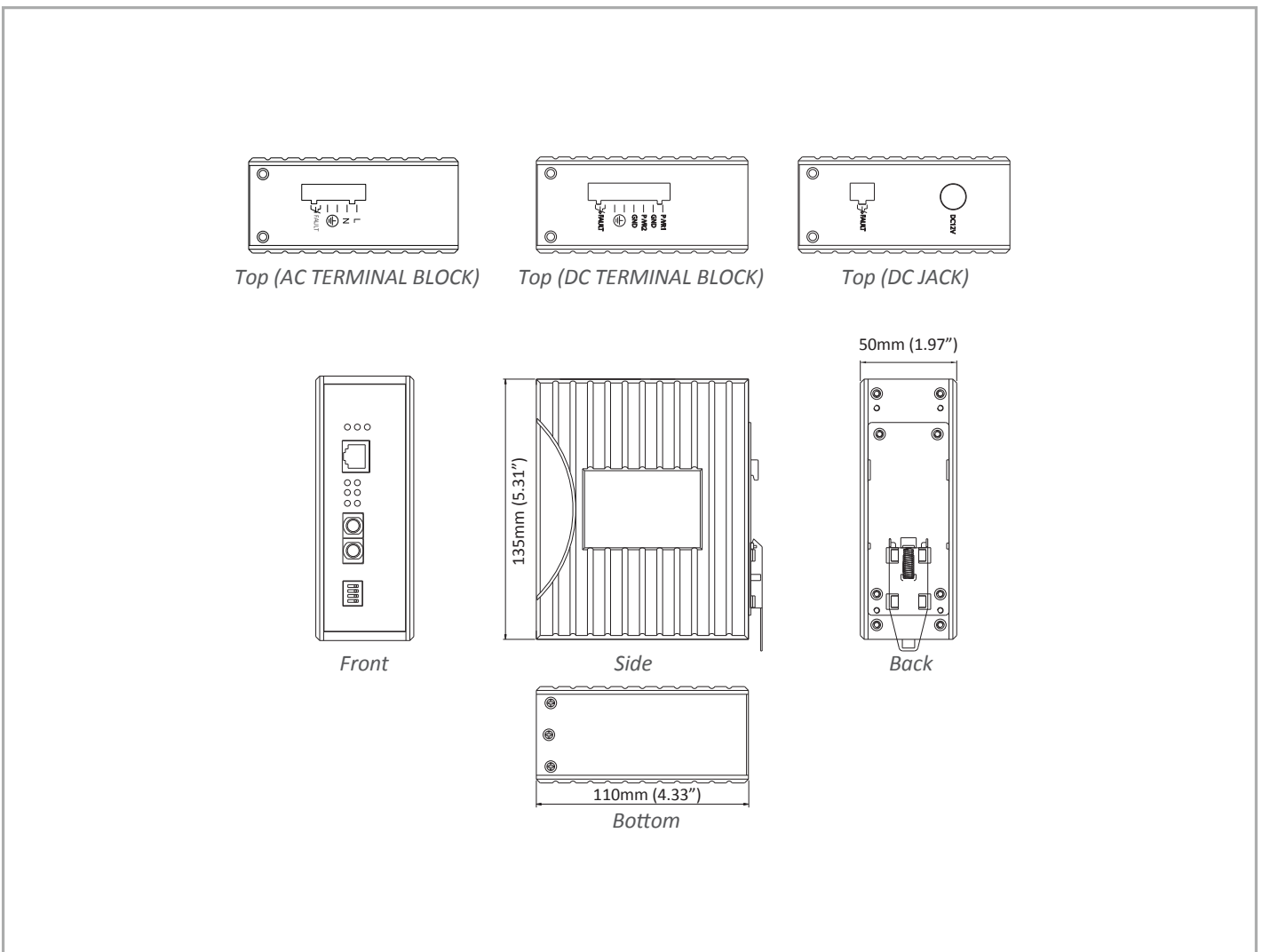
#### NEMA TS1/2

- Environmental requirements for traffic control equipment

# Application Diagram



# Dimensions



# Ordering Information

## Model

<b>EL900-A-Y-1-P</b>	Hardened 10/100BASE-TX to 100BASE-FX Media Converter
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\* DIN-Rail mounting kit included

## 100FX Fiber Options (Y)

<b>B</b>	Multi Mode (SC) - 2Km (1310nm)
<b>C</b>	Multi Mode (ST) - 2Km (1310nm)
<b>D</b>	Multi Mode (SC) WDM -TX:1310nm/RX:1550nm - 2Km
<b>E</b>	Multi Mode (SC) WDM -TX:1550nm/RX:1310nm - 2Km
<b>F</b>	Multi Mode (SC) WDM-TX:1310nm/RX:1550nm - 5Km
<b>G</b>	Multi Mode (SC) WDM-TX:1550nm/RX:1310nm - 5Km
<b>Q</b>	Single Mode (SC) WDM -TX:1310nm/RX:1550nm - 20Km
<b>R</b>	Single Mode (SC) WDM -TX:1550nm/RX:1310nm - 20Km
<b>S</b>	Single Mode (SC) WDM -TX:1310nm/RX:1550nm - 40Km
<b>T</b>	Single Mode (SC) WDM -TX:1550nm/RX:1310nm - 40Km
<b>M</b>	Single Mode (ST) - 20Km (1310nm)
<b>N</b>	Single Mode (SC) - 20Km (1310nm)
<b>O</b>	Single Mode (SC) - 40Km (1310nm)

## Power Connector Options (P)

<b>A</b>	DC Terminal Block
<b>B</b>	DC Jack
<b>C</b>	24VAC Terminal Block

## Optional Accessories

<b>KP-AA96-480</b>	Panel mounting Kit
<b>DR-30-24</b>	30W/1.5A DIN-Rail 24VDC Industrial Power Supply (Optional, For Terminal Block)
<b>DR-60-24</b>	60W/2.5A DIN-Rail 24VDC Industrial Power Supply (Optional, For Terminal Block)
<b>DR-75-24</b>	75W/3.2A DIN-Rail 24VDC Industrial Power Supply (Optional, For Terminal Block)
<b>DR-120-24</b>	120W/5A DIN-Rail 24VDC Industrial Power Supply (Optional, For Terminal Block)
<b>41-136046-X</b>	36W/3A 12VDC hardened power adapter with open wire in aluminum housing (Optional, For Terminal Block); (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA
<b>41-136044-X</b>	36W/3A 12VDC hardened power adapter with latched DC jack in aluminum housing (Optional, For DC Jack); (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA