

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

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

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

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

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

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

ISO

- Manufactured in an ISO9001 facility

Safety

ISA12.12.01

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

UL60950-1

EN60950-1

IEC60950-1

EMI

FCC Part 15B, Class A

EN61000-6-3

EN55022

EN61000-3-2

EN61000-3-3

EMS

EN61000-6-2

- EN61000-4-2 (ESD Standards)
- EN61000-4-3 (Radiated RFI Standards)
- EN61000-4-4 (Burst Standards)
- EN61000-4-5 (Surge Standards)
- EN61000-4-6 (Induced RFI Standards)
- EN61000-4-8 (Magnetic Field Standards)

Environmental Test Compliance

IEC60068-2-6 Fc (Vibration Resistance)

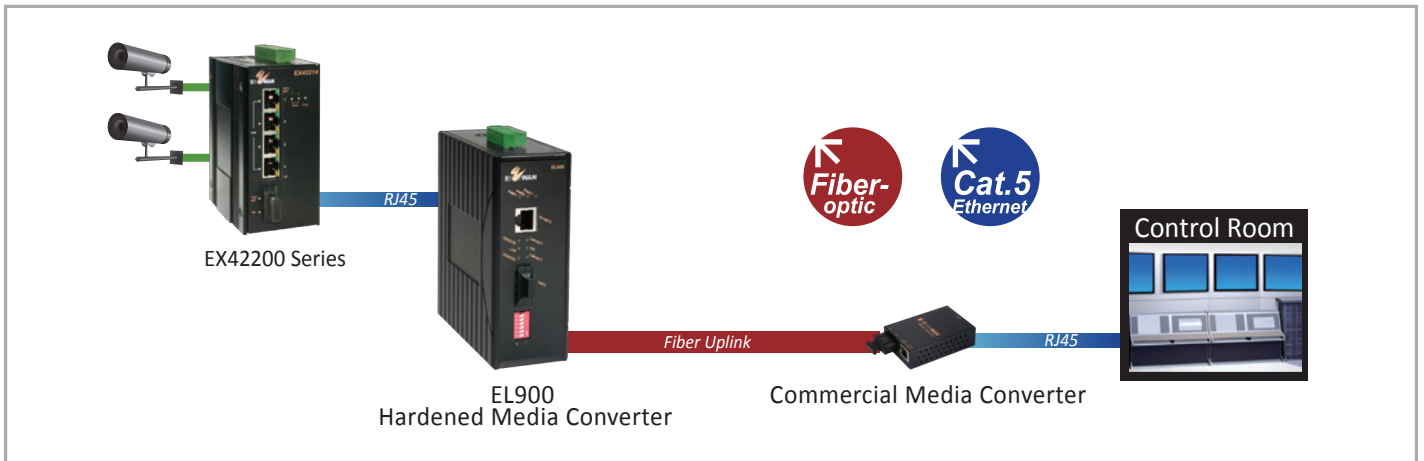
IEC60068-2-27 Ea (Shock)

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

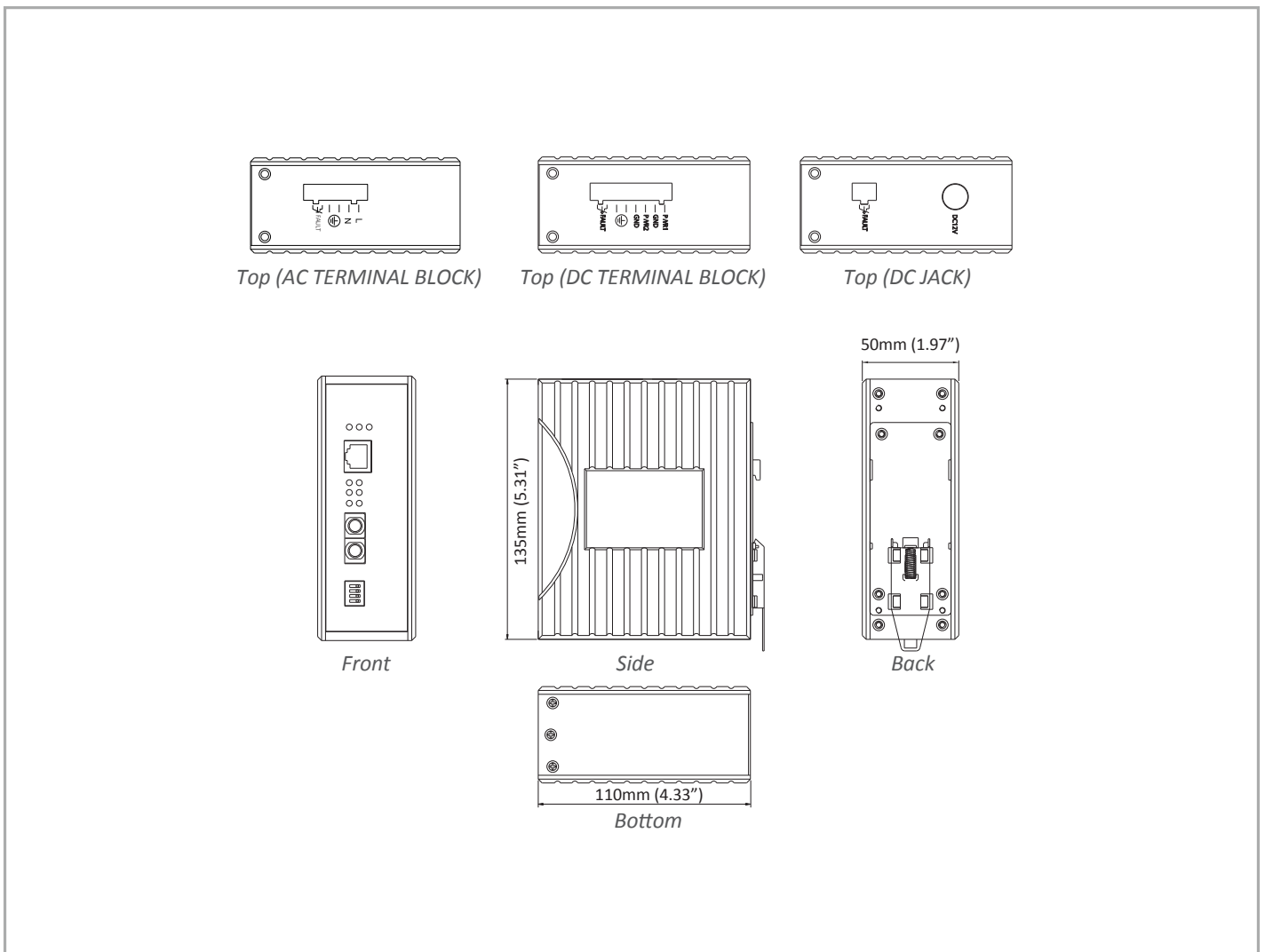
NEMA TS1/2

- Environmental requirements for traffic control equipment

Application Diagram



Dimensions



Ordering Information

Model

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

100FX Fiber Options (Y)

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

Power Connector Options (P)

A	DC Terminal Block
B	DC Jack
C	24VAC Terminal Block

Optional Accessories

KP-AA96-480	Panel mounting Kit
DR-30-24	30W/1.5A DIN-Rail 24VDC Industrial Power Supply (Optional, For Terminal Block)
DR-60-24	60W/2.5A DIN-Rail 24VDC Industrial Power Supply (Optional, For Terminal Block)
DR-75-24	75W/3.2A DIN-Rail 24VDC Industrial Power Supply (Optional, For Terminal Block)
DR-120-24	120W/5A DIN-Rail 24VDC Industrial Power Supply (Optional, For Terminal Block)
41-136046-X	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
41-136044-X	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