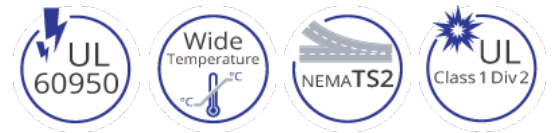


## EL9000 Series

Hardened 1000BASE-T to 1000BASE-SX/LX/BX Media Converter



## Overview

**This product is discontinued as of 31th July 2021. [Click here](#) for alternative product.**

The EL9000 Series provides media conversion between 1000BASE-T(X) and 1000BASE-SX-LX Fiber. Built specifically for missioncritical applications in harsh environments, the EL9000'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 EL9000 is the ideal media converter for environments where connectivity is crucial.

EtherWAN — "When Connectivity is Crucial."

## Spotlight

### Gigabit Connectivity

- » 1000BASE-TX and 1000BASE-SX/LX/BX Ethernet transmission conversion
- » 1000Mbps Full duplex and full wire-speed forwarding rate

### 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

# Specifications

## Technology

### Standards

- IEEE802.3ab 1000BASE-T
- IEEE802.3z 1000BASE-SX/1000BASE-LX
- IEEE802.3x full duplex and flow control

### Forward and Filtering Rate

- 1,488,100pps for 1000Mbps

### Processing Type

- Auto Negotiation
- Half duplex back-pressure and IEEE802.3x full-duplex flow control
- Auto-MDI/MDIX

---

## Power

### Input Voltage

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

### Power Consumption

- 9.12W Max, 0.76A @ 12VDC, 0.38A@ 24VDC, 0.19A @ 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**

- 1000BASE-T: 1 port
- 1000BASE-SX/LX: 1 port

### **LED Indicators**

- Per Unit: Power, Power2, Fault
- Per Port: LNK, TX, RX

### **DIP Switch**

- No.1: LFPT on/off
- No.2: Auto-negotiation for fiber port on/off
- No.3: Alarm for copper port on/off
- No.4: Alarm for fiber port on/off

### **Alarm 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 ISO 9001 facility

### EMI

FCC Part 15B Class A

VCCI Class A

EN 55022

EN 61000-3-2

EN 61000-3-3

EN 61000-6-3

### Safety

ISA 12.12.01 (UL1604) for Hazardous Locations

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

UL 60950-1

### EMS

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

IEC 60068-2-6 Fc (Vibration Resistance)

IEC 60068-2-27 Ea (Shock)

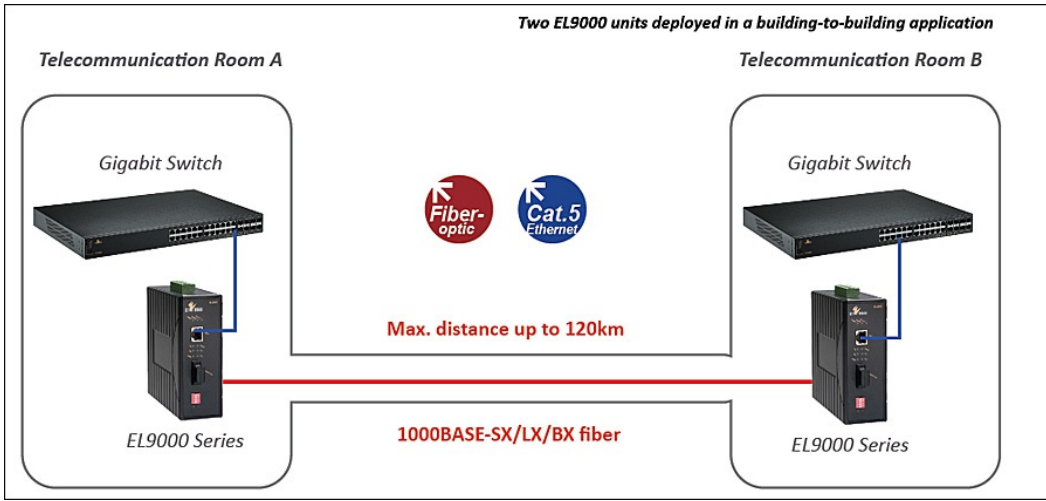
FED STD 101C Method 5007.1 (Free fall w/ package)

### Industrial Compliance

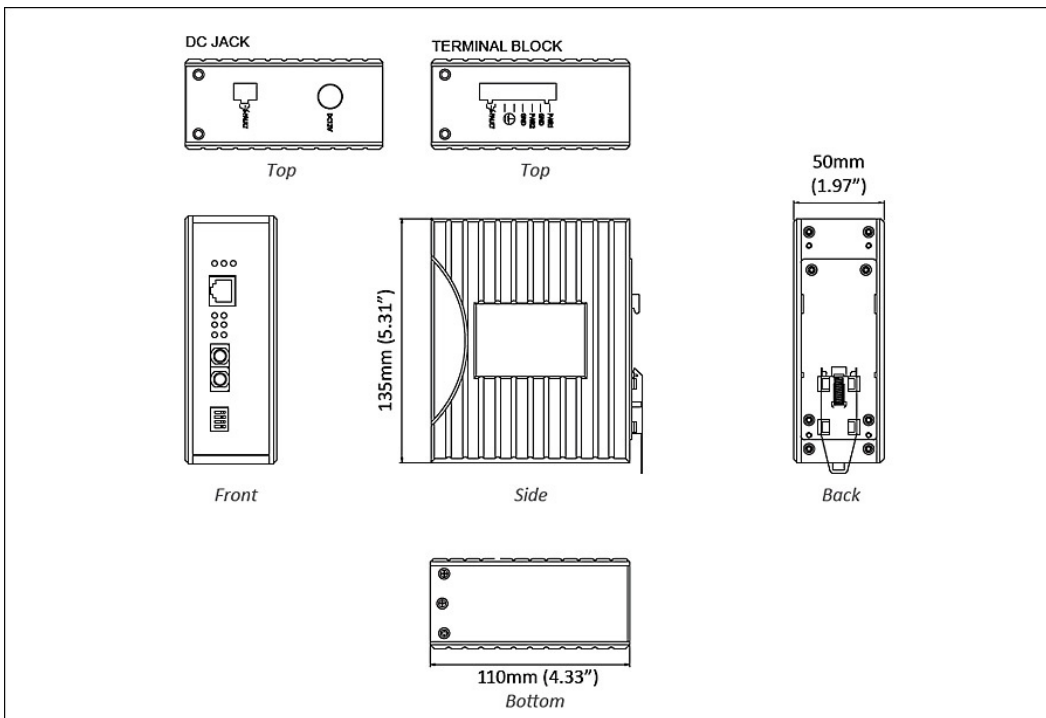
NEMA TS2

---

# Application



# Dimensions



## Ordering Info

### Model

<b>EL9000-A-Y-1-P</b>	1000BASE-T to 1000BASE-SX/LX Hardened Media Converter
-----------------------	---

### Gigabit Fiber Options (Y)

<b>B</b>	1000BASE-SX (SC) - 550m (850nm)
<b>C</b>	1000BASE-SX (SC) - 2Km (1310nm)
<b>N</b>	1000BASE-LX (SC) - 10Km (1310nm)
<b>O</b>	1000BASE-LX (SC) - 20Km (1310nm)
<b>R</b>	1000BASE-BX (SC) WDM-TX: 1310nm/RX: 1550nm-20Km
<b>S</b>	1000BASE-BX (SC) WDM-TX: 1550nm/RX: 1310nm-20Km

\* More Gigabit options are also available upon request.

### Power Connector Options (P)

<b>A</b>	Terminal Block
<b>B</b>	DC Jack

### Optional Accessories

<b>KP-AA96-480</b>	Panel mount 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
<b>EX41-145044-X</b>	Power Supply 45W 12VDC with Latch (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA



© EtherWAN Systems, Inc. All rights reserved. 20220629

EtherWAN is constantly developing and improving products. Specifications are subject to change without notice and without incurring any obligation.