

# EL9100 Series

Hardened 10/100/1000BASE-TX to 1000BASE-SX/LX/BX Media Converter



## Overview

**This product is discontinued as of 15th December 2020. [click here](#) for alternative product.**

The EL9100 Series provides media conversion between 10/100/1000BASE-T(X) and 1000BASE-SX-LX Fiber. Built specifically for mission-critical applications in harsh environments, the EL9100'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 EL9100 is the ideal media converter for environments where connectivity is crucial.

EtherWAN — "When Connectivity is Crucial."

## Spotlight

### Gigabit Connectivity

- » Auto 10/100/1000BASE-TX and 1000BASE-SX/LX/BX Ethernet transmission conversion
- » 1000Mbps Full duplex, 10/100MBps Full/Half duplex
- » Full wire-speed forwarding rate

### UL508 Certification

- » Specific design for industrial communication applications with UL508 safety certification

### Wide Operating Temperature

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

# Specifications

## Technology

### Standards

- IEEE802.3 10BASE-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
  - Auto-MDI/MDIX
- 

## Power

### Input Voltage

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

### Power Consumption

- 7.68W Max, 0.16A@48VDC

### Protection

- Overload current protection
  - Reverse polarity protection
- 

## Mechanical

### Casing

- Aluminum Case
- IP30

### Dimensions

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

### Weight

- 0.8Kg (1.76lbs.)

## Installation

- DIN-Rail (Top hat type 35mm), Panel, or Rack mounting
- 

## Interface

### Ethernet Port

- 1000BASE-TX: 1 port
- 1000BASE-SX/LX/BX: 1 port

### LED Indicators

- Per Unit: Power1, Power2, Power3, Fault, LFPT
- Per 10/100/1000BASE-TX Port: Link/ACT, 1000M, Full-duplex
- Per 1000SX/LX/BX Port: Link/Act

### DIP Switch

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

### Alarm Contact

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

## Environment

### Operating Temperature

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

### Storage Temperature

- -40 to 85°C (-40 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 61000-6-4

## Safety

UL 508

## 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

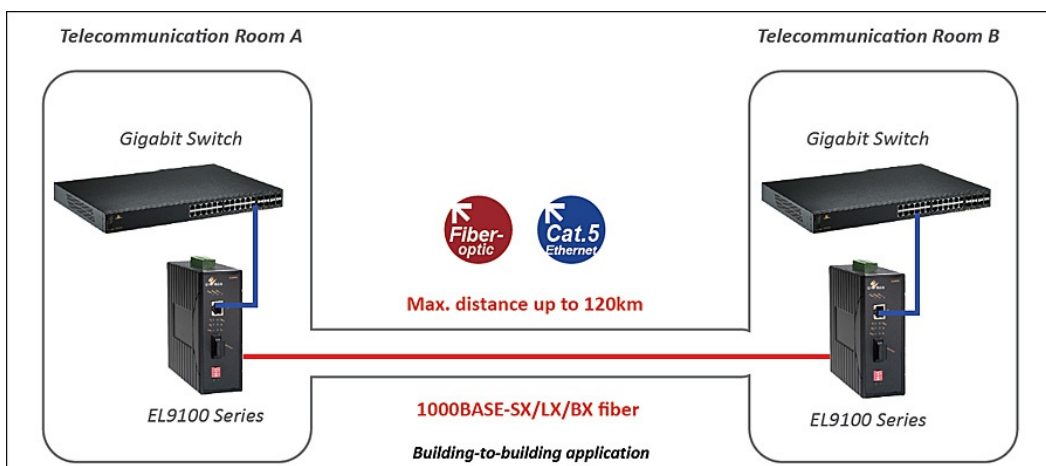
IEC 60068-2-6 Fc (Vibration Resistance)

IEC 60068-2-27 Ea (Shock)

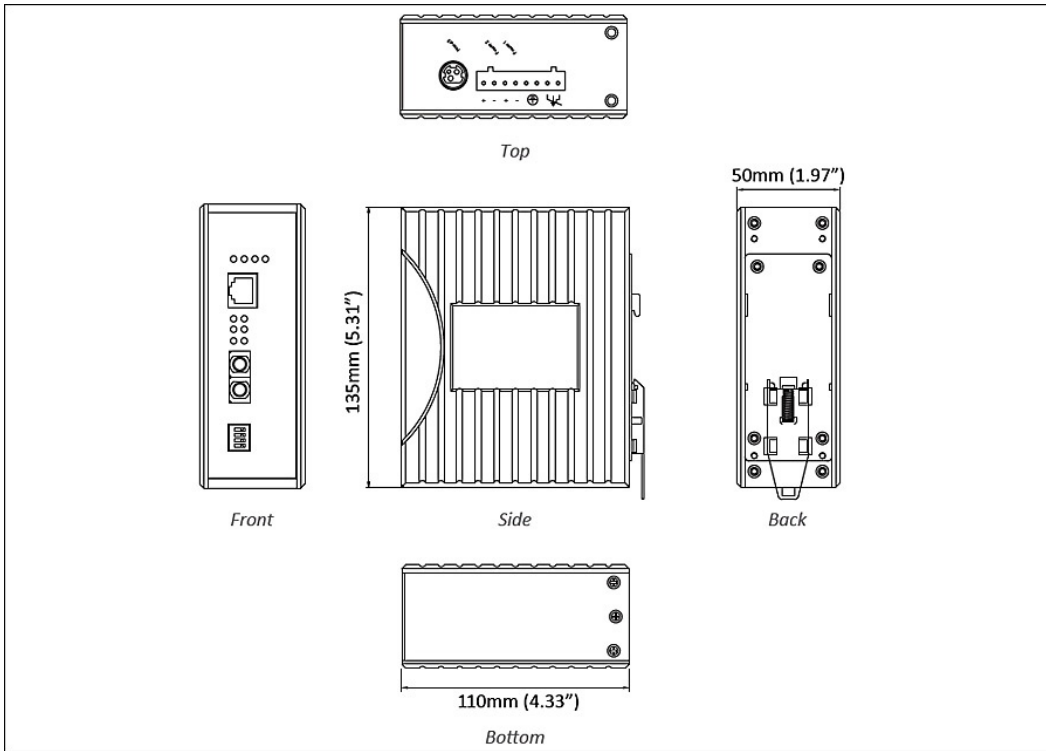
FED STD 101C Method 5007.1 (Free fall w/package)

---

## Application



## Dimensions



## Ordering Info

### Model

<b>EL9100-X1B</b>	10/100/1000BASE-TX to 1000BASE-SX/LX/BX Hardened Media Converter
-------------------	--

### Gigabit Port Options (X)

<b>3</b>	1000BASE-SX (SC) - 550m
<b>4</b>	1000BASE-SX (SC) - 2Km
<b>5</b>	1000BASE-SX (ST) - 550m
<b>A</b>	1000BASE-LX (SC) - 10Km
<b>B</b>	1000BASE-LX (SC) - 20Km
<b>E</b>	1000BASE-LX (SC) - 40Km (1310nm)
<b>H</b>	1000BASE-LX (ST) - 10Km (1310nm)
<b>I</b>	1000BASE-LX (ST) - 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

\* DIN-Rail mounting kit included.

### Optional Accessories

<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. 20230211

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