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

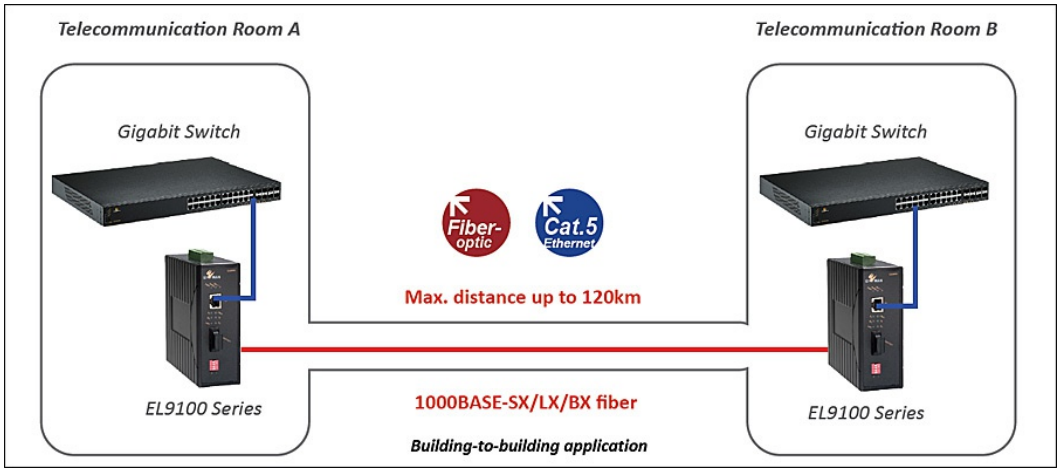
EN 61000-3-2
EN 61000-3-3
EN 61000-6-4

Safety
UL 508

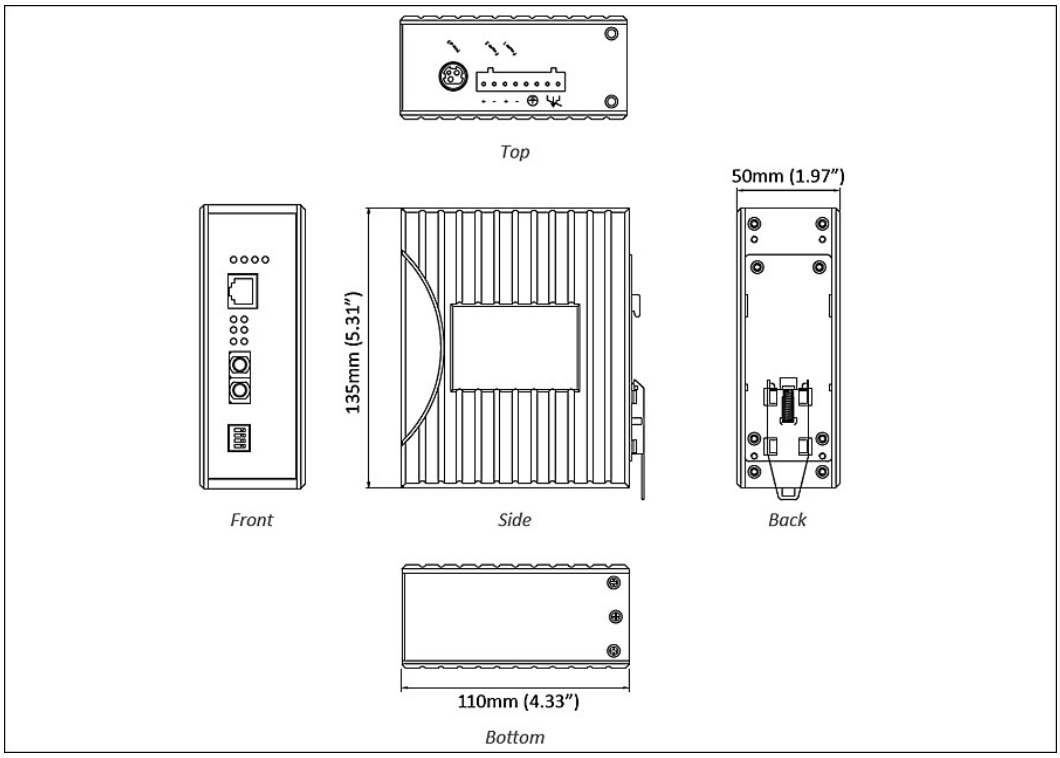
EMS
EN 61000-6-2
• EN 61000-4-2 (ESD Standards)
• EN 61000-4-3 (Radiated RFI Standards)
• EN 61000-4-4 (Burst Standards)
• EN 61000-4-5 (Surge Standards)
• EN 61000-4-6 (Induced RFI Standards)
• EN 61000-4-8 (Magnetic Field Standards)

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

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

Gigabit Port Options (X)

3	1000BASE-SX (SC) - 550m
4	1000BASE-SX (SC) - 2Km
5	1000BASE-SX (ST) - 550m
A	1000BASE-LX (SC) - 10Km
B	1000BASE-LX (SC) - 20Km
E	1000BASE-LX (SC) - 40Km (1310nm)
H	1000BASE-LX (ST) - 10Km (1310nm)
I	1000BASE-LX (ST) - 20Km (1310nm)
R	1000BASE-BX (SC) WDM-TX: 1310nm/RX: 1550nm-20Km
S	1000BASE-BX (SC) WDM-TX: 1550nm/RX: 1310nm-20Km

* DIN-Rail mounting kit included.

Optional Accessories

HDR-30-24	30W/1.5A DIN-Rail 24VDC Industrial Power Supply
HDR-60-24	60W/2.5A DIN-Rail 24VDC Industrial Power Supply
EDR-75-24	75W/3.2A DIN-Rail 24VDC Industrial Power Supply
EX41-145046-X	Power Supply 45W 12VDC with Open Wire (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA
EX41-145044-X	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. 20260107
EtherWAN is constantly developing and improving products. Specifications are subject to change without notice and without incurring any obligation.