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)

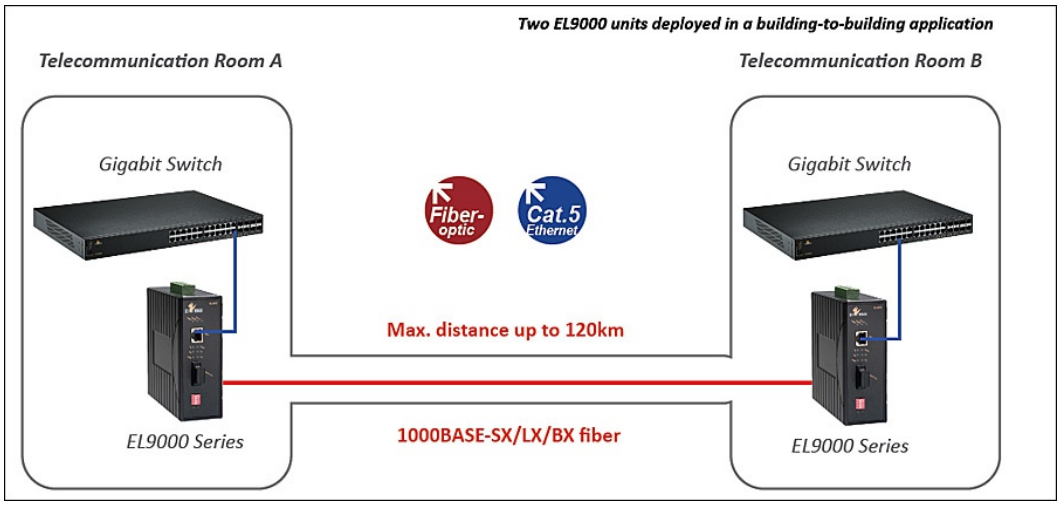
Environmental Test Compliance

IEC 60068-2-6 Fc (Vibration Resistance)
IEC 60068-2-27 Ea (Shock)
FED STD 101C Method 5007.1 (Free fall w/ package)

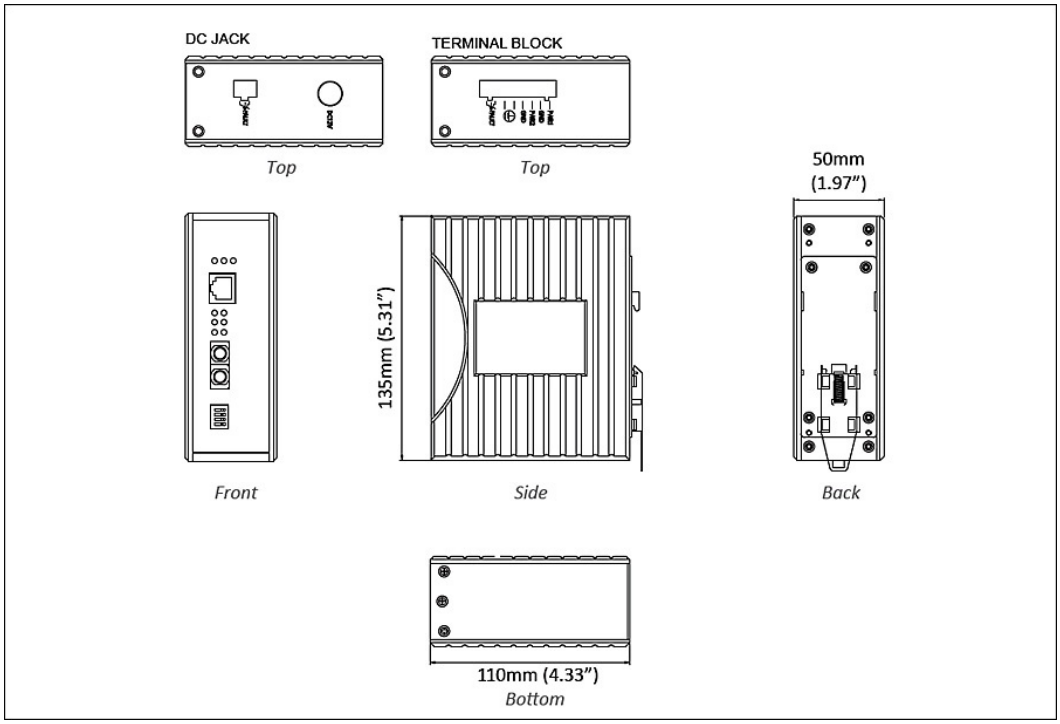
Industrial Compliance

NEMA TS2

Application



Dimensions



Ordering Info

Model

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

Gigabit Fiber Options (Y)

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

* More Gigabit options are also available upon request.

Power Connector Options (P)

A	Terminal Block
B	DC Jack

Optional Accessories

KP-AA96-480	Panel mount kit
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.