EL9020 Series

Hardened 10/100/1000BASE-TX to Gigabit SFP Media Converter



Overview

This product is discontinued as of 15th December 2020.click here for alternative product.

The EL9020 Series provides media conversion between 10/100/1000BASE-TX and 1000BASE SFP Fiber. Built specifically for missioncritical applications in harsh environments, the EL9020's hardened design features high shock & vibration resistance, electrical noise immunity, wide operating temperature range from -40 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 EL9020 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
» SFP socket flexible for Gigabit fiber optic expansion

UL 508 Certification

» Specific design for industrial communication applications with UL 508 safety certification

Wide Operating Temperature

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

Specifications

Technology

Standards

- IEEE 802.3 10BASE-T
- IEEE 802.3u 100BASE-TX
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3z 1000BASE-SX/1000BASE-LX
- IEEE 802.3x Full duplex and flow control

Forward and Filtering Rate

- 1,488,100pps for 1000Mbps

Processing Type

- Auto Negotiation
- Half duplex back-pressure and IEEE 802.3x full-duplex flow control
- Auto-MDI/MDIX

Power

Input

- 12-48VDC (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
• 10/100/1000BASE-TX: 1 port
• Gigabit SFP: 1 port

LED Indicators
• Per Unit: Power 1, Power 2, Power 3, Fault, LFPT
• Per 10/100/1000TX Port: Link/Activity, 100M, 1000M, Full-duplex/Collision
• Per Gigabit SFP Port : Link/Activity

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

Safety

UL 508

EMI

FCC Part 15B Class A
VCCI Class A
EN 55022
EN 61000-3-2
EN 61000-3-3
EN 61000-6-3

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)

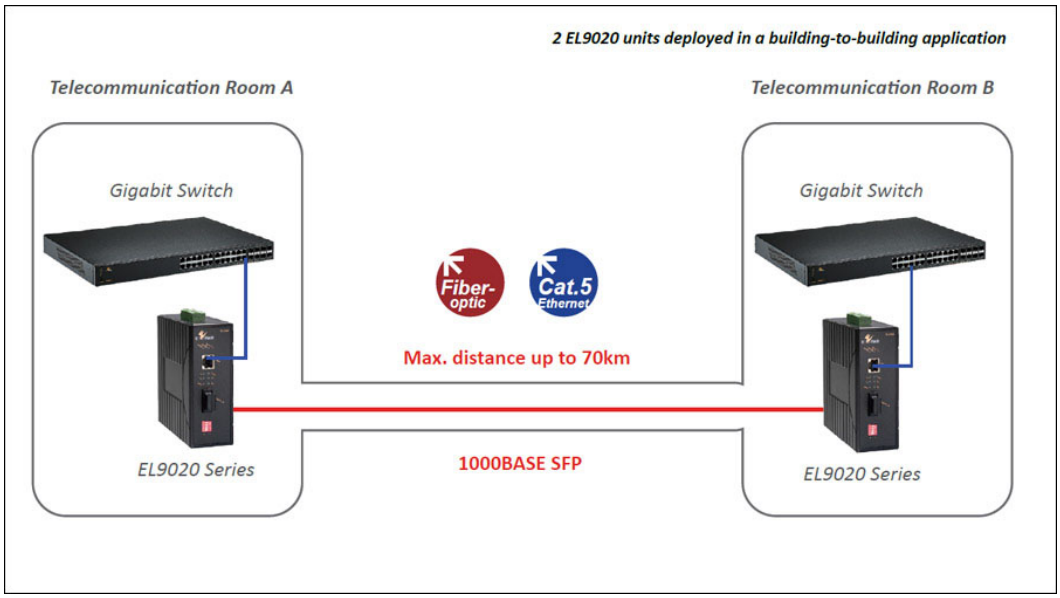
Environmental Test Compliance

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

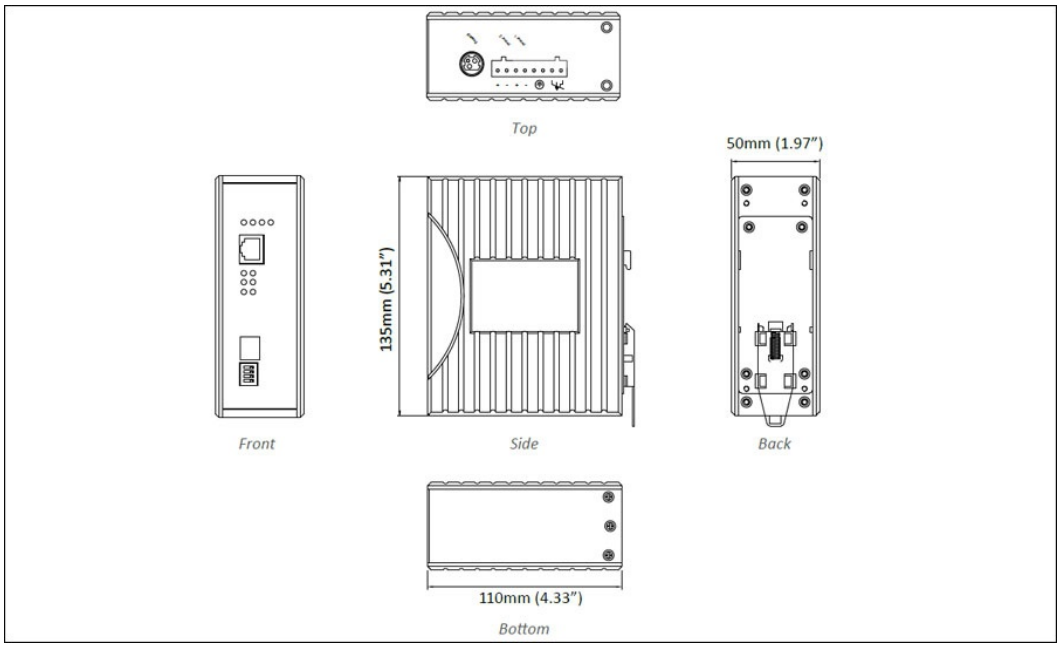
Industrial Compliance

NEMA TS2

Application



Dimensions



Ordering Info

Model

EL9020-00B	10/100/1000BASE-TX to Gigabit SFP Hardened Media Converter

* DIN-Rail mounting kit included.

Optional Accessories

KP-AA96-480	Panel mounting 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

Hardened SFP Gigabit Fiber Tranceivers

Part Number	Distance	Cable Type	Connector Type	Wavelength
EX-1250NSP-SB1L-A S	275m/550m	62.5/125μm/50/125 μm, MM	Duplex LC	850nm
EX-1250TSP-MB4L-A S	10Km	9/125μm, SM	Duplex LC	1310nm
EX-LS38-C3L-TI-N-EB (DDM)	40Km	9/125μm, SM	Duplex LC	1310nm
EX-LS48-C3U-TI-N-EB (DDM)	70Km	9/125μm, SM	Duplex LC	1550nm
EX-1250TBP-MB1L-A S	550m	62.5/125μm/50/125 μm, MM	Single LC	TX: 1310nm/RX: 1550nm
EX-1250TBP-LB1L-A S	550m	62.5/125μm/50/125 μm, MM	Single LC	TX: 1550nm/RX: 1310nm
EX-1250TBP-MB4L-A S	10Km	9/125μm, SM	Single LC	TX: 1310nm/RX: 1550nm
EX-1250TBP-KB4L-A S	10Km	9/125μm, SM	Single LC	TX: 1550nm/RX: 1310nm

EX-1250TBP-MB5L-A S	20Km	9/125µm, SM	Single LC	TX: 1310nm/RX: 1550nm
EX-1250TBP-KB5L-A S	20Km	9/125µm, SM	Single LC	TX: 1550nm/RX: 1310nm

* More SFP options also available upon request.

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