

EL8100 Series

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



Overview

The EL8100 Series provides media conversion between 10/100/1000BASE-TX and 1000BASE-SX/LX/BX Fiber. Built specifically for mission critical applications in harsh environments, the EL8100's hardened design features high shock & vibration resistance, electrical noise immunity, wide operating temperature range from -40 to 75°C (-40 to 167°F), and aluminum housing. With two power inputs, link down alarming, Link-Fault-Pass-Through and a wide range of fiber connectivity options, the EL8100 is the ideal media converter for environments where connectivity is crucial.

EtherWAN — "When Connectivity is Crucial."

Spotlight

+ Full Gigabit bandwidth and Jumbo frames + Hardened Grade

10/100/1000BASE-T and 1000BASE-SX/LX/BX
Ethernet transmission conversion

1000Mbps Full duplex and full wire-speed
forwarding rate

Jumbo frames up to 10K bytes to increase
throughput and transmission efficiency

Supports -40 to 75°C (-40 to 167°F) operating
temperature

Redundant power inputs on terminal block
connector

Supports DIN-Rail mounting

+ Port Failure Alarm

Relay alarm configured by DIP switch to notify
users when power fails
or link is down

+ Link-Fault-Pass-Through (LFPT)

Provides constant monitoring of the links
connected to the media converters

If a copper or a fiber link fails, the media converter
will pass the fail state on throughout the link,
disabling the fiber link and the copper link on the
opposite end

Specifications

+ Technology

Standards

IEEE 802.3 10BASE-T

IEEE 802.3u 100BASE-TX

IEEE 802.3ab 1000BASE-T

IEEE 802.3z 1000BASE-X

Forward and Filtering Rate

14,880pps for 10Mbps

148,810pps for 100Mbps

1,488,100pps for 1000Mbps

Processing Type

Auto Negotiation

Auto MDI/MDIX

+ Interface

Ethernet Ports

10/100/1000BASE-TX: 1 port

LED Indicators

Per Unit: Power 1, Power 2, Fault, LFPT

Per Port: Link/Activity

DIP Switches

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 0.6A/30VDC

+ Power

Input

12-48VDC

Power Consumption

1.44W Max., 12~48VDC, 0.12~0.03A

Protection

Overload Current Protection

Reverse Polarity Protection

+ Mechanical

Casing

Aluminum Case

IP30

Dimensions

35.8 x 90 x 100mm (W x D x H)

(1.41" x 3.54" x 3.94")

Weight

0.23Kg (0.51lbs.)

Installation

DIN-Rail

+ Environment

Operating Temperature

-40 to 75°C (-40 to 167°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 61010

Industrial Compliance

EN 50121-4

EMI

FCC Part 15B Class A

VCCI Class A

EN 55032

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 FRI 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)

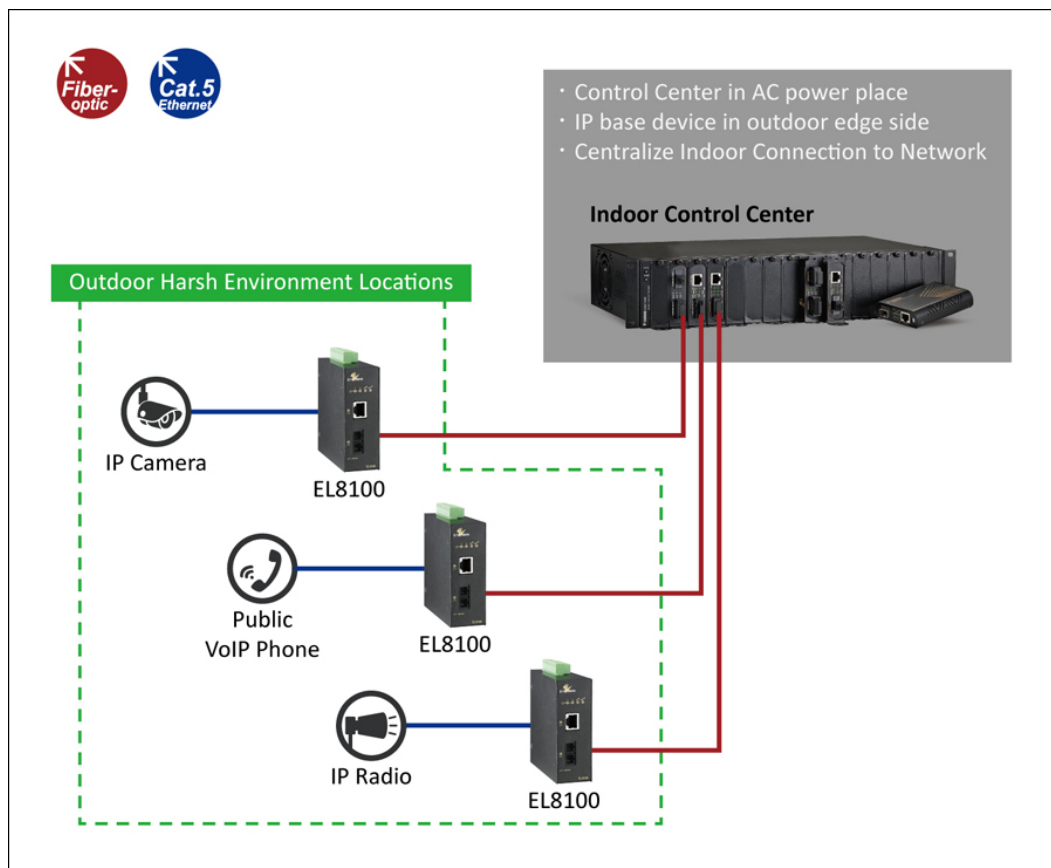
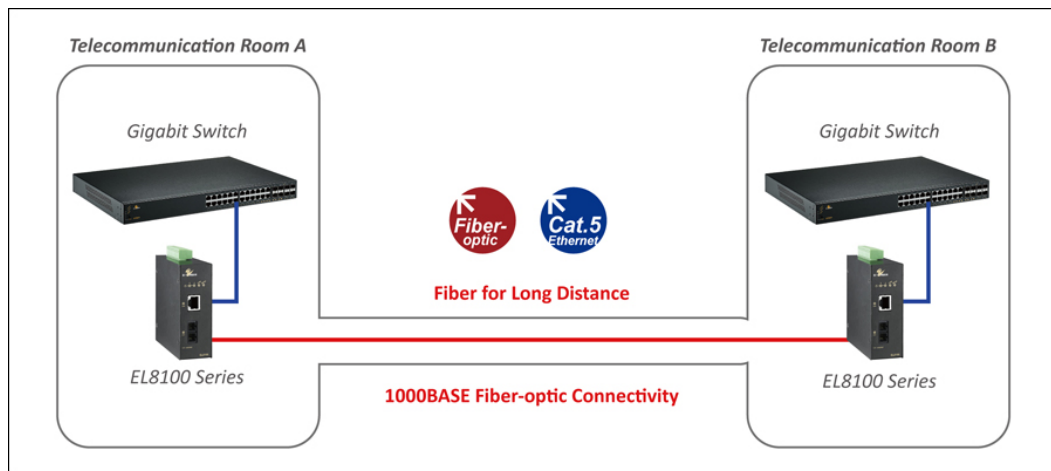
Environmental Test Compliances

IEC 60068-2-6 Fc (Vibration)

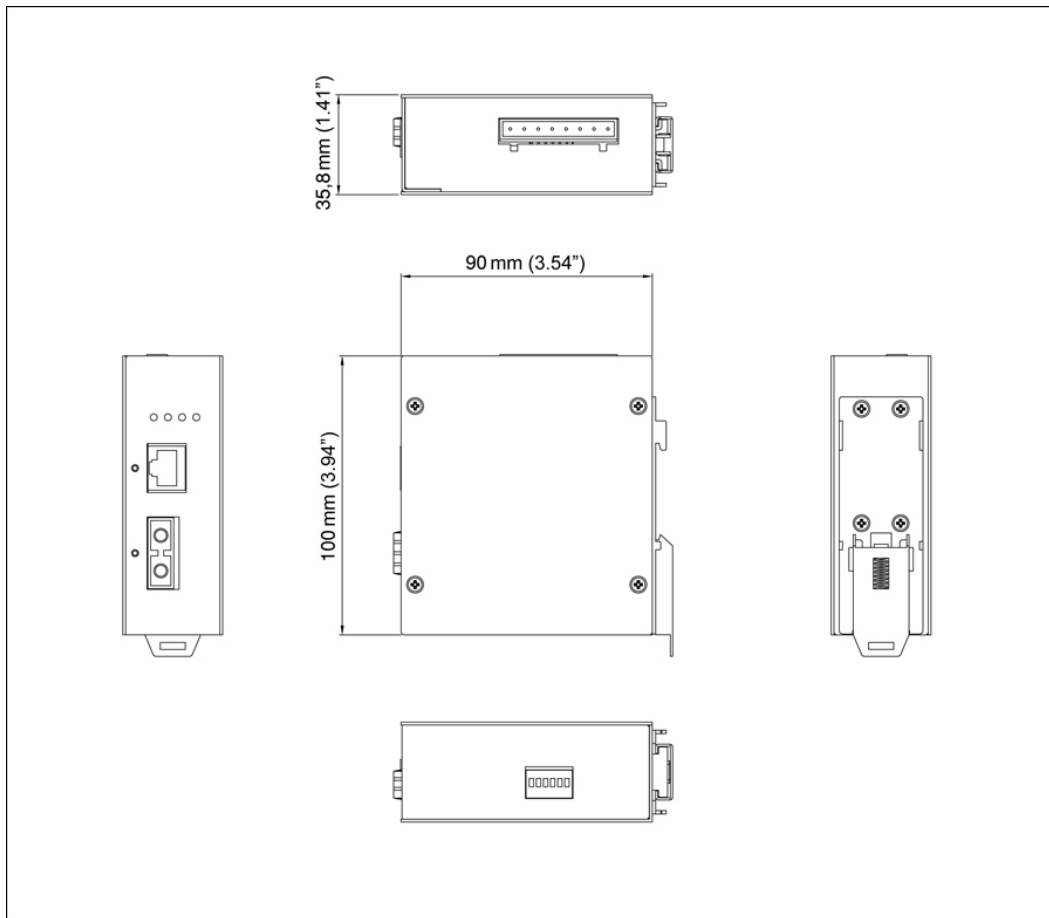
IEC 60068-2-27 Ea (Shock)

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

Application



Dimensions



Ordering Info

+ Model

EL8100-X1E	10/100/1000BASE-TX to 1000BASE-SX/LX/BX Hardened Media Converter
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+ Gigabit Fiber Options (X)

3	1000BASE-SX (SC) - Multi mode 550m 850nm
4	1000BASE-SX (SC) - Multi mode 2Km 1310nm
5	1000BASE-SX (ST) - Multi mode 550m 850nm
A	1000BASE-LX (SC) - Single mode 10Km 1310nm
B	1000BASE-LX (SC) - Single mode 20Km 1310nm
I	1000BASE-LX (ST) - Single mode 20km 1310nm
J	1000BASE-LX (ST) - Single mode 40km 1310nm
R	1000BASE-BX (SC) WDM-TX: Single mode 20Km 1310nm
S	1000BASE-BX (SC) WDM-TX: Single mode 20Km 1310nm

* More Gigabit options are also available upon request.

