EL8000 Series

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

Overview

The EL8000 Series provides media conversion between 1000BASE-TX and 1000BASE-SX/LX/BX/SFP Fiber. Built specifically for mission critical applications in harsh environments, the EL8000's hardened design features high shock & vibration resistance, electrical noise immunity, wide operating temperature range from -40 to 75°C, and aluminum housing. With two power inputs, link down alarming, Link-Fault-Pass-Through and a wide range of fiber connectivity options, the EL8000 is the ideal media converter for environments where connectivity is crucial.

EtherWAN — "**When Connectivity is Crucial.**"

Spotlight

+ Full Gigabit bandwidth and Jumbo frames

- 1000BASE-T and 1000BASE-SX/LX/BX/SFP Ethernet transmission conversion
- 1000Mbps Full duplex and full wire-speed forwarding rate
- Jumbo frames up to 10K bytes to increase throughput and transmission efficiency

+ Hardened Grade

- 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 802.3ab 1000BASE-T
IEEE 802.3z 1000BASE-SX/1000BASE-LX

Forward and Filtering Rate
1,488,100pps for 1000Mbps

Processing Type
Auto Negotiation
Auto MDI/MDIX

Interface

Ethernet Ports
1000BASE-T: 1 port
1000BASE-SX/LX/SFP: 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
0.912W Max
76mA@12VDC
38mA@24VDC
19mA@48VDC

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

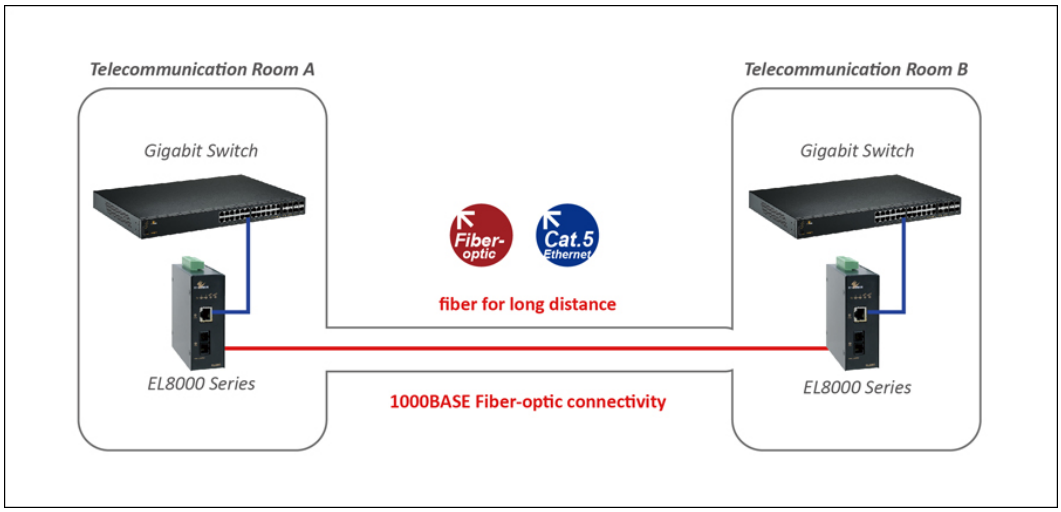
Industrial Compliance
EN 50121-4

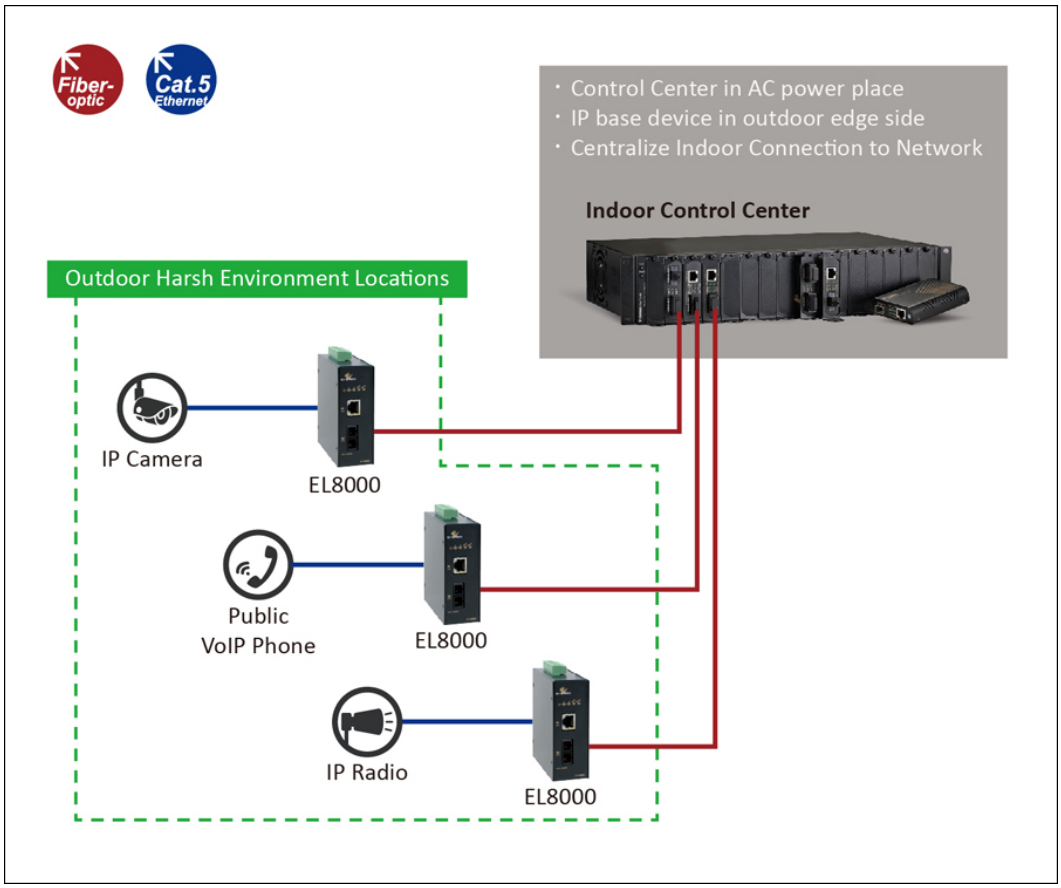
EMI
FCC Part 15B Class A
VCCI Class A
EN 55032
EN 61000-3-2
EN 61000-3-3
EN 61000-6-3

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)

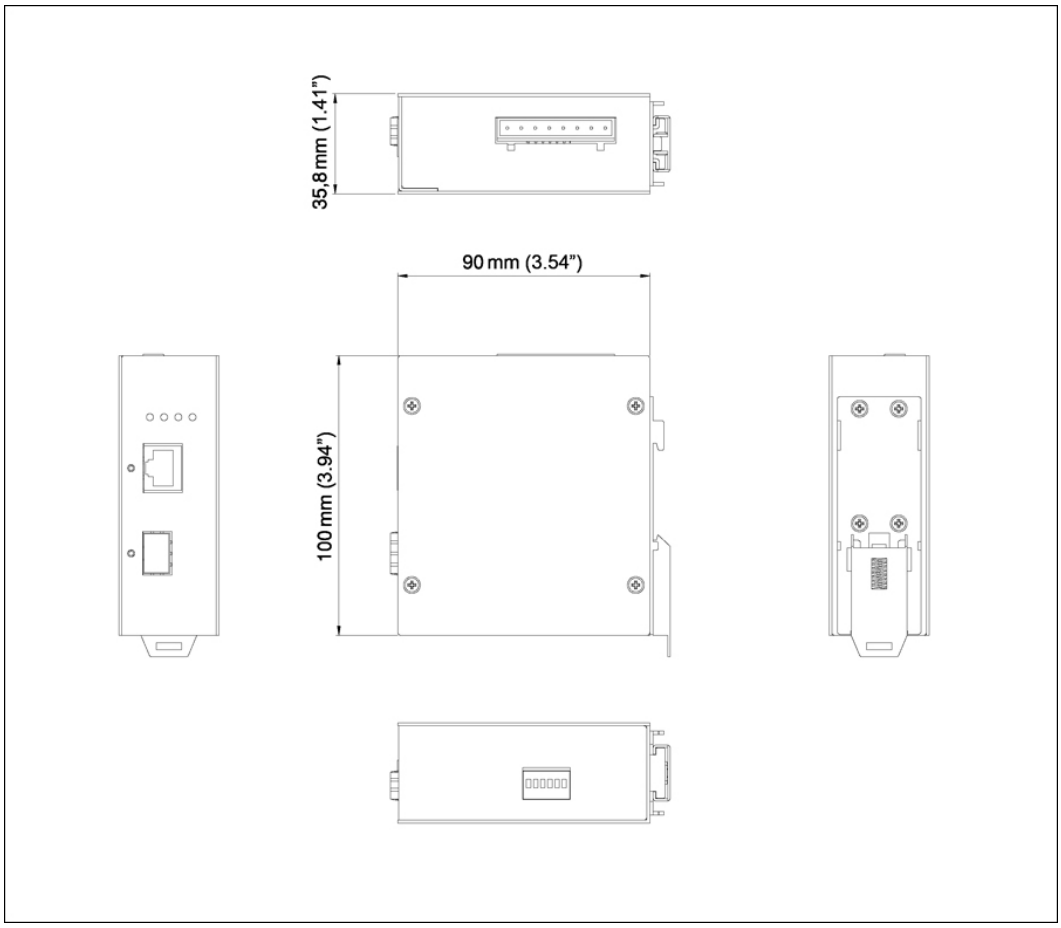
Environmental Test Compliances
IEC 60068-2-6 Fc (Vibration)
IEC 60068-2-27 Ea (Shock)
FED STD 101C Method 5007.1 (Free fall w/ package)

Application





Dimensions



Ordering Info

Model

EL8000-X1E	1000BASE-TX to 1000BASE-SX/LX/BX/SFP Hardened Media Converter

Gigabit Fiber 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
R	1000BASE-BX (SC) WDM-TX: 1310nm/RX: 1550nm-20Km
S	1000BASE-BX (SC) WDM-TX: 1550nm/RX: 1310nm-20Km
V	1000BASE SFP

* More Gigabit options are also available upon request.

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