

## EL8020 Series

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



## Overview

The EL8020 Series provides media conversion between 10/100/1000BASE-TX and 100/1000 SFP Fiber. Built specifically for mission critical applications in harsh environments, the EL8020'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 EL8020 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-TX and 100/1000 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
- 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

#### 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
- 100/1000 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

### EMI

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

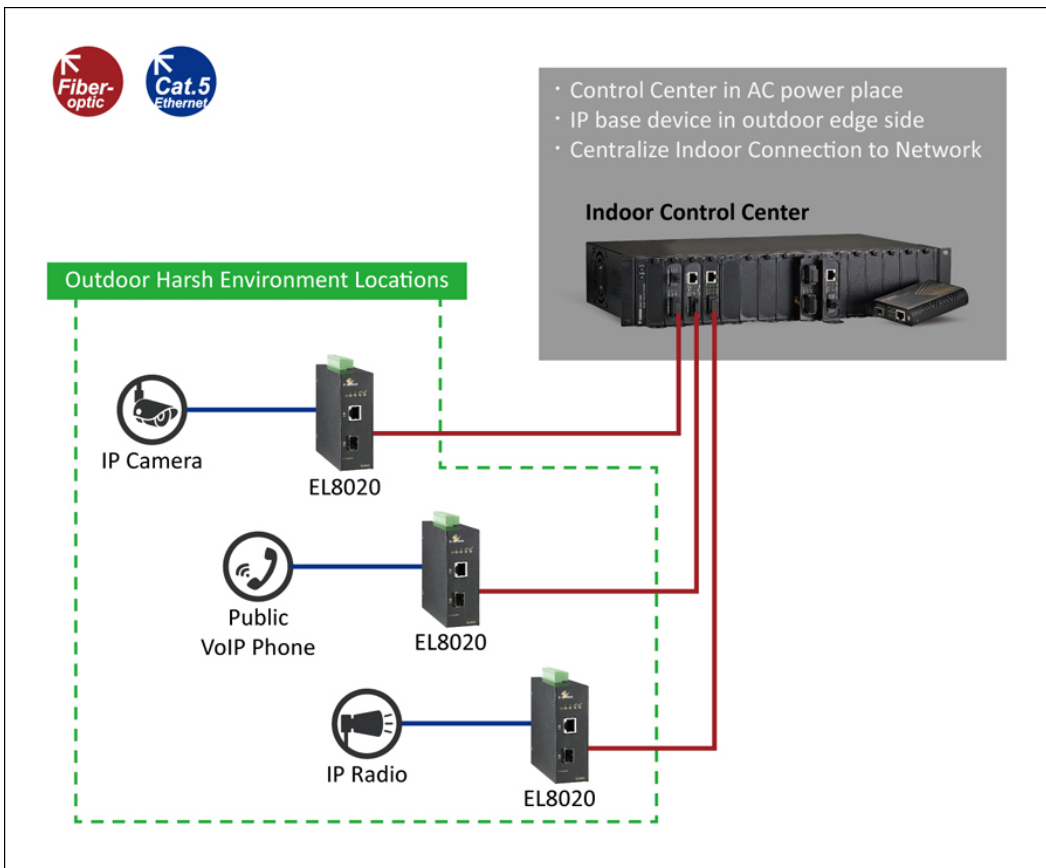
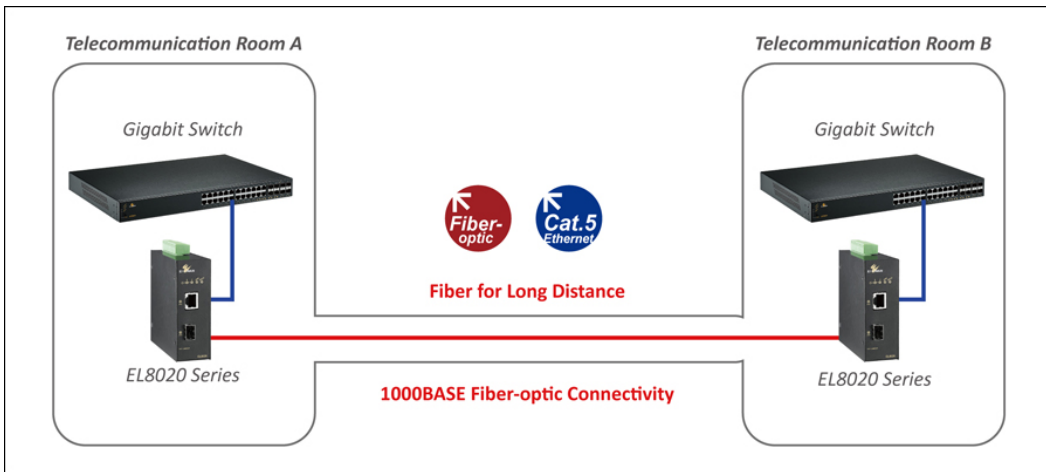
### EMS

- 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)

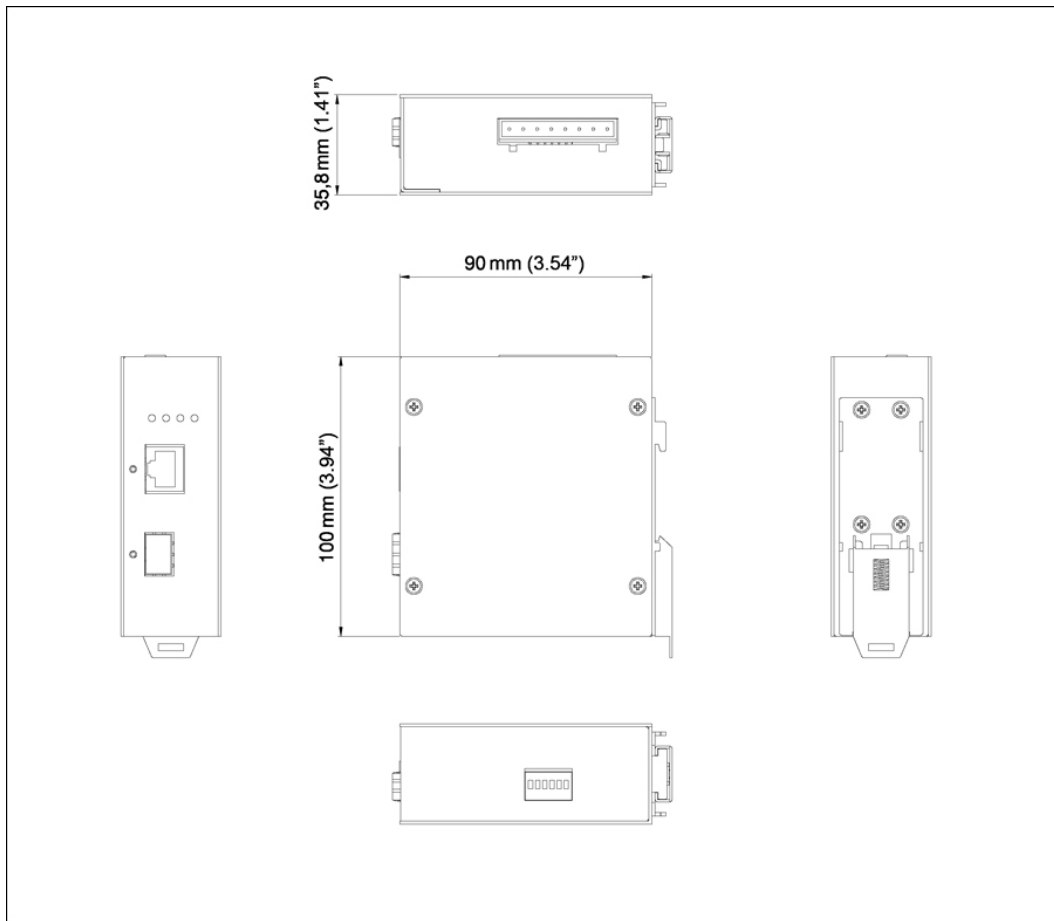
### Environmental Test Compliances

- 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

Model	Description
EL8020-V1E	10/100/1000BASE-TX to 100/1000 SFP Hardened Media Converter



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