

# EL2315 Series

10/100/1000BASE-TX to 100/1000BASE-X Dual Rate SFP  
Media Converter



**DIREKTRONIK**



## Overview

The EL2315 Series provides media conversion between 10/100/1000BASE-T(X) and 100/1000BASE SFP Fiber. The EL2315's fiber design is compatible to 100BASE fiber or 1000BASE fiber transceiver. Through DIP switch selection, the EL2315's SFP port can support 100BASE SFP fiber or 1000BASE-X SFP fiber port. Also, through DIP switch selection, the Link-Fault-Pass-Through (LFPT) function can be active or disabled.

With Gigabit transmission rate, EL2315 supports Jumbo Frame up to 9K bytes, the EL2315 is the ideal media converter for environments where connectivity is crucial.

## Spotlight

- **Gigabit Connectivity**
  - Auto 10/100/1000BASE-T(X) and 1000BASE-SX/LX/BX Ethernet transmission conversion
  - 1000Mbps Full duplex, 10/100Mbps Full/Half duplex
  - Fiber interface supports dual rate 100BASE-FX and 1000BASE-SX/LX fiber transmission
- **100/1000BASE-FX Dual Rate SFP Support**
  - DIP switch controlled 100BASE or 1000BASE SFP options
- **Link-Fault-Pass-Through (LFPT)**
  - Provides constant monitoring of the links connected to the media converters
  - If a copper links 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

# Hardware Specifications

## Technology

### Standards

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

### Forward and Filtering Rate

- 14,880pps for 10Mbps
- 148,810pps for 100Mbps
- 1,488,100pps for 1000Mbps

### Processing Type

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

## Power

### Input

- 12VDC

### Power Consumption

- 2.76W Max. 0.23A@12VDC

## Mechanical

### Casing

- Aluminum Case

### Dimensions

- 80.3 x 109.2 x 23.8mm (W x D x H)  
(3.16" x 4.3" x 0.94")

### Weight

- 150g (0.336lbs.)

### Installation

- Wall mounting

## Interface

### Ethernet Port

- 10/100/1000BASE-TX: 1 port
- 100/1000BASE SFP Slot: 1 port

### DIP Switch

- No.1: LFPT On/Off
- No.2: Auto-Negotiation/Force Mode for TX port
- No.3: Full-duplex/Half-duplex for TX port
- No.4: 100Mbps/10Mbps Force Mode for TX port
- No.5: 100Mbps/1000Mbps for SFP
- No.6: Function Reserved

### LED Indicators

- Per Unit: Power, LFPT
- Per Port: FX/TX Speed, Link/Activity

## Environment

### Operating Temperature

- 0 to 50°C (32 to 122°F)

### Storage Temperature

- -10 to 70°C (-14 to 158°F)

### Ambient Relative Humidity

- 5% to 95% (non-condensing)

## Regulatory Approvals

### ISO

- Manufactured in an ISO 9001 facility

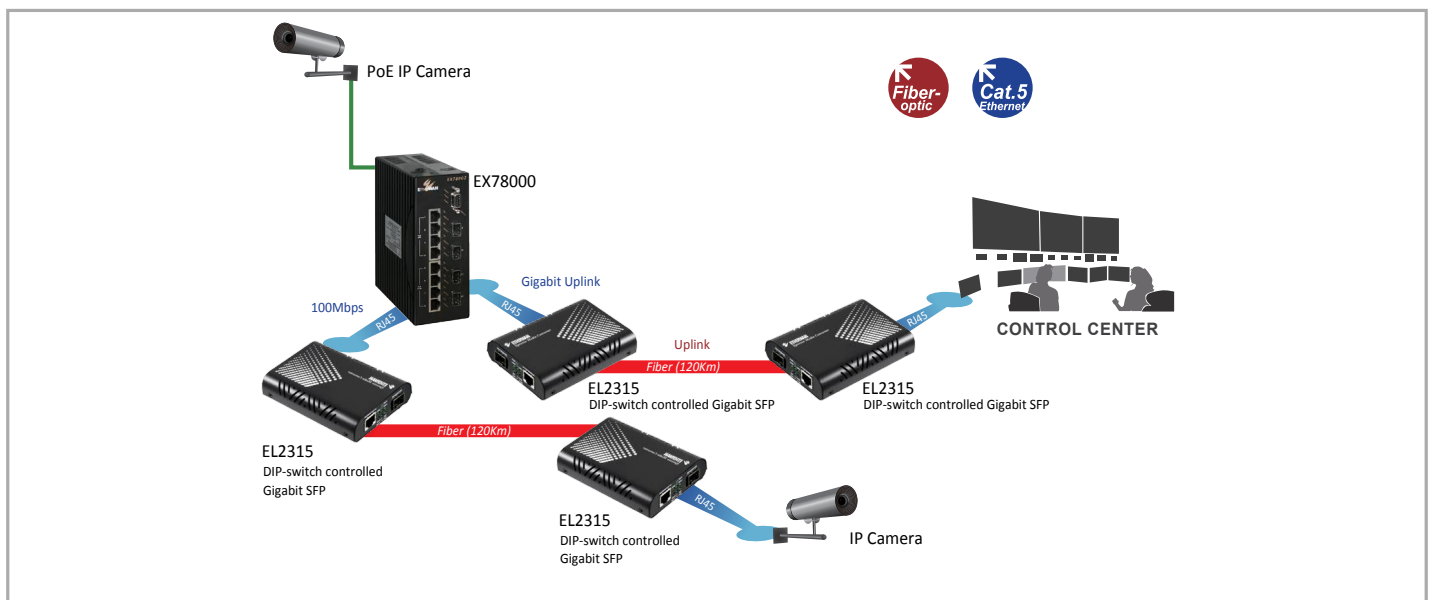
## Emission Compliance

### CE Mark Class A

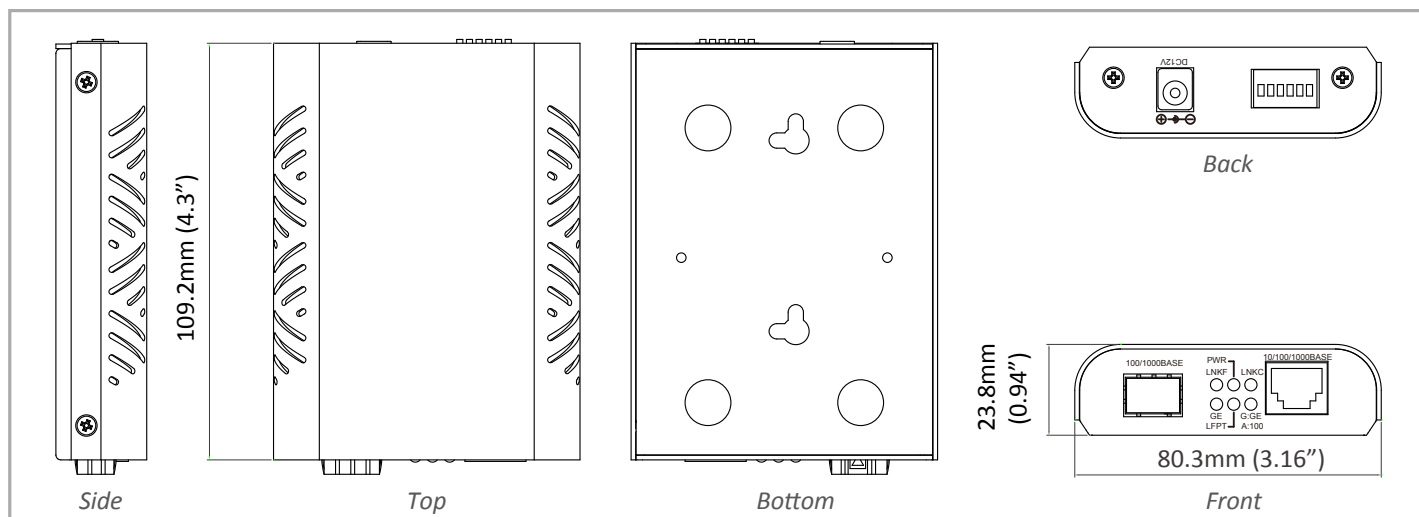
### FCC Part 15B Class A

### VCCI Class A

## Application Diagram



## Dimensions



## Ordering Information

### Model

**33-0032 - EL2315-X** 10/100/1000BASE-TX to 100BASE/1000BASE-X Dual Rate SFP Media Converter

### Power Adapter Options (X)

<b>A</b>	with external power adapter for AU
<b>E</b>	<b>with external power adapter for EU standard</b>
<b>J</b>	with external power adapter for JP
<b>K</b>	with external power adapter for UK
<b>U</b>	with external power adapter for USA
<b>3C</b>	with external power adapter for China

### Optional SFP Non-Hardened Type Gigabit Fiber Transceivers

Model Name	Distance	Cable Type	Connector Type	Wavelength	Link Budget**	Optical Output Power	Sensitivity
<b>EX-1250NSP-SB1L S</b>	275m/550m	62.5/125µm/50/125µm, MM	Duplex LC	850nm	7.5dBm	-9.5 to -4dBm	-17dBm
<b>133-4380 - EX-1250TBP-MB1LS</b>	550m	62.5/125µm/50/125µm, MM	Single LC	TX: 1310nm RX: 1550nm	7dBm	-10 to -4dBm	-17dBm
<b>133-4381 - EX-1250TBP-LB1LS</b>	550m	62.5/125µm/50/125µm, MM	Single LC	TX: 1550nm RX: 1310nm	7dBm	-10 to -4dBm	-17dBm
<b>EX-1250TSP-MB4L S</b>	10Km	9/125µm, SM	Duplex LC	1310nm	11.5dBm	-9.5 to -3dBm	-21dBm
<b>EX-1250TBP-MB4L S</b>	10Km	9/125µm, SM	Single LC	TX: 1310nm RX: 1550nm	12dBm	-9 to -3dBm	-21dBm
<b>EX-1250TBP-KB4L S</b>	10Km	9/125µm, SM	Single LC	TX: 1550nm RX: 1310nm	12dBm	-9 to -3dBm	-21dBm
<b>EX-1250TBP-MB5L S</b>	20Km	9/125µm, SM	Single LC	TX: 1310nm RX: 1550nm	15dBm	-8 to -3dBm	-23dBm
<b>EX-1250TBP-KB5L S</b>	20Km	9/125µm, SM	Single LC	TX: 1550nm RX: 1310nm	15dBm	-8 to -3dBm	-23dBm
<b>EX-LS38-C3L-TC-N-EB (DDM)</b>	40Km	9/125µm, SM	Duplex LC	1310nm	20dBm	-3 to +2dBm	-23dBm
<b>EX-LS38-C3L-TC-N-CE (DDM)</b>	40Km	9/125µm, SM	Single LC	TX: 1310nm RX: 1550nm	20dBm	-3 to +2dBm	-23dBm
<b>EX-LS48-C3L-TC-N-CE (DDM)</b>	40Km	9/125µm, SM	Single LC	TX: 1550nm RX: 1310nm	20dBm	-3 to +2dBm	-23dBm

\* More SFP options upon request. All standard MSA SFP's works

\*\* Link Budget data is based on pair of the same modules.