



## Overview

As an extension from EX42000 Fast Ethernet Switch series, the EX42011 is a compact sized Fast Ethernet Media Converter series equipped with 1-port 10/100BASE-TX and 1-port 100BASE-FX. By using standard auto-negotiation and the inclusion of Auto-MDIX, EtherWAN provides a cost-effective way of integrating legacy 10Mbps networks with 100Mbps Fast Ethernet networks. The TX port auto-negotiates for 10/100Mbps speed and auto-detect full or half-duplex mode. The fibre port on the EX42011 is available with SC or ST with a fibre connection between two nodes that can reach up to 120Km (74.4miles). The EX42011 series can be DIN-Rail mounted and is equipped with Terminal Block power input to match the industrial applications that require a Media Converter.

## Features

- Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment
- 384K bits buffer memory
- 10/100Mbps-Full/Half-duplex, Auto-Negotiation, Auto-MDI/MDIX
- Full wire-speed forwarding rate
- 12 to 48VDC Power inputs
- -10°C to 60°C (-14°F to 140°F) operating temperature range
- Hardened plastic case
- Supports DIN-Rail Mounting installation

## Ordering Information

EX42011-XY-I-P Industrial 10/100BASE-TX to 100BASE-FX Media Converter

### 100FX Fibre Options:

- (XY) = 1A: Multi Mode (SC)  
 1B: Multi Mode (ST)  
 2A: Single Mode (SC) -20Km  
 2B: Single Mode (SC) -40Km  
 2D: Single Mode (ST) -20Km  
 1H: Multi Mode (SC) WDM -TX: 1310nm/RX: 1550nm -2Km  
 1J: Multi Mode (SC) WDM -TX: 1310nm/RX: 1550nm -5Km  
 \*More 100FX Fibre options also available upon request

- 2E: Single Mode (SC) WDM -TX: 1310nm/RX: 1550nm -20Km  
 2F: Single Mode (SC) WDM -TX: 1310nm/RX: 1550nm -40Km  
 1I: Multi Mode (SC) WDM -TX: 1550nm/RX: 1310nm -2Km  
 1K: Multi Mode (SC) WDM -TX: 1550nm/RX: 1310nm 5Km  
 2G: Single Mode (SC) WDM -TX: 1550nm/RX: 1310nm -5Km  
 2H: Single Mode (SC) WDM -TX: 1550nm/RX: 1310nm -40Km

### Installation Type:

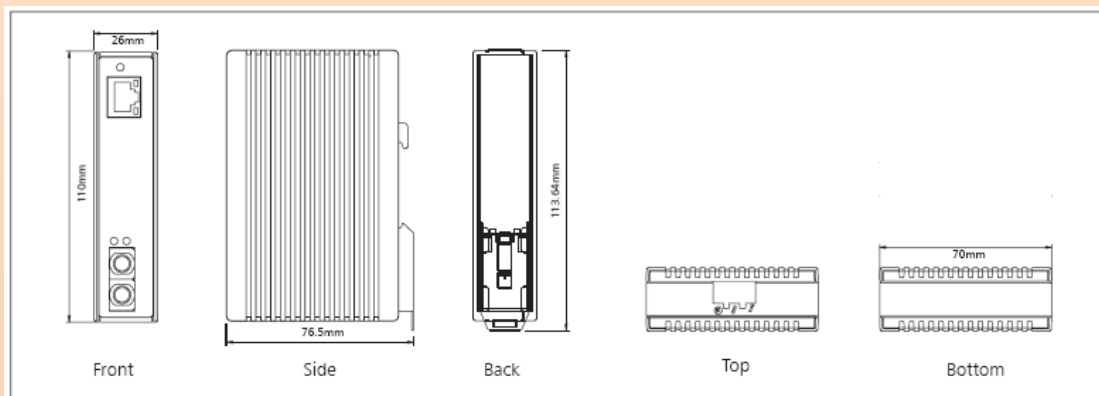
(I) = 1: DIN Rail (mounting kit is included)

### Power Connector Options :

(P) = A: Terminal Block\*

\*Option A - The Terminal Block type external power supply are not included. Please order the following part numbers, as required:  
 DR-30-24, DR-60-24, DR-75-24, DR-120-24 or 41-136046-X X=1,2,3,4,5

## Diagrams



## Specifications

### Technology

#### Standards:

- IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX/100BASE-FX, IEEE802.3x

#### Forward and Filtering Rate:

- 14,880pps for 10Mbps
- 148,810pps for 100Mbps

#### Packet Buffer Memory:

- 384K bits

#### Processing Type:

- Store-and-Forward
- Half-duplex back-pressure and IEEE802.3x full-duplex flow control

### Power

#### Input:

- Input Voltage: 12 to 48VDC (Terminal Block)

#### Power Consumption:

- 2.4W Max. 0.2A@12VDC, 0.1A@24VDC, 0.05A@48VDC

#### Reverse Polarity Protection:

- Present

### Mechanical

#### Casing:

- Plastic case
- IP30

#### Dimensions:

- 26mm (W) x 70mm (D) x 110mm (H)  
(1.02" (W) x 2.76" (D) x 4.33" (H))

#### Weight:

- 0.2Kg (0.44lb.)

#### Installation:

- DIN-Rail (Top hat type 35mm) Mounting

### Interface

#### Ethernet Port:

- 10/100BASE-TX: 1 port
- 100BASE-FX: 1 port

#### LED Indicators:

- Per Unit: Power Status (Power1, Power2)
- Per Port: 10/100TX, 100FX: Link/Activity (Green), Speed (Yellow)

### Environment

#### Operating Temperature:

- -10°C to 60°C (14°F to 140°F)
- Test @ -20°C to 70°C (-4°F to 158°F)

#### Storage Temperature:

- -25°C to 85°C (-13°F to 185°F)

#### Ambient Relative Humidity:

- 5% to 95% (non-condensing)

### Regulatory Approvals

#### ISO:

- Manufactured in an ISO9001 facility

#### Safety:

- UL60950-1, EN60950-1, IEC60950-1

#### EMI:

- FCC Part 15, Class A
- EN61000-6-3
- EN55022
- EN61000-3-2
- EN61000-3-3

#### EMS:

- EN61000-6-2
- EN61000-4-2 (ESD Standards)  
Contact: + / - 4KV; Criteria B  
Air: + / - 8KV; Criteria B
- EN61000-4-3 (Radiated RFI Standards)  
10V/m, 80 to 1000MHz; 80% AM Criteria A
- EN61000-4-4 (Burst Standards)  
Signal Ports: + / - 4KV; Criteria B  
D.C. Power Ports: + / - 4KV; Criteria B
- EN61000-4-5 (Surge Standards)  
Signal Ports: + / - 1KV; Line-to-Line; Criteria B  
D.C. Power Ports: + / - 0.5KV; Line-to-earth; Criteria B
- EN61000-4-6 (Induced RFI Standards)  
Signal Ports: 10Vrms @ 0.15~80MHz; 80% AM Criteria A  
D.C. Power Ports: 10Vrms @ 0.15~80MHz; 80% AM Criteria A
- EN61000-4-8 (Magnetic Field Standards)  
30A/m @ 50, 60Hz; Criteria A

#### Environmental Test Compliance:

- IEC60068-2-6 Fc (Vibration Resistance)  
5g @ 10~150KHz, Amplitude 0.35mm  
(Operation/Storage/Transport)
- IEC60068-2-27 Ea (Shock)  
25g @ 11ms (Half-Sine Shock Pulse; Operation)  
50g @ 11ms (Half-Sine Shock Pulse; Storage/Transport)
- IEC60068-2-32 Ed (Free Fall)

## The Terminal Block and Power input

