

EX42011 Series

10/100Base-TX to 100Base-FX Media Converter



Overview

EX42011 is positioned as a Fast Ethernet Media Converter series to meet fiber networking application. 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-negotiate for 10/100Mbps speed and auto-detect full or half-duplex mode. The fiber port on EX42011 accommodates SC and ST with a fiber connection between two nodes that can reach up to 120Km (74.4miles). EX42011 series can be DIN-Rail mounted and is equipped with Terminal Block power input to match the applications that require a Media Converter.

Features

- ▶ Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment
- ▶ 2048 MAC addresses
- ▶ 384K bits buffer memory
- ▶ 10/100Mbps-Full/Half-duplex, Auto-Negotiation, Auto-MDI/MDIX
- ▶ Full wire-speed forwarding rate
- ▶ 0.1A 24VDC Power inputs
- ▶ -10°C to 60°C (14°F to 140°F) operating temperature range
- ▶ Hardened plastic case
- ▶ Supports DIN-Rail Mounting installation

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

Address Table Size:

- 2048 MAC addresses

Latency:

- Less than 5.0μs

Power

Input:

- Input Voltage: 12 to 48VDC (Terminal Block)
- Input Current: 0.1A Max. (Terminal Block)

Power Consumption:

- 2.4W Max.

Mechanical

Casing:

- Plastic case

Dimensions:

- 25mm (W) x 70mm (D) x 110mm (H)
- (0.99" (W) x 2.76" (D) x 4.33" (H))

Weight:

- 0.2Kg (0.44lb.)

Installation:

- DIN-Rail Mounting

Environment

Operating Temperature:

- -10°C to 60°C (14°F to 140°F)

Storage Temperature:

- -25°C to 85°C (-13°F to 185°F)

Ambient Relative Humidity:

- 10% to 90% (non-condensing)

Interface

LED Indicators:

- Per Unit: Power Status (Power 1, Power 2)
- Per Port: 10/100TX, 100FX: Link/Activity (Green), Speed (Yellow)

Designation	Typical Distance*	Nominal Wavelength	Cable Type	Connector	Optical Budget
100Base-FX	2 Km	1310 nm	62.5/125 MM	ST	15 dB
100Base-FX	2 Km	1310 nm	62.5/125 MM	SC	15 dB
100Base-FX	20 Km	1310 nm	10/125 SM	ST	19 dB
100Base-FX	20 Km	1310 nm	10/125 SM	SC	19 dB
100Base-FX	40 Km	1310 nm	10/125 SM	ST	30 dB
100Base-FX	40 Km	1310 nm	10/125 SM	SC	30 dB
100Base-FX	60 Km	1310 nm	10/125 SM	ST	33 dB
100Base-FX	70 Km	1310 nm	10/125 SM	SC	34 dB
100Base-FX	80 Km	1550 nm	10/125 SM	ST	29 dB
100Base-FX	90 Km	1550 nm	10/125 SM	SC	32 dB
10Base-T	100 m	N/A	N/A	RJ-45	N/A
100Base-TX	100 m	N/A	N/A	RJ-45	N/A

Regulatory Approvals:

ISO:

- Manufactured in an ISO9001 facility.

Emission Compliance:

- CE Mark Class A, FCC Part 15 Class A

Ethernet
Switches

1

Serial
Servers

2

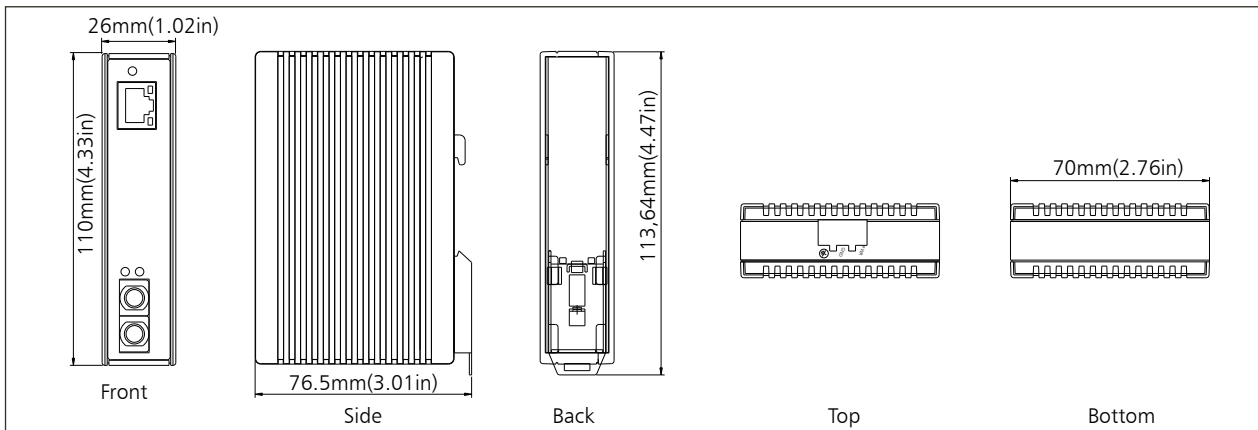
Media
Converters

3

Others

4

Diagrams



Ordering Information

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

100FX Fiber 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
 2E : Single mode (SC) WDM -TX:1310nm/RX:1550nm -20Km
 2F : Single mode (SC) WDM -TX:1310nm/RX:1550nm -40Km
 2G : Single mode (SC) WDM -TX:1550nm/RX:1310nm -20Km
 2H : Single mode (SC) WDM -TX:1550nm/RX:1310nm -40Km

*More 100FX Fiber options also available upon request.

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

Power Connector Options : (P) = A : Terminal Block*

*Options A -The Terminal Block option does not include an external Power supply. Please order the following part numbers, as required: **EX-DR-30-24, EX-DR-60-24, EX-DR-75-24, or EX-DR-120-24, 41-136046-1~5**

*See page 4-5 to 4-8 for more detailed information about optional accessories (Din-Rail Power supply, Power adapter)