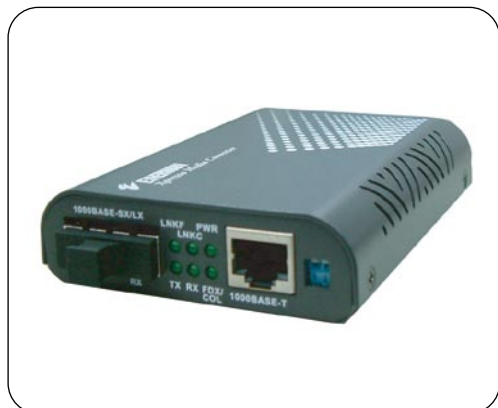


EM1000 EM2000 Series

1000Base-T to 1000Base-SX/LX Media Converter



Overview

EtherWAN's EM1000/EM2000 series offers several different selections from 1000Base-T to fiber optic Gigabit in multi-mode or single-mode 1000Base-SX/LX; There are also several different single-mode options available for 10, 20, and 50Km (6.2, 12.4, and 31 miles) distance. The flexible and easy to use, EM1000/EM2000 series is one of the most versatile media converters in the world. It has a stand-alone kit ideal for desktop use, and is also wall mountable. It's available in a 19" rack mountable chassis that holds up to 16 units of any of EtherWAN's Ethernet and Gigabit Ethernet media converters for central control purposes. EM1000/EM2000 Series features easy to understand diagnostic LEDs. These LEDs show details for Link, Transmit/Receive, Full/Half duplex, and power status.

Features

- ▶ DIP switch configuration for "Link-Fault-Pass-Through", fiber auto/force mode
- ▶ 1000Mbps-Auto/Full-duplex, Auto-Negotiation, Auto-MDI/MDIX
- ▶ Full wire-speed forwarding rate
- ▶ 0.8A 12VDC external universal PSU
- ▶ 0°C to 45°C (32°F to 113°F) operating temperature range
- ▶ Aluminum case
- ▶ Supports Wall Mounting installation or expansion use with EMC1600 media converter chassis system

Specifications

Technology

Standards:

- IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-SX/1000Base-LX, IEEE802.3x

Forward and Filtering Rate:

- 1,488,100pps for 1000Mbps

Power

Input:

- Input Voltage: 12VDC
- Input Current: 0.2A

Power Consumption:

- 2.38W Max.

Mechanical

Casing:

- Aluminum case

Dimensions:

- 80.3mm (W) x 109mm (D) x 24mm (H)
(3.17" (W) x 4.30" (D) x 0.95" (H))

Weight:

- 150g (0.33lb.)

Installation:

- Wall Mounting or expansion use with EMC1600 media converter chassis system

Environment

Operating Temperature:

- 0°C to 45°C (32°F to 113°F)

Storage Temperature:

- -10°C to 70°C (14°F to 158°F)

Ambient Relative Humidity:

- 10% to 90% (non-condensing)

Interface

LED Indicators:

- Per Unit: Power Status (Power), Full-duplex/Collision, Transmit, Receive
- Per Port: 1000T, 1000SX/LX: Link

Designation	Typical Distance*	Nominal Wavelength	Cable Type	Connector	Optical Budget
1000Base-SX	550 m	850 nm	50/125 MM	SC	7.5 dB
1000Base-LX	10 Km	1310 nm	10/125 SM	SC	14.5 dB
1000Base-LX	20 Km	1310 nm	10/125 SM	SC	17 dB

Regulatory Approvals:

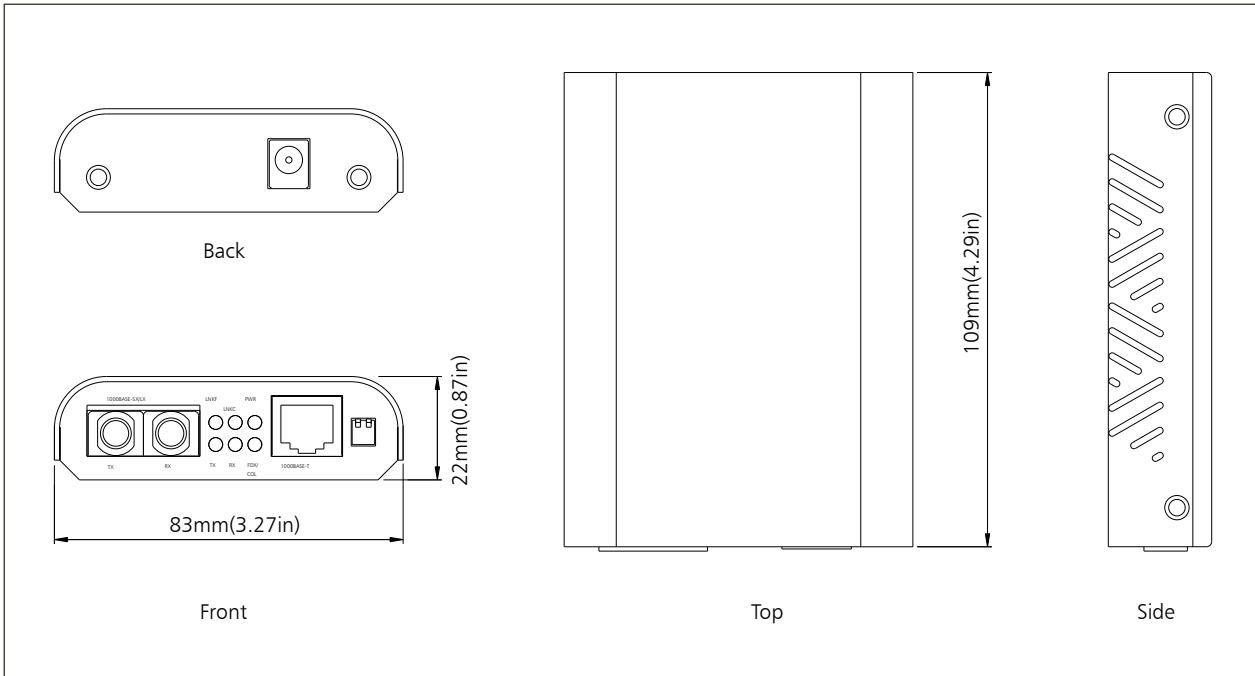
ISO:

- Manufactured in an ISO9001 facility.

Emission Compliance:

- CE Mark Class A, FCC Part 15 Class A

Diagrams



Ordering Information

EM1000TSC	1000Base-T to 1000Base-SX Multi Mode (SC) -550m Media Converter
EM1000TLC-10	1000Base-T to 1000Base-LX Single Mode (SC) -10Km Media Converter
EM1000TLC-20	1000Base-T to 1000Base-LX Single Mode (SC) -20Km Media Converter
EM1000TLC-50	1000Base-T to 1000Base-LX Single Mode (SC) -50Km Media Converter
EM2000TLCA-10	1000Base-T to 1000Base-LX Single Mode (SC) WDM -TX:1310nm/RX:1550nm -10Km Media Converter
EM2000TLCA-20	1000Base-T to 1000Base-LX Single Mode (SC) WDM -TX:1310nm/RX:1550nm -20Km Media Converter
EM2000TLCA-50	1000Base-T to 1000Base-LX Single Mode (SC) WDM -TX:1310nm/RX:1550nm -50Km Media Converter
EM2000TLCB-10	1000Base-T to 1000Base-LX Single Mode (SC) WDM -TX:1550nm/RX:1310nm -10Km Media Converter
EM2000TLCB-20	1000Base-T to 1000Base-LX Single Mode (SC) WDM -TX:1550nm/RX:1310nm -20Km Media Converter
EM2000TLCB-50	1000Base-T to 1000Base-LX Single Mode (SC) WDM -TX:1550nm/RX:1310nm -50Km Media Converter

*Proprietary 19" system chassis can house up to 16 EM1000/EM2000 Series Converters.

*The chassis is to be ordered separately.