

# EM1000 EM2000 Series

## 1000BASE-T to 1000BASE-SX/LX/BX Media Converter

Gigabit

### Overview



EtherWAN's EM1000/EM2000 series offers several different selections from 1000BASE-T to fibre optic Gigabit in multi-mode or single-mode 1000BASE-SX/LX; there are several different single-mode options available for 10, 20, and 50Km (6.2, 12.4, and 31miles) distance. The flexible and easy to use, EM1000/EM2000 series is one of the most versatile media converters in the world. It has a standalone 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. The EM1000/EM2000 Series features easy to understand diagnostic LEDs. These LEDs show link details, Transmit/Receive, Full/Half duplex, and power status.

### Features

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

### Ordering Information

EM1000TSC	1000BASE-T to 1000BASE-SX (SC) -550m Media Converter
EM1000TSC-2	1000BASE-T to 1000BASE-SX (SC) - 2Km Media Converter
EM1000TLC-10	1000BASE-T to 1000BASE-LX (SC) -10Km Media Converter
EM1000TLC-20	1000BASE-T to 1000BASE-LX (SC) -20Km Media Converter
EM1000TLC-50	1000BASE-T to 1000BASE-LX (SC) -50Km Media Converter
EM2000TLCA-10	1000BASE-T to 1000BASE-LX (SC) WDM -TX: 1310nm/RX: 1550nm -10 Km Media Converters
EM2000TLCB-10	1000BASE-T to 1000BASE-LX (SC) WDM -TX: 1550nm/RX: 1310nm -10 Km Media Converters
EM2000TLCA-20	1000BASE-T to 1000BASE-LX (SC) WDM -TX: 1310nm/RX: 1550nm -20 Km Media Converters
EM2000TLCB-20	1000BASE-T to 1000BASE-LX (SC) WDM -TX: 1550nm/RX: 1310nm -20 Km Media Converters
EM2000TLCA-60	1000BASE-T to 1000BASE-LX (SC) WDM -TX: 1310nm/RX: 1550nm -60 Km Media Converters
EM2000TLCB-60	1000BASE-T to 1000BASE-LX (SC) WDM -TX: 1550nm/RX: 1310nm -60 Km Media Converters

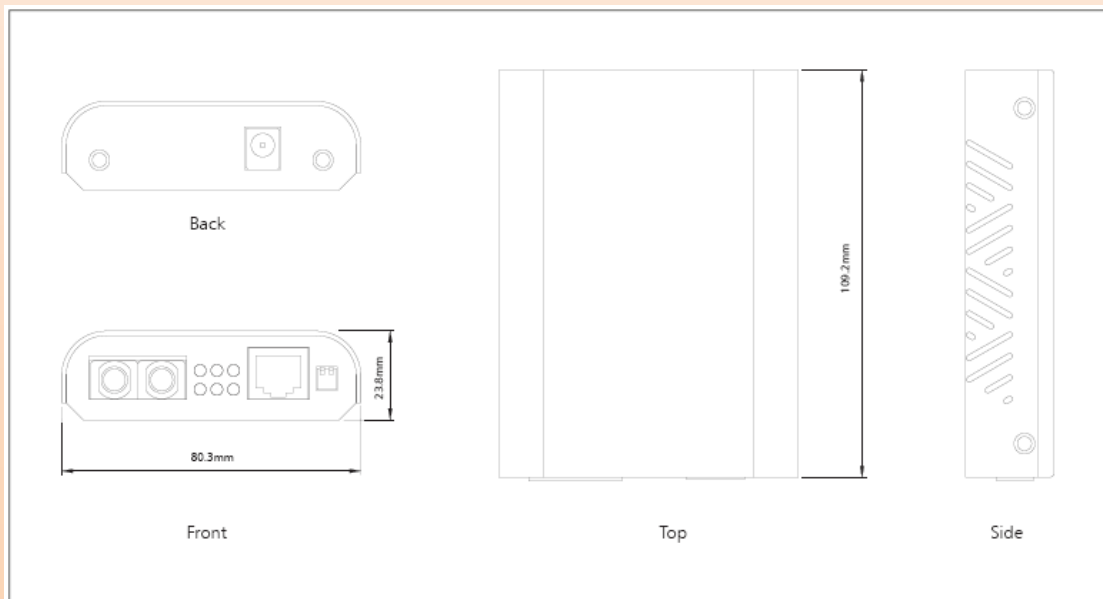
#### NOTES:

\*EMC1600, proprietary 19" chassis system, can house up to 16xEM1000/EM2000 Series Converters.

\*EMC1600 Chassis System is available separately.

\*More Gigabit fibre options are also available upon request

### Diagrams



# EM1000 EM2000 Series

## 1000BASE-T to 1000BASE-SX/LX/BX Media Converter Gigabit

### 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

##### Power Consumption:

- 2.4W Max. 0.2A@12VDC

#### Mechanical

##### Casing:

- Aluminum case

##### Dimensions:

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

##### Weight:

- 150g (0.33lb.)

##### Installation:

- Wall Mounting or use with EMC1600 media converter chassis system

#### Interface

##### Ethernet Port:

- 1000BASE-T: 1 port
- 1000BASE-SX/LX/BX: 1 port

##### LED Indicators:

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

#### 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:

- 5% to 95% (non-condensing)

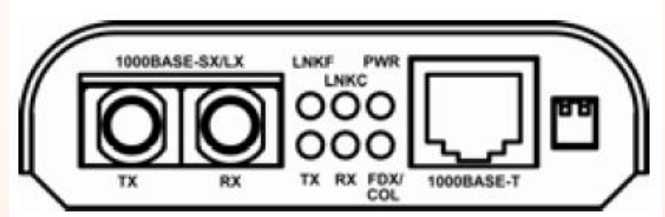
#### Regulatory Approvals

##### ISO:

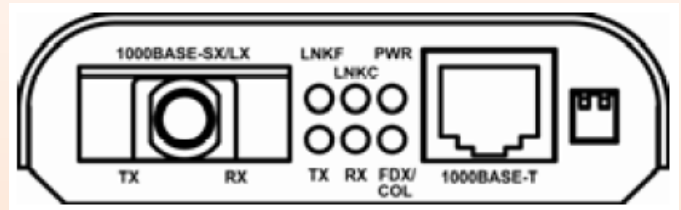
- Manufactured in an ISO9001 facility.

##### Emission Compliance:

- CE Mark Class A, FCC Part 15 Class A, VCCI Class A.



1000Base-T ↔ 1000Base-SX/LX (multi-mode/single-mode)



1000Base-T ↔ 1000Base-LX (WDM single-mode)

### EMC1600 media converter chassis system

