MULTIDYNE
Video and Fiber Optic Systems

E-FMX-150 Series

Auto-Negotiable 10/100M Ethernet SM (One Fiber) Transceiver

Features

♦ Supports IEEE 802.3 10/100 Base-FX and 10/100 Base-TX Standards

♦ Supports TIA/EIA-785 Full Auto-Negotiation
For Twisted Pair & Fiber Media

♦ Selectable Half or Full Duplex Modes

♦ One Fiber Solution up to 50 Km SM

♦ Local Network Management (NMS)

♦ 3 RU Rack Mount Card or Standalone

Applications

♦ Extending Distances Among Ethernet Segments

♦ Linking Ethernet Segments

♦ Full Duplex Connection Between two Switches

♦ Full/Half Duplex Connection of a Work-station to a Switch

♦ A Bridged Full Duplex Uplink Port Capable of Driving Long Distances

♦ Hub Connected via a non-Bridged Half Duplex Uplink Port to a Switch.

Overview

The E-FMX-150 is a 10/100 Base TX unshielded twisted pair (UTP) to 10/100 FX converter via a single fiber cable. Fully compliant with TIA/EIA 785, it supports full auto-negotiation for twisted pair and fiber optic media including 10/100 Base and half/full duplex operations.

The E-FMX-150 auto adapts to the highest level of performance supported by the device that is connected to the UTP port. When the device is a switch or a workstation that supports full duplex, the E-FMX-150 adapts to the full duplex mode and provides an effective 200 Mbps bandwidth. When the connected device is a hub or workstation that supports only half duplex, the E-FMX-150 adapts to the half duplex mode and provides the nominal 100 Mbps bandwidth. An override switch provides total manual control over half and full duplex or 10 Mbps and 100 Mbps operation.

The E-FMX-150 operates at 1300/1550nm wavelength over one Singlemode fiber optic cable. It supports up to 25 Km and up to 50 Km distances with two models.

Local Network Monitoring System is also available Via UTIL-2305 NMS module of the UTIL-2300 chassis system

Specifications

System:

Error Rate	1 in 10^9 or Better
Power (Rack Chassis)	90-240 VAC
	+12 VDC

Supports:

Standards	IEEE – 802.3
	TIA/EIA - 785
Data Speed	10/100 Mbps
Operation Mode	Haft / Full Duplex
Auto-Negotiation	10/100 - Haft/Full Duplex
Singlemode, Standard	25 Km
Singlemode, Extended	50 Km
Fiber Interface	One Fiber, Single Mode

Environment:

Operating	0^0C to 50^0 C
Storage	-40^0C to 95^0 C
Humidity	95% Non-Condensing

Indicators:

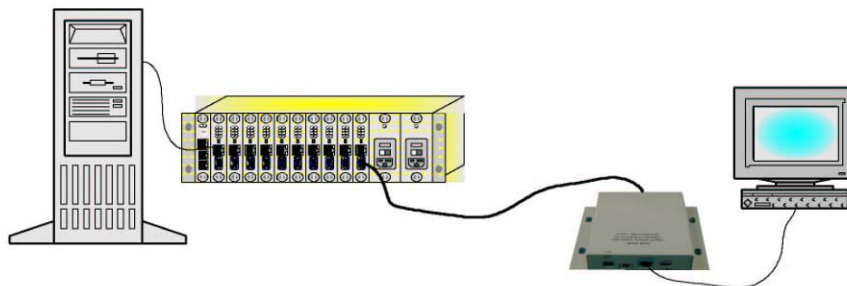|	
Power	LED, Green, Power Applied
Link	LED, Green, Receive Fiber Link
TP-ACT	LED, Green, TP Activity
FO-ACT	LED, Green, Fiber Activity
TP-10	LED, Green, TP 10M Data
FO-10	LED, Green, Fiber 10M Data
TP-100	LED, Green, TP 100M Data
FO-100	LED, Green, Fiber 100M Data

Switches:

UTP Crossover	Straight, Crossed
UTP Auto-Negotiation	Auto Negotiation, Manual
Mode	Half Duplex, Full Duplex
Data Rate Selection	10M, 100M

Physical:

Dimensions	5.0" x 6.0" x 1.0"
Weight	.5 lb.

Example Application

Typical E-FMX-150 Transceiver Application

MULTIDYNE
Video and Fiber Optic Systems

191 Forest Ave.
Locust Valley, NY 11560-2132
Tel: 1-800-488-8378
Fax: 1-516-671-3362
www.multidyne.com
Email: info@multidyne.com

Ordering Information

Model	Description
E-FMX-150-ST-3/5	10/100 Ethernet Transceiver, 1310/1550nm SM, 25Km, ST, One Fiber
E-FMX-150R-ST-5/3	10/100 Ethernet Transceiver Rack Card, 1550/1310nm SM, 25Km, ST, One Fiber
E-FMX-150L-ST-3/5	10/100 Ethernet Transceiver, 1310nm/1550 SM, 50Km, ST, One Fiber

* Replace ST with SC for SC Connectors