MULTIDYNE
Video and Fiber Optic Systems

OptiMux 650 Series

Features

- Multiplex 4 Duplex Optical LAN/WAN High Speed Signals
- Individual Channel Bandwidth from 0 to 650 Mbps
- Transmit Synchronous and Asynchronous Data Up to 40 Km
- 100% Protocol Independent I/O
- Plug and Play
- No Bandwidth Penalty
- SNMP Option (Local Monitoring)

4 Optical Fiber Port Protocol Independent Mux/De-Mux System over *ONE* Fiber

Applications

- Telco CO-CO Multiplexing
- Telco Fiber Optic Feeder
- Enterprise and Corporate Networks
- Leased Fiber Networks
- Mixed Protocol Multiplexing
- Military Tactical Communications

Overview

The OptiMux 650 Series is a fiber optic, protocol independent multiplexer that is designed to multiplex Singlemode and Multimode digital optical signals. The OptiMux can multiplex up to 8 optical signals on one fiber.

Each I/O port can accept synchronous and asynchronous digital optical signals between 0 and 650 Mbps, such that an 4 channel OptiMux 650 has the equivalent bandwidth of one SONET OC-48 signals. The OptiMux 650 can transmit multiplexed signals up to 40 Km via Singlemode fiber.

Using automatic gain control and state-of-the-art multiplexing technology, the OptiMux 650 is a plug and play device. The OptiMux 650 features protocol independent I/O ports, which introduces no bandwidth penalty or excessive transmission delay to the I/O protocol.

Protocol independent ports enable users to re-configure an entire network without re-configuring the OptiMux 650. For example, a Singlemode 100M Ethernet I/O connection can be changed to a Singlemode OC-12 connection simply by disconnecting the 100M Ethernet from the OptiMux 650 and connecting the OC-12 signal to the OptiMux 650.

The OptiMux 650 is ideal for high-speed leased fiber, Telco feeder, SCADA, Enterprise and Corporate Networks. The OptiMux650 multiplexes SONET OC-1, OC-3, and OC-12, SDH STM-1 and STM-4, 10M Ethernet, 100M Ethernet, DS3, E3, CEPT-1, FDDI, ESCON, and many other standard or proprietary digital optical signals.

Specifications

System:

Error Rate	1 in 10^{10}
I/O Channel	4
Indicators	PWR
	TX Ch 1-4
	RX Ch 1-4
Data Rate	0 to 650 Mbps per Channel
Protocol	Independent
SNMP	Option

Environment:

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

Power:

AC	90-240 VAC, 47-63 Hz
DC	-44 to - 56 VDC

Optical Composite:

Transmitters	CWDM Lasers
Wavelength	1510, 1530, 1550, 1570nm
Speed	0 to 650 Mbps x 4
Receiver	PIN
Wavelength	1510, 1530, 1550, 1570nm
Power Budget	14 dB SM
Distance	40 Km
Connectors	FC/APC
Fiber	One

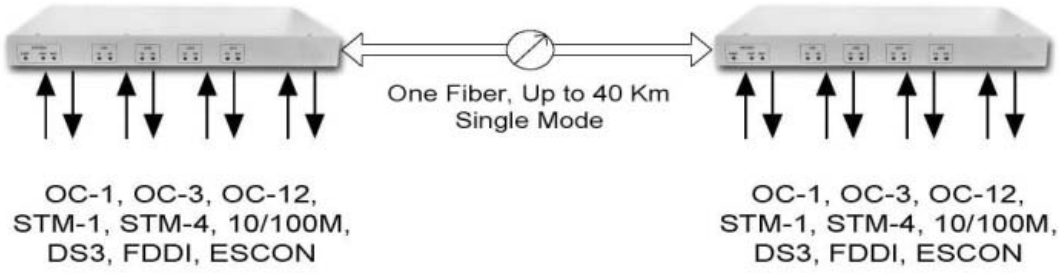
Optical Input/Output:

Transmitters	Lasers 1310nm SM
	LED 1310nm MM
	VCSEL 850nm MM
Output	-3 dBm SM
	-16 dBM MM
	-3 dBm MM (850)
Receiver	PIN
Saturation	+1 dBm
Sensitivity	-28 dBm

Physical:

Dimensions	19” x 1.75” x 10”

Example Application



Typical OptiMux 650 Application

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Ordering Information:

Model	Description
OM650A-XX-Y	4 Channel Optical Multiplexer, One Fiber System
I/O Group	XX = 01 850 nm MM
	02 1310 nm MM
	03 1550 nm SM
Composite Connectors	Y = ST / SC FC