



Overview

VILINK third generation Optical Mux: The OM442 is a fiber optic CWDM transporter system that is designed to multiplex 4 optical fiber channels over one pair of single mode fiber. It is a low cost fiber expansion solution with each I/O channel is a protocol independent transponder. The OM442 can accept all digital optical signals between 10Kbps and 2.5 Gbps from various communication devices, and transmit up to 50 Km via single mode fiber.

Using automatic gain control and state-of-the-art multiplexing, combining with CWDM technologies, the OM442 is a plug and play device. Protocol independent ports enable users to re-configure an entire network without re-configuring the OM442. For example, a single mode 100M Ethernet I/O connection can be changed to a single mode OC-12 connection simply by disconnecting the 100M Ethernet from the OM442 and connect the OC-12 signal to the OM442.

The OM442 is ideal for high speed leased fiber, SAN, Telco feeder, SCADA, Enterprise and Corporate Networks. The OM442 multiplexes SONET OC-1, OC-3, and OC-12, SDH STM-1 and STM-4, 100M Ethernet, Gigabits Ethernet, DS3, E3, CEPT-1, FDDI, ESCON, Direct TV, HD Video, HDTV and many other standard or proprietary digital optical signals.

Features

- *Multiplex 4 Full Duplex Optical*
- *LAN/WAN, SAN High Speed Signals*
- *Individual Channel Bandwidth From 10Kbps to 2.5 Gbps*
- *Transmit Synchronous and Asynchronous Data Up to 50 Km*
- *100% Protocol Independent I/O*
- *Plug and Play*
- *No Bandwidth Penalty*
- *1 RU Rack Mountable*
- *NEMA Temperature*

Applications

- *Telco CO-CO Multiplexing*
- *Fiber Optic Feeder*
- *Enterprise and Corporate Networks*
- *Leased Fiber Networks*
- *Mixed Protocol Multiplexing*
- *Military Tactical Communications*
- *ITS Traffic Networks*
- *METRO Monitoring Operation*
- *Homeland Security*
- *Oils and Gas Monitoring System*

Ordering Information

Model	Descriptions
OM442STST	4-Channel Optical Multiplexer, ST to ST, 2.5 GB, 50Km, 90~240 VAC
OM442SCST	4-Channel Optical Multiplexer, SC to ST, 2.5 GB, 50Km, 90~240 VAC

*** Please Consult Factory for Additional Model Numbers***

System:	
Error Rate	1 in 10 ¹² or Better
NMS	GUI, RS-232 Ports
NMS Connector	RJ11
Indicators	PWR, TX1-4, RX1-4
I/O Channels	Full Duplex
Data Rate	10 Kbps to 1.25 Gbps per Channel
Protocol	100% Transparency
Environment:	
Operating	-34 ^o C to +74 ^o C
Storage	-40 ^o C to + 95 ^o C
Humidity	98% Non-Condensing
Physical:	
Dimensions	19" x 10" x 1.75"
Weight	5 lbs
Power:	
Rack mountable	90~240 VAC

Optical Composite Interface:	
Transmitter	SM CWDM Lasers
Receiver	SM CWDM & PIN-TIA
Data Rate	4 x 2.5 Gbps
Distance	50 Km @ single mode
Connector	ST, SC, SFP
Optical I/O Interface:	
Transmitter	1310nm Lasers
Receiver	PIN-TIA
Data Rate	2.5 Gbps
Distance	30 Km @ single mode
Connector	ST, SC, SFP
10/100M Ethernet Interface (Optional):	
Port	1
Network Standard	IEEE802.3u 100Base TX/FX
Auto Re-connect	512 bits collision-free packet
Support	VLAN, Tag VLAN, MTU, MPLS, PPPOE
Indicators	PWR, Link, TD, RD, TX, RX

Applications

