Overview

Vi-Link Optical Transport equipment: The OM1600 is a fiber optic CWDM transporter system that is designed to convert and multiplex 16 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 OM1600 can accept all digital optical signals between 1.25 Gbps to 10 Gbps from various communication devices, and transmit up to 40 Km via single mode fiber. Using automatic gain control and state-of-the-art multiplexing, combining with CWDM technologies, the OM1600 is a plug and play device.

Protocol independent ports enable users to re-configure an entire network without re-configuring the OM1600. For example, a single mode 1000M Ethernet I/O connection can be changed to a single mode OC-12 connection simply by disconnecting the GB Ethernet from the OM1600 and connect the OC-12 signal to the OM1600.

The OM1600 is ideal for high speed leased fiber, 5G Telco, SAN, Telco feeder, SCADA, Enterprise and Corporate Networks. It multiplexes SONET OC-1, OC-3, and OC-12, OC-48, SDH STM-1 and STM-4, STM16, Gigabits Ethernet, 10GB Ethernet, DS3, E3, CEPT-1, FDDI, ESCON, HD-SDI Video, HDTV and many other standard or proprietary digital optical signals.

Features

- Multiplex 16 Full Duplex Optical
- LAN/WAN, SAN High Speed Signals
- Individual Channel Bandwidth From 1.25 Gbps to 10 Gbps
- Transmit Synchronous and Asynchronous Data Up to 40 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

Order Information

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<tr>
<th>Model</th>
<th>Descriptions</th>
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<tr>
<td>OM1600TST05</td>
<td>160 GB Optical Multiplexer (Tx), 16 Channels SFP i/o, 1.25 GB ~ 10 GB per Channel, ST, SM 40Km, 90~240 VAC</td>
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*** Please Consult Factory for Additional Model Numbers***
## Specifications

### System:
- **Error Rate**: 1 in $10^{15}$ or Better
- **Indicators**: PWR, TX1-16, RX1-16
- **I/O Channels**: Full Duplex
- **Data Rate**: 1.25 Gbps to 10 Gbps per Channel
- **Protocol**: 100% Transparency

### Environment:
- **Operating**: -34°C to +74°C
- **Storage**: -40°C to +95°C
- **Humidity**: 98% Non-Condensing

### Physical:
- **Dimensions**: 19” x 10” x 1.75”
- **Weight**: 10 lbs

### Optical Composite Interface:
- **Transmitter**: SM CWDM Lasers
- **Receiver**: SM CWDM & PIN-TIA
- **Data Rate**: 16 x 10 Gbps
- **Distance**: Up to 40 Gbps @ single mode
- **Connector**: ST or SFP

### Optical I/O Interface:
- **Transmitter**: VESEL-850, 1310nm MM/SM Lasers
- **Receiver**: PIN-TIA
- **Data Rate**: 16 x 10 Gbps
- **Distance**: 20 Km @ single mode
- **Connector**: SFP

### Power:
- **Rack mountable**: 90~240 VAC

## Application

### Traffic Operation Center
- **OM 1600**: 40 Km SM

### OM Series
- **Traffic Signal**: 20 Km SM
- **Bus Station**: 20 Km SM
- **OM 1600**: Single mode 40 Km
- **Traffic Operation Center**: 20 Km SM

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