Overview

Vi-Link Optical Transport equipment: The OM820 is a fiber optic CWDM transporter system that is designed to converter/repeat and multiplex 8 optical fiber channels and one 10/100/1000M Ethernet Channel 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 OM820 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. The 10/100/1000M Ethernet channel supports store and data forwarding with extremely low latency. It is high-performance, cost effective and flexible solutions for a wide range of applications in the field of LAN campus network. Using automatic gain control and state-of-the-art multiplexing, combining with CWDM technologies, the OM800 is a plug and play device.

Protocol independent ports enable users to re-configure an entire network without re-configuring the OM820. 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 OM820 and connect the OC-12 signal to the OM820.

The OM820 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 8 Full Duplex Optical
- LAN/WAN, SAN High Speed Signals
- Individual Channel Bandwidth From 1.25 Gbps to 10 Gbps
- 10/100/1000M Ethernet Link
- 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

<table>
<thead>
<tr>
<th>Model</th>
<th>Descriptions</th>
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<tbody>
<tr>
<td>OM820TST05</td>
<td>80 GB Optical Multiplexer (Tx), 8 Channels SFP i/o, 1 x 10/100/1000M, ST, SM 50Km, 90~240 VAC</td>
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*** Please Consult Factory for Additional Model Numbers***
**OM820 Technical Specifications**

#### Specifications

<table>
<thead>
<tr>
<th>System:</th>
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<tbody>
<tr>
<td>Error Rate</td>
<td>1 in $10^{12}$ or Better</td>
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<tr>
<td>Indicators</td>
<td>PWR, TX1-8, RX1-8</td>
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<tr>
<td>I/O Channels</td>
<td>Full Duplex</td>
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<tr>
<td>Data Rate</td>
<td>1.25 Gbps to 10 Gbps per Channel</td>
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<tr>
<td>Protocol</td>
<td>100% Transparency</td>
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<tr>
<th>Environment:</th>
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<tr>
<td>Operating</td>
<td>-34°C to +74°C</td>
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<tr>
<td>Storage</td>
<td>-40°C to + 95°C</td>
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<tr>
<td>Humidity</td>
<td>98% Non-Condensing</td>
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<th>Physical:</th>
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<tr>
<td>Dimensions</td>
<td>19&quot; x 10&quot; x 1.75&quot;</td>
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<tr>
<td>Weight</td>
<td>7 lbs</td>
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<tr>
<th>Power:</th>
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<tbody>
<tr>
<td>Rack mountable</td>
<td>90~240 VAC</td>
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</tbody>
</table>

#### Optical Composite Interface:

- **Transmitter**: SM CWDM Lasers
- **Receiver**: SM CWDM & PIN-TIA
- **Data Rate**: 8 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**: 8 x 10 Gbps
- **Distance**: 20 Km @ single mode
- **Connector**: SFP

#### 10/100/1000M Ethernet Interface:

- **Channel**: 1
- **TX Port**: Auto Negotiation MDI/MDIX
- **Data Rate**: 10/100/1000 Mbps
- **Network Standard**: IEEE802.3 10/100/1000BaseT

### Application

- **Bus Station**: SM 20 Km
- **Traffic Signal**: SM 20 Km
- **METRO Operation Center**: Single mode 50 Km
- **Traffic Operation Center**: SM 20 Km

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