

# WDM Lite (TM) M-ROADM Product Information

CWDM Lite<sup>TM</sup> M-ROADM is a passive, manually reconfigurable add-drop multiplexer (ROADM) that add-drops any configuration of CWDM channels in an 8, 16 or 18 channel fiber link.

### **Features of Product Line**

- 2 degree unit expandable to any number of degrees
- 3 models, with a total of 8, 16, and 18 add-drop channels.
- Each channel is add-drop in East and West direction
- Fraction of price of typical industry ROADM
- Channels compatibility with all manufacturers DWDM channel plans
- Transparent to all data protocol
- Easy to install, requires no configuration or maintenance
- Environmentally friendly product, completely passive, no power and no cooling required for operation.
- Operating temperature, -5° to +70°C

- Manual variable optical attenuators (VOA) for channel levelling
- Low insertion loss high isolation.
- Monitor ports on network connections
- Fully universal, bidirectional operation on any port
- Ready for use on dual or single fiber network fibers
- High reliability, MTBF >> 100 years
- GR-1221 qualified
- Accepts any data rate and any protocol on any port up to 10 Gbps, also 40 Gbps (DPSK, DQPSK) and 100 Gbps (DP-QPSK)

### **Applications**

- Local, Metro, and Long Haul DWDM channel add-drop
- GigE, OC-48, OC-192, OC-768, 10GigE, 40GigE, STM64, STM-256

## **Compatibility**

- Fully compatible with all ITU-T CWDM transceivers.
- Compatible other manufacturer's lightwave equipment including, Cisco, Nortel, Alcatel, Ciena, Fujitsu, etc.
- Manufacturer specific channel assignments available.

## 8-Channel CWDM Lite™ M-ROADM

#### **Specifications**

Channels	14/1nm to 1611ni
Add/Drop Insertion Loss (max)	3.0
Express thru Loss ea (max)	3.5 dB
Isolation (min)	30.0 dB
Polarization Dependent Loss (max)	0.1 dB
Directivity (min)	55.0 dB

Product Code TMRD - 08W - 02- 20 - 47 - 61 - LCU

## 16-Channel CWDM Lite™ M-ROADM

#### **Specifications**

Channels	1311nm to 1611nm
Add/Drop Insertion Loss (max)	4.5
Express thru Loss ea (max)	5.0
Isolation (min)	30.0 dB
Polarization Dependent Loss (max)	0.1 dB
Directivity (min)	55.0 dB

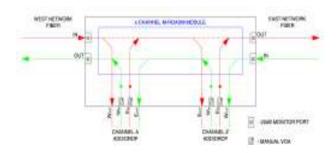
Product Code TMRD - 16W - 02- 20 - 31 - 61 - LCU

### 18-Channel CWDM Lite™ M-ROADM

### **Specifications**

Available Wavelengths	1271nm to 1611r
Add/Drop Insertion Loss (max)	4.5 dB
Express thru Loss ea (max)	5.5 dB
Isolation (min)	30.0 dB
Polarization Dependent Loss (max)	0.1 dB
Directivity (min)	55.0 dB

Product Code TMRD - 18W - 02- 20 - 27 - 61 - LCU





A functional diagram of a M-ROADM

An 8 channel CWDM M-ROADM with VOA ports

#### \* Patent Pending