MDX81-E
8 Channels CWDM Mux/Demux

- 8 channels, CWDM MUX/DEMUX device, with Express and monitor ports and Duplex LC connectors
- Unbalanced Low Insertion Loss for wavelengths 1530,1550,1570nm
- The stand-alone device is a half 19”/1RU case, whereas the module occupies 3 slots in the MetroStar system
- CWDM-Band channels deployment
- Low insertion loss, low temperature sensitivity, and high channel isolation
- Monitor port for troubleshooting the optical signals
- High stability and reliability

The **MDX81-E** modules and the **MDX81-E/SA** stand-alone devices are 9 channels MUX/DEMUX units with Express and Monitor ports, and LC connectors.
Each unit has 8 CWDM input channels and one Express channel and multiplexes 9 optical input signals into an optical output signal over a fiber link.

Overview

The CWDM MUX.DEMUX utilize thin film coating technology, and comply with RoHS & Telcordia GR-1221-CORE & Telcordia GR-1209-CORE standards.
The **MDX81-E** module and the **MDX81-E/SA** stand-alone device are transparent to data frame sizes, accommodating multiple protocols and provide a cost effective solution in transferring up to 8 various signals (FE/GE/Fiber Channel/SONET/SDH/10GE) plus Express port over CWDM channels
These devices operate in the following wavelengths: (1470, 1490,1510,1530, 1550-1570,1590,-1610)
The MDX81-E/SA is a 8 channels stand-alone CWDM multiplexer-demultiplexer device, supporting 8 channels, plus Express port (1310nm) and one Monitor port, Duplex LC connectors, Half 19"/1RU

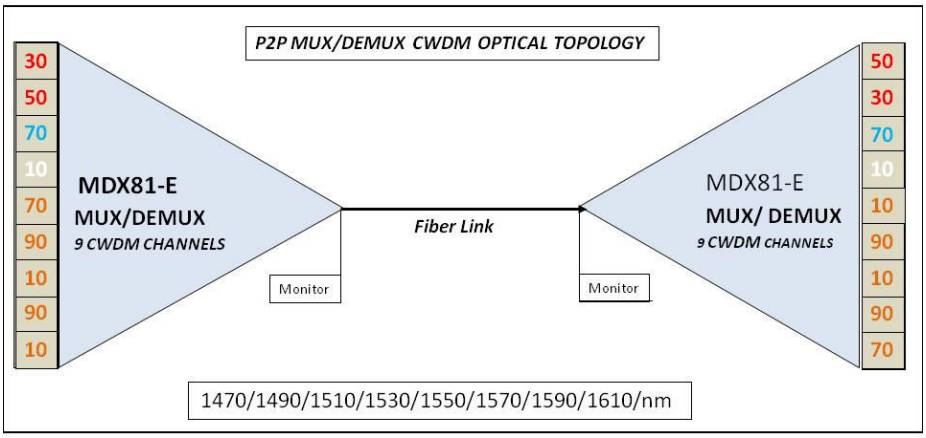
Key Features

- Wide pass band
- High Channel isolation
- Low insertion Loss
- Epoxy free on optical path
- High Stability and reliability
- Low temperature sensitivity

Applications

- Telecommunication
- Access/Metro Networks
- WDM Networks
- Cellular Applications
- Fiber Optical amplifier
- Line Monitoring

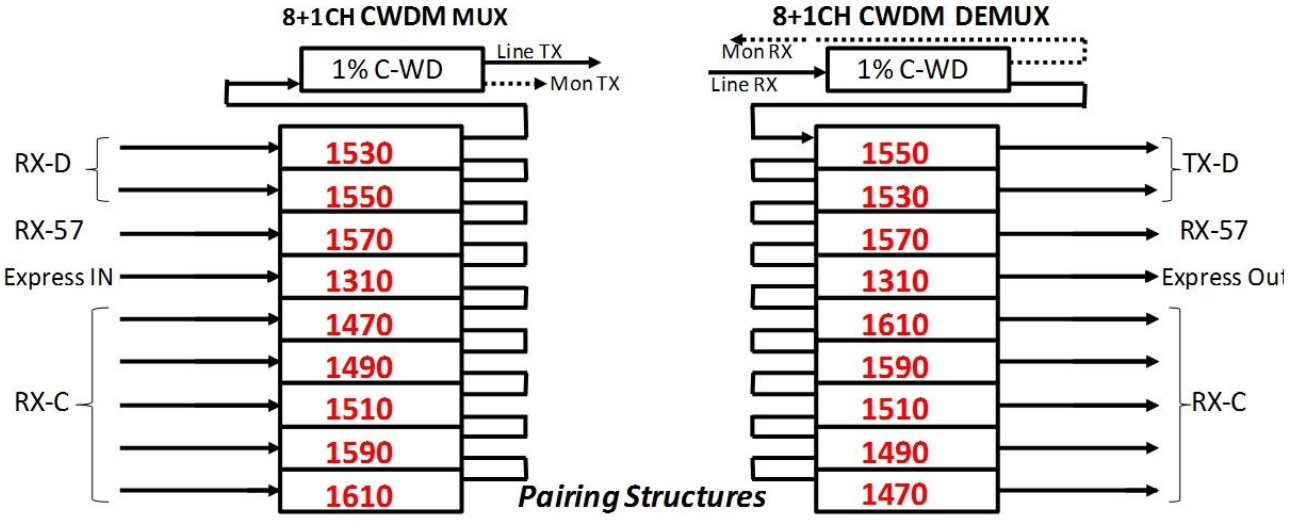
Typical Optical Topology



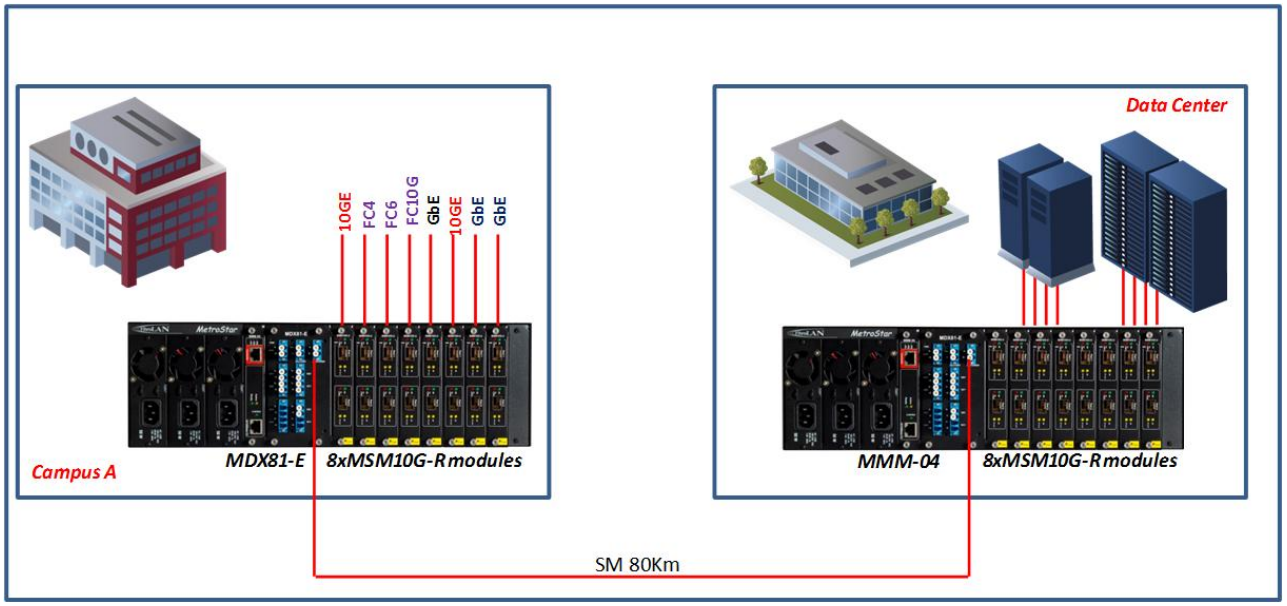
Technical and Environmental Specifications

Parameter	Unit	Value
Channel No		8 CWDM channels (1470-1610nm)+Express channel 1310 ± 50nm
Channel Spacing	nm	20
Center Wavelength	nm	1470/1490/1510/1530/1550/1570/1590/ 1610
Channel Passband (@0.5dB bandwidth)	nm	ITU+/-6. 5nm
Max. Link Loss (MUX+DEMUX Pair Only)	dB	RX-D to TX-D: ≤ 2.3
	dB	RX-57 to TX-57: ≤ 3.0
	dB	Express In to Express Out: ≤ 3.6
	dB	RX-Ct o TX-C: ≤ 5.1
Max Insertion Loss	dB	RX to Mon TX: 24.8 (MUX)
	dB	Line RX to Mon RX (DEMUX): 22
Channel Ripple	dB	0.3
Adjacent Channel Isolation	dB	> 30
Non- Adjacent Channel Isolation	dB	> 40
Isolation: Express with/without filter	dB	> 30 / >12
Directivity	dB	> 50
Return Loss	dB	> 45
Polarization Dependent Loss (PDL)	dB	< 0.1
Polarization Mode Dispersion	ps	< 0.1
Insertion Loss Temperature Sensitivity	dB/°C	< 0.005
Max Power Handling	mW	300
Wavelength Temperature Shifting	nm/°C	< 0.002
Operating Temperature	°C(°F)	0 + 70 (32 + 158)
Connector type		LC/UPC

Optical Channels Configuration



Typical Solution: Point to Point Multiservice Aggregation



Ordering Information

P/N	Model	Description
MDX81-E	**2807**	8 channels CWDM multiplexer-demultiplexer, (1470/1490/1510/1530/1550/1570/1590/1610nm) , plus Express channel (1310nm), and one Monitor port, Duplex LC connectors, occupies 3 slots in the Fibrolan ***MetroStar*** System
MDX81-E/SA	**2814**	8 channels stand-alone CWDM multiplexer-demultiplexer device, (1470/1490/1510/1530/1550/1570/1590/1610nm) ,plus Express channel (1310nm) and one Monitor port , Duplex LC connectors, Half 19"/1RU enclosure

Specifications are subject to change w/o prior notice

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