WaveReady™ 8-Channel Modular Multiplexer/Demultiplexer, Upgradeable to 40 Channels

MDX-08MD1Z1xB

Key Benefits

- Conserves or reclaims fiber with DWDM to improve capacity exhaust during fiber constraint
- Lowers initial costs without limiting growth
- Easily upgrade to 40 channels per fiber
- Multiplexes and demultiplexes up to eight ITU 100 GHz-spaced channels onto a single fiber pair

Key Features

- Low pass-through insertion loss for C-band channels
- Fits into standard LGX-mounting solutions
- Thermally-stable passive optics require no power

Applications

- Point-to-point multichannel in linear (bus) add/drop and hub-and-spoke ring architectures

Compliance

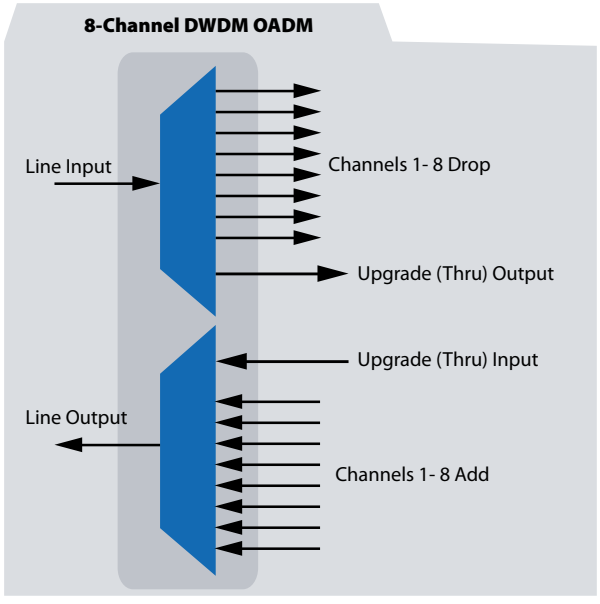
- ITU-T G694.1
- GR-63-CORE

The JDSU WaveReady 100 GHz Optical Add/Drop Modules (OADMs) comprise a family of flexible, low-cost solutions to expand existing fiber capacity. Dense wavelength division multiplexing (DWDM) technology lets a single optical fiber carry up to 40 discrete optical channels in 5 bands of 8 wavelengths each.

The 100 GHz DWDM OADM can be configured as both an OADM or a terminal multiplexer and demultiplexer (mux/demux) supporting a broad range of architectures from scalable point-to-point links to four-fiber protected rings. Innovative band upgrade ports let you pay-as-you-grow with in-service capacity scaling, in multiples of eight channels, to lower initial costs without limiting growth.

Market standard LGX™ packaging is readily deployed in existing LGX-compatible shelves.

The 100 GHz OADM operates with both WaveReady transponders and optical regenerators and ITU transponder cards for other widely available transmission equipment.



8-Channel DWDM OADM

Specifications[1]

Parameter	Minimum	Typical	Maximum
Optical characteristics			
DWDM channel spacing		100 GHz	
DWDM channel bandwidth		ITU I ±0.1 nm	
DWDM mux/demux insertion loss	3 dB		4 dB
DWDM channel flatness		0.5 dB	
DWDM channel non-uniformity		1 dB	
Adjacent DWDM channel isolation		25 dB	
Non-adjacent DWDM channel isolation		40 dB	
Through-channel isolation		12 dB	
Upgrade path insertion loss	1.0 dB		1.5 dB
Polarization-dependent loss		0.3 dB	
Polarization-mode dispersion		0.2 ps	
Optical return loss		40 dB	
Input optical power — sum of all DWDM channel ports		500 mW	
Physical characteristics			
Size (H x W x L)		129.5 x 57.7 x 160.3 mm (5.10 x 2.27 x 6.31 in)	
Optical connector type (all ports)		Duplex LC/PC bulkhead	
Environmental characteristics			
Operating ambient temperature (short term)	–5°C	—	+70°C
Operating ambient temperature (extended term)	+10°C	—	+40°C
Storage temperature	–40°C	—	+85°C
Relative humidity (non-condensing)	5%	—	95%

Note:
1. Specifications are based on worst case end of life over specified temperature and wavelength range.

Ordering information

Product Number	Description
MDX-08MD1Z11B	8-Channel Multiplexer/Demultiplexer Band 1, ITU Channels 52 – 59
MDX-08MD1Z12B	8-Channel Multiplexer/Demultiplexer Band 2, ITU Channels 44 – 51
MDX-08MD1Z13B	8-Channel Multiplexer/Demultiplexer Band 3, ITU Channels 36 – 43
MDX-08MD1Z14B	8-Channel Multiplexer/Demultiplexer Band 4, ITU Channels 28 – 35
MDX-08MD1Z15B	8-Channel Multiplexer/Demultiplexer Band 5, ITU Channels 20 – 27

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