

WaveReady™

Coarse WDM Optical Add/Drop Module — CWDM OADM



Key Features

- Adds and drops ITU-T G.695- and 694.2-compatible CWDM channels onto a fiber pair
- Upgradeable to 8 channels per fiber
- Provides low-loss pass through for CWDM channels
- Fits into standard LGX™ mounting solutions
- Thermally stable passive optics require no electrical power

Applications

- Maximize fiber applications
- Provides fiber conservation/reclamation through CWDM
- Supports linear (bus) add/drop architectures
- Supports hub-and-spoke ring architectures

Compliance

- Telcordia GR-63 (NEBS)
- Telcordia GR-1221
- ITU-T GR-694.2 and GR-695

The WaveReady™ Coarse Wavelength Division Multiplexing Optical Add/Drop Modules (CWDM OADM) comprise a family of flexible, low-cost solutions that enable the capacity expansion of existing fiber. Through the use of CWDM technology, individual channels can be optically extracted from a fiber pair while allowing pass-through traffic to continue unobstructed through the bus or ring.

CWDM OADM market standard LGX packaging is readily deployed in existing LGX-compatible frames in combination with the WaveReady CWDM Universal Mux (UMUX) and Mux/Demux products, or it can be integrated into the WaveReady MDX series of passive enclosures.

The CWDM OADM Module is designed to interoperate with both the WaveReady line of transponder and optical regenerator solutions as well as ITU G.694.2-compliant small form-factor pluggable (SFP) transponders and transponder cards used in widely available transmission equipment. With millions of field operating hours, the industry-leading JDSU optical multiplexing technology offers unparalleled reliability and leading edge performance.

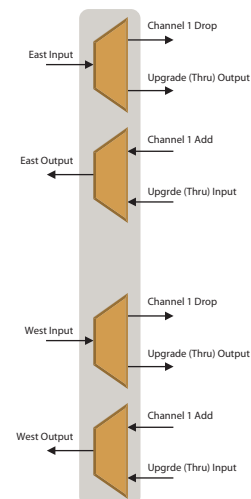


Figure 1 Functional diagram

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Sample Configurations

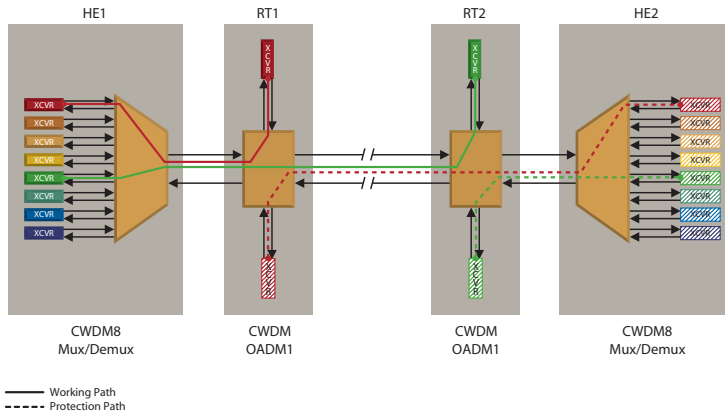


Figure 2 Protected Linear (Bus) Network

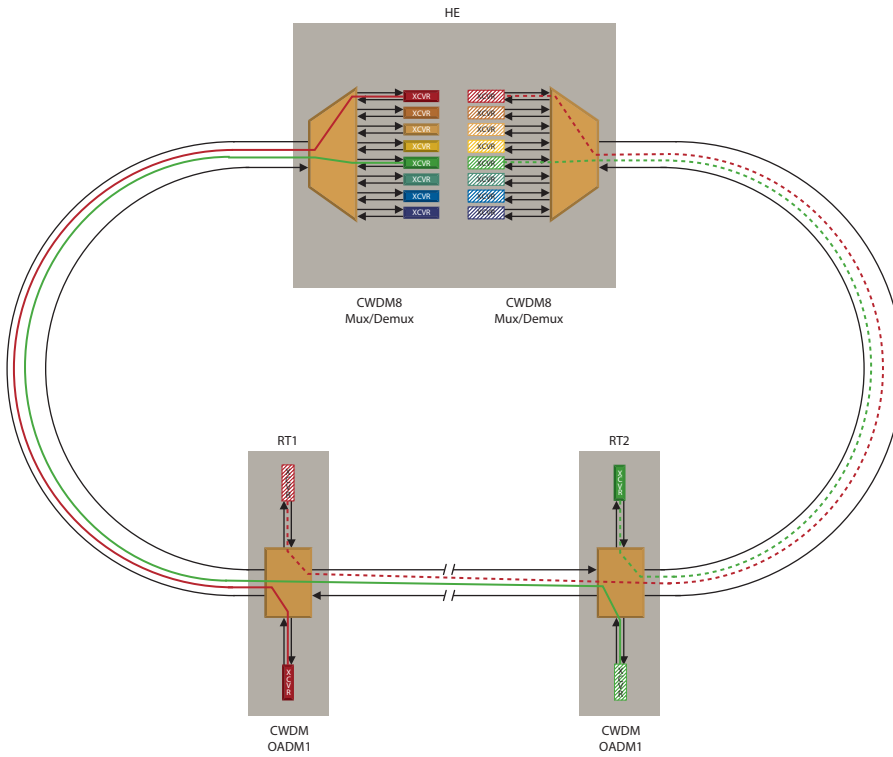


Figure 3 Protected Ring (Hub and Spoke)

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Network Optical Specifications¹

Parameter	Min	Typical	Max
Mux/add insertion loss		1.0 dB	1.3 dB
Demux/drop insertion loss		1.0 dB	1.3 dB
Upgrade path insertion loss			0.9 dB
Optical pass-through insertion loss			1.8 dB
Channel center wavelengths		1471, 1491, 1511, 1531, 1551, 1571, 1591, 1611 nm	
Channel passband	±6.5 nm		
Channel flatness	0.5 dB		
Isolation			
Adjacent 20 nm spaced channel	30 dB		
Non-adjacent 20 nm spaced channels	50 dB		
Through channel add/drop	30 dB		
Optical return loss	40 dB		
Maximum input optical power — sum of all channel ports			1 W
PDL			0.2 dB
PMD			0.2 ps

Physical Specifications¹

Size (H x W x L)	129.5 x 28.4 x 160.3 mm (5.10 x 1.12 x 6.31 in)		
	Single slot LGX		
Optical connector type (all ports)	Duplex LC/PC		
Weight (approximate)	0.45 kg (1 lb)		

Physical Specifications¹

Operating ambient temperature	-5°C	—	70°C
Storage temperature	-40°C	—	85°C
Relative humidity (non-condensing)	5%	—	85%

¹All specifications are guaranteed over the life, operating temperatures, wavelength range specified.

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Ordering Information

For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-800-498-JDSU (5378) in North America, +1 800-5378-JDSU worldwide or via e-mail at sales@jdsu.com.

Sample: MDX-01ADC049B

MDX-01ADC0 B

Code	Channel Plan (Wavelength)
47	1471 nm
49	1491 nm
51	1511 nm
53	1531 nm
55	1551 nm
57	1571 nm
59	1591 nm
61	1611 nm