

Introduction:

Fiberdyne Labs, Inc. manufactures a Dense Wave Division Multiplexer that is 100% plug compatible with the Cisco® ONS 15200 Series at a cost that is 50% less. Fiberdyne Labs, Inc. offers both **Red** and **Blue** compatible filters.

Red Filter - a passive device comprising a 100-GHz, 16X1, wavelength unidirectional multiplexer and a 100-GHz, 1X16, wavelength unidirectional demultiplexer operating in the 1546 to 1561-nm band.

Blue Filter - a passive device comprising a 100-GHz, 16X1, wavelength unidirectional multiplexer and a 100-GHz, 1X16, wavelength unidirectional demultiplexer operating in the 1530 to 1545-nm band.

Features and Benefits:

- Leverages existing fiber optic facilities to support greater bandwidth and traffic
- Fast and easy deployment
- Compact size permits installation in space restricted environments
- Additional wavelengths are as simple as plugging jumpers into a patch panel
- Equipped with integral fiber retainers which protect bend radius and eliminate sharp edges
- All ports are front panel loaded for easier installation and maintenance
- Cost savings of 50% saves resellers and end user's valuable funds

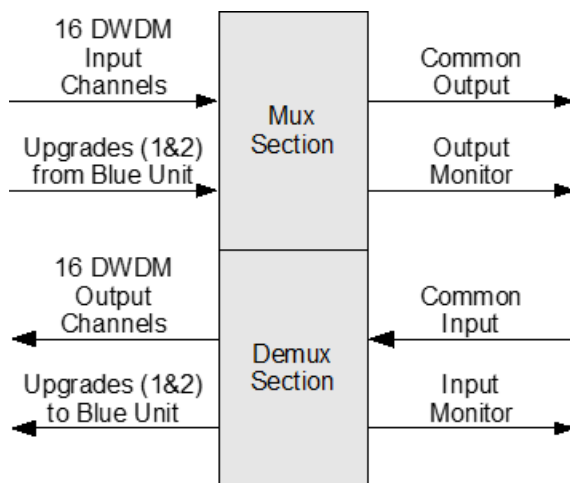
Fiberdyne Labs, Inc. also offers 100% compatible OADMs
(Optical Add/ Drop Multiplexers)

[100 GHz Comparison Document](#)

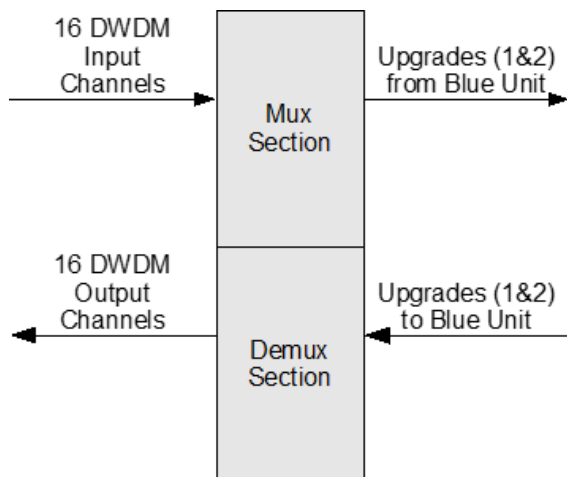


Conceptual Usage:

Base (Red) Unit:



Upgrade (Blue) Unit:



Specifications:

Item Description	Unit	Value	
Channel Spacing	GHz	100	
Wavelength per Channel	nm	Base (Red) Unit	Upgrade (Blue) Unit
		1546.12	1530.33
		1546.92	1531.12
		1547.72	1531.90
		1548.52	1532.68
		1550.12	1534.25
		1550.92	1535.04
		1551.72	1535.82
		1552.52	1536.61
		1554.13	1538.19
		1554.94	1538.98
		1555.75	1539.77
		1556.56	1540.56
		1558.17	1542.14
		1558.98	1542.94
		1559.79	1543.73
		1560.61	1544.53
Channel Spacing	GHz	100	
Channel Specification		Per ITU G.694.1	
Passband @ -0.5dB	nm	0.4	
Channel Uniformity	dB	< 1.5	
Passband Flatness	dB	< 0.75	
Pair Insertion Loss (end-to-end, including 2 connector losses)	dB	< 10.5	
Monitor Port Insertion Loss (2% tap)	dB	< 17.7	
Demux Isolation:	dB		
- adjacent channels		> 25	
- non-adjacent channels		> 40	
Channel Uniformity @ 23°C:	dB		
- excludes spares		< 1.5	
- includes spares		< 2.0	
Directivity	dB	> 50	
Return Loss	dB	> 40	
Temperature - Operating	°C	0 to 70	
Temperature - Storage	°C	-40 to +85	
Connectors		SC/UPC	
Package Size	inch	3.5 x 17.4 x 8.5 *	
Rackmount (reversible ears):		19 or 23	

***Note:** Module depth (8.5-inch does not include fiber management shelf.
Depth is 11 inches, with fiber management shelf.

Mux/Demux

Fiberdyne Part Number	Product Description
FD15216-100-Red	ITU-100; 32 Wavelengths Red Multiplexing/Demultiplexing
FD15216-100-Blue	ITU-100; 32 Wavelengths Blue Multiplexing/Demultiplexing

Add/Drop

Fiberdyne Part Number	Product Description
FD15216-100-OADM-1-XXXX.XX*	ITU-100 GHz, 1 Channel, Dual Path, OADM, XXXX.XX nm
FD15216-100-OADM-2-XXXX.XX-YYYY.YY**	ITU-100 GHz, 2 Channel, Dual Path, OADM, XXXX.XX-YYYY.YY nm

Note: * Must Specify one DWDM Wavelength (XXXX.XX) from Table.

** Must Specify two DWDM Wavelengths (XXXX.XX & YYYY.YY) from Table.

[Dense Wave Division Multiplexing \(DWDM\) ITU Grid](#)

Note: Cisco is compatible with Channels 21-59 only.