



Passive DWDM Components



EM316DWMUX16

EM316DWMUX32

Overview

The Fiber Driver DWDM Passive Mux/Demux and OADM modules deliver the benefits of a Dense Wave Division Multiplexer in a fully passive solution. With matching Mux/Demux units placed at each end of an optical link, 8, 16 or 32 Full Duplex data channels can be combined and transmitted over a Singlemode fiber trunk. The passive OADM modules can be used to add/drop 1 to 8 wavelength-specific data channels at any point along the trunk.

Protocol and topology independent, the operation of these passive components remains transparent to both the network and the end user. With plug-n-play setup and a design that minimizes budget loss, they can readily and seamlessly be integrated into an existing environment. Their small form factor and no power requirement means they can be placed virtually anywhere.

For additional information on these or any of the full line of MRV Communications products, including pricing and availability, contact your MRV Communications representative.

Features

- 32-, 16- and 8-channel passive DWDM Mux/Demux
- 1-, 2-, 4- and 8-channel DWDM OADM
- 100 GHz (0.8 nm) ITU Grid, C Band
- Transparent operation - protocol and topology independent
- Secure physical separation between data channels
- Low insertion loss
- Fully passive devices - require no power
- High density form factor

Physical Specifications: Passive DWDM Mux/Demux and OADM Modules

Operating Temperature Range:	0° C to 50° C (32° F to 158° F)*
Storage Temperature:	-55° C to 85° C (-67° F to 185° F)
Relative Humidity:	85% maximum, non-condensing
Physical Dimensions: 1-Slot Module	25 mm x 90 mm x 170 mm deep (1" x 3.56" x 6.67" deep)
2-Slot Module	50 mm x 90 mm x 170 mm deep (2" x 3.56" x 6.67" deep)
Approximate Weight: 1-Slot Module	0.8 kg (1.8 lb)
2-Slot Module	1.4 kg (3.1 lb)
Emission Compliance:	FCC - PART 15, SUBPART B, 1999, CLASS A; CE MARK - EN 50081-1:1992;
	EN 50082:1997; EN 55024:1998; EN 55022:1998; AS/NZS 3548:1995

* If operated in a non-powered chassis, temp range is -5° C to 70° C (23° F to 185° F)



PASSIVE DWDM MUX/DEMUX

Part Number	Description	Connectors Ports/ Link	Wavelengths Ports & Link (nm)	Max. Insertion Loss (dB)	Max. Link Insertion Loss (dB)	Adjacent Ch. Isolation (dB)	Non Adj.Ch. Isolation (dB)
EM316DWMX8	One Slot, passive 8-Ch. DWDM Mux. Channels 31 - 38 (Red).	MU (x8) / SC	100 GHz ITU Grid, C Band	3.9	5.7	≥25	≥40
EM316DWDMX8	One Slot, passive 8-Ch. DWDM Demux. Channels 31 - 38 (Red).	MU (x8) / SC	100 GHz ITU Grid, C Band	3.9	5.7	≥25	≥40
EM316DWMX8-R1	One Slot, passive 8-Ch. DWDM Mux. Channels 21 - 28 (Red).	MU (x8) / SC	100 GHz ITU Grid, C Band	3.9	5.7	≥25	≥40
EM316DWDMX8-R1	One Slot, passive 8-Ch. DWDM Demux. Channels 21 - 28 (Red).	MU (x8) / SC	100 GHz ITU Grid, C Band	3.9	5.7	≥25	≥40
EM316DWMX8-R2	One Slot, passive 8-Ch. DWDM Mux. Channels 29 - 36 (Red).	MU (x8) / SC	100 GHz ITU Grid, C Band	3.9	5.7	≥25	≥40
EM316DWDMX8-R2	One Slot, passive 8-Ch. DWDM Demux. Channels 29 - 36 (Red).	MU (x8) / SC	100 GHz ITU Grid, C Band	3.9	5.7	≥25	≥40
EM316DWMX8-R2B	One Slot, passive 8-Ch. DWDM Mux. Channels 29 - 36 (Red) w/ band splitter.	MU (x8) / DMU (x2)	100 GHz ITU Grid, C Band	4.2	6.3	≥25	≥40
EM316DWDMX8-R2B	One Slot, passive 8-Ch. DWDM Demux. Channels 29 - 36 (Red) w/ band splitter.	MU (x8) / DMU (x2)	100 GHz ITU Grid, C Band	4.2	6.3	≥25	≥40
EM316DWMX8-B1	One Slot, passive 8-Ch. DWDM Mux. Channels 43 - 50 (Blue).	MU (x8) / SC	100 GHz ITU Grid, C Band	3.9	5.7	≥25	≥40
EM316DWDMX8-B1	One Slot, passive 8-Ch. DWDM Demux. Channels 43 - 50 (Blue).	MU (x8) / SC	100 GHz ITU Grid, C Band	3.9	5.7	≥25	≥40
EM316DWMX8-B2B	One Slot, passive 8-Ch. DWDM Mux. Channels 51 - 58 (Blue).	MU (x8) / DMU (x2)	100 GHz ITU Grid, C Band	4.2	6.3	≥25	≥40
EM316DWDMX8-B2B	One Slot, passive 8-Ch. DWDM Demux. Channels 51 - 58 (Blue).	MU (x8) / DMU (x2)	100 GHz ITU Grid, C Band	4.2	6.3	≥25	≥40
EM316DWMX8-CW3	One Slot, passive 8-Ch. DWDM Mux. Channels 56 - 63 (Blue).	MU (x8) / SC	100 GHz ITU Grid, C Band	3.9	5.7	≥25	≥40
EM316DWDMX8-CW3	One Slot, passive 8-Ch. DWDM Demux. Channels 56 - 63 (Blue).	MU (x8) / SC	100 GHz ITU Grid, C Band	3.9	5.7	≥25	≥40
EM316DWMX8-CW5	One Slot, passive 8-Ch. DWDM Mux. Channels 31 - 38 (Red).	MU (x8) / SC	100 GHz ITU Grid, C Band	3.9	5.7	≥25	≥40
EM316DWDMX8-CW5	One Slot, passive 8-Ch. DWDM Demux. Channels 31 - 38 (Red).	MU (x8) / SC	100 GHz ITU Grid, C Band	3.9	5.7	≥25	≥40
EM316DWMUX16-R	One Slot, passive 16-Ch. DWDM Mux. Channels 21 - 36 (Red).	MU (x16) / SC	100 GHz ITU Grid, C Band	4.5	7	≥25	≥40
EM316DWDMX16-R	One Slot, passive 16-Ch. DWDM Demux. Channels 21 - 36 (Red).	MU (x16) / SC	100 GHz ITU Grid, C Band	4.5	7	≥25	≥40
EM316DWMUX16-B	One Slot, passive 16-Ch. DWDM Mux. Channels 43 - 58 (Blue).	MU (x16) / SC	100 GHz ITU Grid, C Band	4.5	7	≥25	≥40
EM316DWDMX16-B	One Slot, passive 16-Ch. DWDM Demux. Channels 43 - 58 (Blue).	MU (x16) / SC	100 GHz ITU Grid, C Band	4.5	7	≥25	≥40
EM316DWMUX32	One Slot, passive 32-Ch. DWDM Mux. Channels 21 - 52.	MU (x32) / SC	100 GHz ITU Grid, C Band	6.6	10.5	≥25	≥40
EM316DWDMX32	One Slot, passive 32-Ch. DWDM Demux. Channels 21 - 52.	MU (x32) / SC	100 GHz ITU Grid, C Band	6.6	10.5	≥25	≥40
EM316DWMUX32-RB	One Slot, passive 32-Ch. DWDM Mux. Channels 21-36 & 43 - 58.	MU (x32) / SC	100 GHz ITU Grid, C Band	6.6	10.5	≥25	≥40
EM316DWDMX32-RB	One Slot, passive 32-Ch. DWDM Demux. channels 21-36 & 43 - 58.	MU (x32) / SC	100 GHz ITU Grid, C Band	6.6	10.5	≥25	≥40

Ordering Info



PASSIVE DWDM OADM

Ordering Info	Part Number	Description	Data Port Connector	Trunk Conn. In/Out	Trunk Add/Drop Wavelength (nm)	Max. Add/Drop Insertion Loss (dB)	Max. Other Chan. Insertion Loss (dB)	Adjacent Ch. Isolation (dB)	Non Adj. Ch. Isolation (dB)
	EM316DPADXX	One slot, 1 channel passive DWDM OADM	MU (x2)	DLC/DLC	(Select from 100 GHz ITU Grid, C Band channels 20-60)	3	1.2	≥25	≥10
	EM316DPADXXYY	One slot, 2 channel passive DWDM OADM	MU (x4)	DLC/DLC	(Select from 100 GHz ITU Grid, C Band channels 20-60)	3.3	1.8	≥25	≥40
	EM316DPAD4XX	One slot, 4 channel passive DWDM OADM	MU (x8)	DLC/DLC	(Select from 100 GHz ITU Grid, C Band channels 20-60)	3.9	3	≥25	≥40
	EM316DPAD8XX	One slot, 8 channel passive DWDM OADM	MU (x16)	MU (x2)/ MU (x2)	(Select from 100 GHz ITU Grid, C Band channels 20-60)	5.1	5.4	≥25	≥40
	EM316DDADDXX	Dual Fiber, 1 channel DWDM OADM	MU (x4)	MU (x2)/ MU (x2)	East/West (XX - Wavelength from ITU Grid Table)	3	1.2	≥25	≥40
	EM316DDADDXXYY	Dual Fiber, 2 channel DWDM OADM	MU (x8)	MU (x2)/ MU (x2)	East/West (XXYY - Wavelength from ITU Grid Table)	3.6	2.4	≥25	≥40
	EM316DSADSXX	Single Fiber, 1 channel DWDM OADM	MU (x2)	MU/MU	East/West (XXYY - Wavelength from ITU Grid Table)	1.8	0.8	≥25	≥40

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