



## Datasheet

# **CWDM Passive Optical Add/Drop Multiplexers**





#### **Overview**

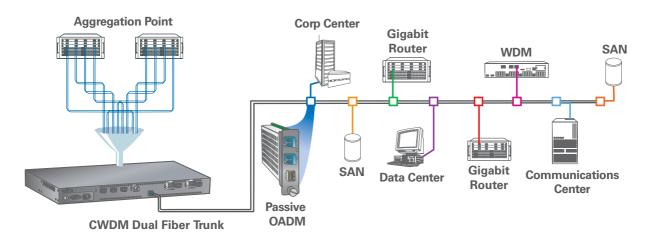
Extending the capabilities of Wave Division Multiplexing systems, the Fiber Driver<sup>®</sup> CWDM Passive OADM modules from MRV Communications create a network topology in which one or more wavelengths can be added or dropped on demand at specific locations along a CWDM trunk. The technology enables flexible and intelligent planning and provisioning of optical services while at the same time simplifying the deployment and maintenance of an optical network.

Protocol transparent, the operation of a CWDM Passive OADM module remains invisible to both the network and the end user. With plug-n-play setup and a design that minimizes budget loss, it can readily and seamlessly be integrated into an existing network. The unit's small form factor and no requirement for power means it can be placed virtually anywhere.

### Features

- O Protocol transparent, fully passive operation
- Low insertion loss
- Supports Point-to-Point Bus and Linear Point-to-Multipoint topologies
- Works in conjunction with any ITU-T G.694.2 (2002) compliant CWDM
- Requires no power
- 1-slot form factor can be operated in any Fiber Driver Chassis
- SNMP manageable, MegaVision Web<sup>®</sup> supported
- Available in single sided (East or West) and dual sided (East and West) configurations supporting up to 8 channels/wavelengths

#### Linear Point-to-Multipoint







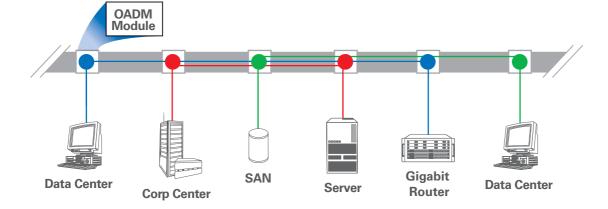
The Passive CWDM OADM modules are available in single sided (East or West) and dual sided (East and West) configurations supporting up to eight (8) channels/ wavelengths. Designed in a high-density form factor, each is a single-slot module that can be placed in any powered or non-powered Fiber Driver chassis.

Each Fiber Driver CWDM Passive OADM utilizes wavelengths that fall within the ITU-T G.694.2 (2002)

#### **Point-to-Point Bus**

CWDM Grid standard of 1310 nm to 1610 nm with 20 nm spacing. (See the wavelength table at the end of this datasheet for specific ordering information.)

For additional information on Fiber Driver CWDM Passive OADM or any of the full line of MRV Communications products contact your nearest authorized MRV Communications representative.



Physical Specifications: CWDM Passive Optical Add/Drop Multiplexers				
Operating Temperature: 0° to 50° C / 32° to 122° F				
Storage Temperature:	<b>ture:</b> -40° to 95° C / -40° to 203° F			
Relative Humidity:	85% maximum, non-condensing			
Physical Dimensions:	25 mm x 75 mm x 175 mm deep (1" x 3" x 7" deep)			
Weight:	120 - 240 g (4.2 - 8.5 oz) depending on configuration			
Emission Compliance:	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				

#### CWDM SINGLE SIDED (EAST OR WEST) OADM DUAL FIBER TRUNK/EXPRESS

	Product	Description	Common/Express Connector	Add/Drop Connector	Add/Drop Wavelength (nm)	Add/Drop Insertion Loss (dB)	Common/Express Insertion Loss (dB)
	EM316OSC/XX*	Optical Service Channel	LC / LC	LC	(Select from	1	0.2 / 0.6
		module Dual Fiber			Wavelength Chart)		
	EM316PAD-XX	1-Channel Passive OADM	LC / LC	MU	(Select from	1	0.2 / 0.6
Info		module Dual Fiber			Wavelength Chart)		
g lı	EM316PAD-XXYY	2-Channel Passive OADM	LC / LC	MU	(Select from	1.2	0.2 / 1
rin		module Dual Fiber			Wavelength Chart)		
Orde	EM316PADM41-MU	4-Channel Passive OADM	LC / LC	MU	1470 - 1530	2	0.2 / 1.5
		module Dual Fiber			(20 nm increments)		
	EM316PADM42-MU	4-Channel Passive OADM	LC / LC	MU	1550 - 1610	2	0.2 / 1.5
		module Dual Fiber			(20 nm increments)		
	EM316PADM8	8-Channel Passive OADM	MU / MU	MU	1470 - 1610	3.7	0.2 / 3.5
		module Dual Fiber			(20 nm increments)		

\* See Service Channel Module Notes below





#### CWDM DUAL SIDED (EAST OR WEST) OADM DUAL FIBER TRUNK/EXPRESS

Info	Product	Description	Common/Express Connector	Add/Drop Connector	Add/Drop Wavelength (nm)	Add/Drop Insertion Loss (dB)	Common/Express Insertion Loss (dB)
ຼ	EM316CDADDXX	1-Channel Passive OADM	MU / MU	MU	(Select from	1	0.2/0.6
iri		module Dual Fiber			Wavelength Chart)		
rde	EM316CDADDXXYY	2-Channel Passive OADM	MU / MU	MU	(Select from	1.2	0.2 / 1
ō		module Dual Fiber			Wavelength Chart)		

#### CWDM SINGLE SIDED (EAST OR WEST) OADM SINGLE FIBER TRUNK/EXPRESS

0	Product	Description	Common/Express Connector	Add/Drop Connector	Add/Drop Wavelength (nm)	Add/Drop Insertion Loss (dB)	Common/Express Insertion Loss (dB)
lnfo	EM316CSADSXX	1-Channel/Dual Wavelength	MU / MU	MU	(Select from	1	0.2 / 0.6
ຼ		Passive OADM module, SF			Wavelength Chart)		
erir	EM316CSADSXXYY	2-Channel/4- Wavelength	MU / MU	MU	(Select from	1.2	0.2/1
rde		Passive OADM module, SF			Wavelength Chart)		
0	EM316CSADS4XX	4-Channel/8-Wavelength	MU / MU	MU	1470 - 1610	2	0.2 / 1.5
		Passive OADM module, SF			(20 nm increments)		

#### CWDM DUAL SIDED (EAST OR WEST) OADM SINGLE FIBER TRUNK/EXPRESS

×	nto	Product	Description	Common/Express Connector	Add/Drop Connector	Add/Drop Wavelength (nm)	Add/Drop Insertion Loss (dB)	Common/Express Insertion Loss (dB)
	ຼົ	EM316CSADDXX	1-Channel/Dual Wavelength	MU / MU	MU (x2)	(Select from	1	0.2/0.6
•	ů,		Passive OADM module, SF			Wavelength Chart)		
	Ordei	EM316CSADDXXYY	2-Channel/4- Wavelength	MU / MU	MU (x4)	(Select from	1.2	0.2/1
Q	ō		Passive OADM module, SF			Wavelength Chart)		

t	(XX)	Wavelength	(XX)	Wavelength
Chart	31	1310 nm	47	1470 nm
Сh	33	1330 nm	49	1490 nm
lth	35	1350 nm	51	1510 nm
อินล	37	1370 nm	53	1530 nm
Wavelength	39	1390 nm	55	1550 nm
Vav	41	1410 nm	57	1570 nm
>	43	1430 nm	59	1590 nm
	45	1450 nm	61	1610 nm

Service Channel Module Notes			
Note OCS	To add/drop the service channel use EM316OSC/31		
Note OCS -SBD To add/drop the service channel use EM316SOSCB/3135			
Note OCS -DBD To add/drop the service channel   use EM316DOSCB/3135 Visite Comparison			

#### **ADAPTER CABLES**

nfo	Part Number	Description	Connectors Port / Link	Fiber Length (cm)
iring l	10600120-0002	Cable, Passive Mux/Demux SM	MU / LC	30
Orde	10600120-0003	Cable, Passive Mux/Demux SM	MU / SC	30

MRV has more than 50 offices throughout the world. Addresses, phone numbers, and fax numbers are listed at www.mrv.com. Please e-mail us at **sales@mrv.com** or call us for assistance.

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