

DWDM 100GHz Mux Demux | Single Fiber Bidirectional Solution | Dense Wavelength Division Multiplexer



Description

Dense wavelength division multiplexer (DWDM) employs thin film coating technology along with a unique design for non-flux metal bonding micro-optics packaging. It ensures minimal insertion loss, excellent channel isolation, a broad pass band, low temperature sensitivity, and an epoxy-free optical path.

Montclair provides a comprehensive selection of dependable and stable 100GHz DWDM Mux & Demux solutions, which come in various formats including cassette, LGX module, rack-mount, and custom packaging options. DWDM Optical Add/Drop Multiplexers (OADM) are also offered.

Features

- High channel isolation
- Wide Pass Band
- Low PDL
- Excellent environmental stability & reliability
- Telcordia GR-1221 qualified

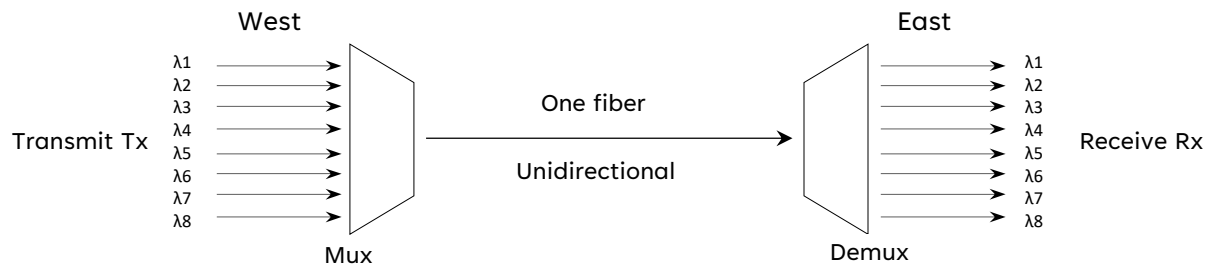
Applications

- DWDM networks
- Telecommunications
- Long haul networks

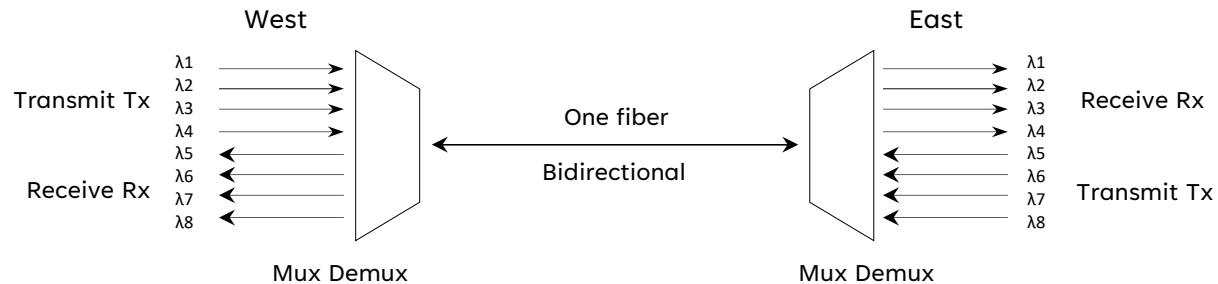
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Bidirectional 1 Fiber Mux | Demux Solution

1. Unidirectional Mux | Demux over one fiber:



2. Bidirectional Mux | Demux over one fiber:



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Specifications

Parameters		Value					
Channel number		2	4	8	16	32	40
Central wavelength nm		ITU-T Grid					
Passband @0.5dB nm		≥ 0.3					
Passband nm		ITU±0.11					
Passband flatness nm		≤ 0.5					
Insertion loss dB	Typical	1.4	1.6	2.6	3.8	4.8	5.2
	Max.	1.8	2.0	3.2	4.5	5.5	6.0
Adj. channel isolation dB		≥ 25					
Non-adj. channel isolation dB		≥ 45					
Return loss dB		≥ 45					
PMD ps		≤ 0.10	≤ 0.10	≤ 0.10	≤ 0.15	≤ 0.15	≤ 0.15
PDL dB		≤ 0.10	≤ 0.15	≤ 0.20	≤ 0.25	≤ 0.30	≤ 0.30
Directivity dB		≥ 50					
Operating temperature °C		-5 to +70					
Storage temperature °C		-40 to +85					
Fiber type		Singlemode Bend insensitive G657A					

Note: Above values do not include connectors

Housing type

DWDMs available in the following standard housing types and in high-density options

LGX® module

Cassette

Rack-mount 19/23"

Note:

DWDM housing size/dimensions dependant on the number of channels and packaging in either single mux, single demux, or combination mux/demux. DWDM housing type and size determined at time of inquiry.

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Ordering information

M W - D 1 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 1 0

1. Number of channels:	2. Starting wavelength (nm):	3. Application type (single fiber):
2	C21, C22, C23 , etc.	MD1 Mux Demux in same housing
4	Refer to ITU-T standard	M Mux Only
8	wavelength reference table on	D Demux Only
16	following page	
32		
40		

Note:

Available in other channels

4. Housing type:	5. Adapter connector type:	6. Fiber length input output (m):
C Cassette	AFC FC/APC	0.5 ~ 5
M LGX® module	FCU FC/UPC	Note: For specifying fiber cable leads on housings with connectors or pigtails; <u>Leave Blank</u> if not specifying fiber cable leads
R Rack-mount	ALC LC/APC	
	LCU LC/UPC	
	ASC SC/APC	
	SCU SC/UPC	
	PL Pigtail	

7. Fiber cable type options:	8. Additional wideband port:	9. Upgrade Express Port:
9um 900um loose-tube cable	31 1310±40nm wideband	U Upgrade/Express
2mm 2.0mm diameter	55 1550±40nm wideband	Note: <u>Leave Blank</u> if not specifying Additional port
3mm 3.0mm diameter	Note: <u>Leave Blank</u> if not specifying Additional port	
Note: For specifying fiber cable leads on housings with connectors or pigtails; <u>Leave Blank</u> if not specifying fiber cable leads		10. Monitor port:
		M1 1% Monitor Port
		M2 2% Monitor Port
		M3 3% Monitor Port
		M4 4% Monitor Port
		M5 5% Monitor Port
		Note: <u>Leave Blank</u> if not specifying Monitor port

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DWDM ITU Grid; C-Band; 100GHz Spacing (200Ghz use even and odd numbers)

Channel no.	Wavelength (nm)	Frequency (GHz)	Channel no.	Wavelength (nm)	Frequency (GHz)
C1	1577.03	190100	C37	1547.72	193700
C2	1576.20	190200	C38	1546.92	193800
C3	1575.37	190300	C39	1546.12	193900
C4	1574.54	190400	C40	1545.32	194000
C5	1573.71	190500	C41	1544.53	194100
C6	1572.89	190600	C42	1543.73	194200
C7	1572.06	190700	C43	1542.94	194300
C8	1571.24	190800	C44	1542.14	194400
C9	1570.42	190900	C45	1541.35	194500
C10	1569.59	191000	C46	1540.56	194600
C11	1568.11	191100	C47	1539.77	194700
C12	1567.95	191200	C48	1538.98	194800
C13	1567.13	191300	C49	1538.19	194900
C14	1566.31	191400	C50	1537.40	195000
C15	1565.50	191500	C51	1536.61	195100
C16	1564.68	191600	C52	1535.82	195200
C17	1563.86	191700	C53	1535.04	195300
C18	1563.05	191800	C54	1534.25	195400
C19	1562.23	191900	C55	1533.47	195500
C20	1561.42	192000	C56	1532.68	195600
C21	1560.61	192100	C57	1531.90	195700
C22	1559.79	192200	C58	1531.12	195800
C23	1558.98	192300	C59	1530.33	195900
C24	1558.17	192400	C60	1529.55	196000
C25	1557.36	192500	C61	1528.77	196100
C26	1556.56	192600	C62	1527.99	196200
C27	1555.75	192700	C63	1527.22	196300
C28	1554.94	192800	C64	1526.44	196400
C29	1554.13	192900	C65	1525.66	196500
C30	1553.33	193000	C66	1524.89	196600
C31	1552.52	193100	C67	1524.11	196700
C32	1551.72	193200	C68	1523.34	196800
C33	1550.92	193300	C69	1522.56	196900
C34	1550.12	193400	C70	1521.79	197000
C35	1549.32	193500	C71	1521.02	197100
C36	1548.52	193600	C72	1520.25	197200
			C73	1519.48	197300