

Customized Single Fiber DWDM Mux Demux + Monitor/Expansion Port

FMT Plug-in Module, LC/UPC

Long-haul LANs and MANs, Single Fiber Solutions



Overview

The customized single fiber DWDM Mux/Demux is high-density, low-loss, and suitable for long-haul transmission DWDM device based on TFF (Thin Film Filter)/AAWG (Gaussian). In accordance with the ITU-T G.694.1 100GHz grid, it maximizes the capacity of the C-band range. It is designed for maximum configuration flexibility, with pluggable modules that plug directly into the 1U FMT managed chassis, each module occupying one or two slots.

The Mux/Demux can facilitate an integrated cost-effective and flexible optical layer solution by incorporating a variety of optical layer boards, such as DCM/EDFA/OEO/OSW/OLP/R/B. It can be applied to DWDM single-fiber/optical cable monitoring systems, to meet the diverse needs of scenarios.

Features

- Fit Into One or Two Slots of the FMT Managed Chassis
- Facilitate an Integrated Optical Layer Solution by Incorporating DCM/EDFA/OEO/OSW/OLP/R/B
- Suitable for Long-haul LANs and MANs, Single Fiber Solutions
- Customizable Monitor Port for Troubleshooting, Expansion Port for Increasing Capacity
- Multiplexing of Multiple Channels on Single Fiber to Maximize the Use of Existing Fiber
- Compliant with All Optical Networking Products (ITU Grid)

Technical Specification

Parameter	Specification
Number of Channel	4CH, 8CH, 16CH
Channel Spacing	100GHz (0.8nm)
Wavelength Range	ITU Channels 186.6 to196.1 THz
Connector Type	LC/UPC
Channel Passband @-0.5dB	0.22nm
Technology	4/8CH: TFF (Thin Film Filter) 16CH: AAWG (Gaussian)
Insertion Loss	≤2.5dB (4CH); ≤3.5dB (8CH); ≤3.8dB (16CH)
Return Loss	≥45dB
Power Consumption	≤1W
Directivity	≥50dB
Adjacent Channel Isolation	≥30dB
Non-adjacent Channel Isolation	≥45dB
Polarization Mode Dispersion	≤0.1ps
PDL	≤0.1dB
Wavelength Thermal Stability	≤0.002nm/°C
Insertion Loss Thermal Stability	≤0.005dB/°C
Max Optical Power	≤300mW (24.77dBm)
Housing	Pluggable Module (Occupies 1 or 2 Slots in FMT Managed Chassis)
Operating Temperature	-10 to 60°C (14 to 140°F)
Storage Temperature	-20 to 75°C (-4 to 167°F)

ITU Channel Guiding

ITU Channel (xx or yy)	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Wavelength (nm)	1560.61	1559.79	1558.98	1558.17	1557.36	1556.55	1555.75	1554.94	1554.13	1553.33	1552.52	1551.72	1550.92	1550.12	1549.32	1548.51	1547.72	1546.92	1546.12	1545.32

ITU Channel (xx or yy)	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Wavelength (nm)	1544.53	1543.73	1542.94	1542.14	1541.35	1540.56	1539.77	1538.98	1538.19	1537.40	1536.61	1535.82	1535.04	1534.25	1533.47	1532.68	1531.90	1531.12	1530.33	1529.55

Ordering Information

Mux Demux & OADM		
DWDM Mux Demux	FMU-D402160M3	40 Channels 100GHz C21-C60, with 1310nm and Monitor Port, 3.5dB Typical IL, LC/UPC, Dual Fiber DWDM Mux Demux, 1U Rack Mount #35887
	M6200-D2160M	40 Channels 100GHz C21-C60 Dual Fiber DWDM Mux and Demux with Monitor Port, Pluggable Module, LC/UPC, Integrated with M6200 Series Managed Chassis #120424
	FMU-D162136EM3	16 Channels 100GHz C21-C36, with Monitor, Expansion and 1310nm Port, LC/UPC, Dual Fiber DWDM Mux Demux, 1U Rack Mount #72430
	FMU-MD085360EM3	CWDM/DWDM Hybrid Solution, 8 Channels 100GHz C53-C60, with Monitor, Expansion and 1310nm Port, LC/UPC, Dual Fiber DWDM Mux Demux, FMU Plug-in Module #72433
	FMT-OMD	FMT-OMD, Customized DWDM Dual-fiber Mux/Demux for FMT Managed Chassis #317057
CWDM Mux Demux	FMT-OMD-SF	FMT-OMD-SF, Customized DWDM Single-fiber Mux/Demux for FMT Managed Chassis #317055
	FMU-C182761M	18 Channels 1270-1610nm, with Monitor Port, LC/UPC, Dual Fiber CWDM Mux Demux, 1U Rack Mount #33489
	FMU-MC084761EM	8 Channels 1470-1610nm, with Monitor and Expansion Port, LC/UPC, Dual Fiber, Low Insertion Loss CWDM Mux Demux, FMU Plug-in Module #78163
LWDM Mux Demux	FMU-L042930A	4 Channels 1295.56-1309.14nm, Single Fiber LAN-WDM Mux Demux, Side-A, FMU Plug-in Module, LC/UPC #244657
	FMU-L042728B	4 Channels 1273.55-1286.66nm, Single Fiber LAN-WDM Mux Demux, Side-B, FMU Plug-in Module, LC/UPC #244655
OADM	DOADM-DF	Customized Dual Fiber & Single Fiber DWDM OADM #70427
	COADM-DF	Customized Dual Fiber & Single Fiber CWDM OADM #70425
Chassis	FMU-1UFMX-N	FMU 2-Slot 1U 19" Rack Chassis Unloaded, Holds up to 2 Units FMU Plug-in Module #30408
TRANSPONDERS & MUXPONDERS		
25G	FMT4DL-OEO25GSFP28	4 Channels 25G WDM Transponder (Converter), 8 SFP28/SFP+ Slots #92056
10G	FMT4DL-OEO10GSFP	4 Channels WDM Transponder (Converter), 8 SFP/SFP+ Slots #30515
Chassis	FMT04-CH1U	1U Managed Chassis Unloaded Platform, Supports up to 4x EDFA/OEO/OLP Card with Accessories #39214
	FMT-CH	Customized 1U/2U/4U Managed Chassis Unloaded, Supports up to 16x Multiplexer/EDFA/OEO/OLP Module with Accessories #70413
OPEN LINE SYSTEM		
Amplifiers	M6200-25PA	25dB Gain DWDM EDFA Pre-Amplifier, 16dBm Output #107367
	M6200-20BA	20dBm Output DWDM EDFA Booster Amplifier, 16dB Gain #107366
Dispersion Compensation	M6200-DCM40	40KM DCF-based Passive Dispersion Compensation Module #107370
	M6200-DCM80	80KM DCF-based Passive Dispersion Compensation Module #119071

CUSTOMIZED SINGLE FIBER DWDM MUX DEMUX + MONITOR/EXPANSION PORT

Line Protection	M6200-OLP2	1+1 Optical Line Protection Switch (OLP) #107368
Red/Blue Filter	M6200-RB	1x2 Single Fiber DWDM Red/Blue Filter #107369
VOA Units	M6200-SFPVOA	SFP Variable Optical Attenuator Module #107373
	AT-M-LCU	Fixed Fiber Optic Attenuators #70009
Chassis	M6200-CH2U	2U Managed Chassis Unloaded Platform, Supports 7x Mux/DEMUX/EDFA/OEO/OLP/DCM Cards #107371
	M6200-CH5U	5U Managed Chassis Unloaded Platform, Supports 15x MUX/DEMUX/EDFA/OEO/OLP/DCM Cards #111052

WDM TRANSCEIVERS

100G/200G CFP2	M-CFP2-DCO	C14 1566.31nm 100G/200G Tunable CFP2-DCO Coherent Transceiver, up to 1000km #120128
25G SFP28	DWDM-SFP25G-10	25G DWDM SFP28 100GHz 1563.86nm 10km DOM LC SMF Optical Transceiver Module #87000
	CWDM-SFP25G-40S	25G 1270nm CWDM SFP28 40km DOM LC SMF Optical Transceiver Module #100112
	CWDM-SFP25G-10SP	25G 1270nm CWDM SFP28 10km DOM LC SMF Optical Transceiver Module #76003
	LWDM-SFP25G-40	25G LWDM SFP28 1286.66nm 40km DOM LC SMF Optical Transceiver Module #93786
	DWDM-SFP10G-80	10G DWDM SFP+ 1559.79nm 80km DOM LC SMF Transceiver Module, Commercial Temperature#31237, Industrial Temperature #113562
	DWDM-SFP10G-40	10G DWDM SFP+ 1560.61nm 40km DOM LC SMF Transceiver Module, Commercial Temperature#38731, Industrial Temperature #113511
10G SFP+	DWDM-SFP10G-C	10G DWDM C-band Tunable SFP+ 50GHz 80km DOM LC SMF Transceiver Module #69267
1G SFP	CWDM-SFP10G-80L	10G CWDM SFP+ 1470nm 80km DOM LC SMF Transceiver Module #19367
	CWDM-SFP10G-40S	10G CWDM SFP+ 1270nm 40km DOM LC SMF Transceiver Module, Commercial Temperature#22168, Industrial Temperature #112392
	DWDM-SFP1G-EZX	1000BASE-DWDM SFP 100GHz 1563.86nm 100km DOM LC SMF Transceiver Module #54150
	DWDM-SFP1G-ZX	1000BASE-DWDM SFP 1563.86nm 80km DOM LC SMF Transceiver Module #47697
	CWDM-SFP1G-ZX	1000BASE-CWDM SFP 1270nm 80km DOM LC SMF Transceiver Module #33234

*Standard products are listed above. Customized specifications are available upon request.