

# 40KM Passive Dispersion Compensation Module

3.5dB Low Loss, LC/UPC, Plug-in Card Type



# Description

DCM (Dispersion Compensation Modules) - provides fixed chromatic dispersion compensation for high-speed metro core, regional, and extended-haul DWDM networks.

FS DCM is a purely passive module that provides negative dispersion for DWDM transmission systems, increasing transmission range and decreasing BER of optical links. And it can be used to compensate dispersion on standard single-mode optical fiber (SMF) across the entire C-Band.

Based on DCF technology, it is designed for protocol transparent data rates between 10 Mbps and 40 Gbps high-speed extended haul DWDM networks. When combined with transponders and amplifiers, the DCM provides a simple, reliable, and cost-effective DWDM transport solution.

### **Features**

- 100% slope compensation of G.652 fiber in C-band (Typical)
- Low insertion loss
- · Low polarization mode dispersion
- Wide band dispersion compensation
- Compensation up to 40 km
- · Completely passive—no powering utilized
- Telcordia GR-2854-CORE, RoHS compliant

# **Application**

- · Metro and long-haul DWDM networks
- SDH/SONET system
- CATV system

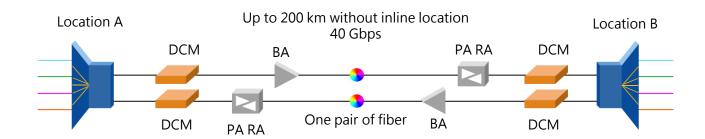


# **Product Specifications**

Compensated Length	40km	Wavelength	C-Band
Dispersion(ps/nm)	-680±3%	Connector	LU/UPC
Insertion Loss	3.5dB max	Power Consumption	≤1W
PMD	0.8ps max	PDL	0.1dB max
Noise Figure	4.5dB (Typical)	For Use With	FMT managed chassis
Operating Temperature	−5° C ~ 55° C	Storage Temperature	-40° C ~ 85° C

# DCM for DWDM Network up to 200 km

DCM is designed for protocol transparent data rates between 10 Mbps and 40 Gbps of DWDM networks application. Thus up to 96 DWDM wavelengths (100 GHz grid) can be compensated on a fiber optic link. Using these dispersion compensation modules, the transmission distances in fiber can be increased significantly without regenerating the signals.





# **Dimensions**

4-slot 1U managed chassis, supports up to 4x multiplexer/EDFA/OEO/OLP card with accessories;

- Width: 482.6mm(19")

- Height: 44.50mm(1.75")

- Depth: 300mm(11.81")

EDFA plug-in card occupies one slot.



# 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		
CWDM MUX DEMUX	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	ABS-L042930A	4 Channels 1295.56-1309.14nm, Single Fiber LAN-WDM Mux Demux, Side-A, ABS Pigtailed Module, LC/UPC #97782		
	ABS-C062737A	6 Channels 1271-1371nm, Single Fiber CWDM Mux Demux, Side-A, ABS Pigtailed Module, LC/UPC #97784		
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		
	FUD-1UFMX-N	FUD 4-Slot 1U 19" Rack Chassis Unloaded, holds up to 4 Units FUD Plug-in Module #106578		



TRANSPONDE	ERS & MUXPONDE	RS		
	FMT4DL- OEO25GSFP28	4 Channels 25G WDM Transponder (Converter), 8 SFP28/SFP+ Slots#92056		
10G <u></u>	FMT4DL-OEO10GSFP	4 Channels WDM Transponder (Converter), 8 SFP/SFP+ Slots#30515		
	FMT04-CH1U	1U Managed Chassis Unloaded Platform, Supports up to 4x EDFA/OEO/OLP Card with Accessories #39214		
Chassis	FMT-CH	Customized 1U/2U/4U Managed Chassis Unloaded, Supports up to 16x Multiplexer/EDFA/OEO/OLP Module with Accessories #70413		
OPEN LINE SYSTEM				
1	FMT26PA-EDFA	26dB Gain DWDM EDFA Pre-Amplifier, 16dBm Output#36524		
<u>F</u> Amplifiers	FMT20PA-EDFA	20dB Gain DWDM EDFA Pre-Amplifier, 13dBm Output#72284		
	FMT17BA-EDFA	17dBm Output DWDM EDFA Booster Amplifer, 17dB Gain #72283		
<u> </u>	FMT-LA	In-Line EDFA for DWDM Solution#35924		
1	FMT40-DCM	40KM DCF-based Passive Dispersion Compensation Module#65781		
Dispersion Compensation	FMT80-DCM	80KM DCF-based Passive Dispersion Compensation Module#65779		
1	FS-TDCM	C-band Tunable Dispersion Compensation Module (TDCM)#72427		
<u> </u>	FMT-OLP2	1+1 Optical Line Protection Switch (OLP)#66010		
Line Protection [	FMT-BDOLP	FMT-BDOLP, Optical Line Protection Switch (OLP)#72700		
<u> </u>	FMT-BDSplitter	FMT-BDSplitter, Optical Splitter#73324		
Red/Blue Filter	FMT-RB	1x2 Single Fiber DWDM Splitter Red/Blue C Band Filter#65981		
<u>1</u>	FMT-OPD	4 Channels 1550nm Optical Power Detection OPD (AIU)#78568		
<u> </u>	FMT-OPM	Optical Performance Monitoring (OPM)#71586		
Fiber Monitoring	FMT-OSW	1x16 Multi-Channel Opto-Mechanical Optical Switches with Adjustable Channels Control#73287		
1	FMT-OTDR	Optical Time Domain Reflectometer (OTDR)#73281		
	FMT-LSU	LSU Light Source Unit, Pluggable Module for FMT Multi-Service Transport Platform#78469		
<u>F</u> VOA Units	FS-VOA-C	Variable Optical Attenuator, 0~15dB, Pluggable Module, LC/UPC#65271		
V O/ V OT III L3	AT-M-LCU	Fixed Fiber Optic Attenuators #70009		



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
WDM TRANSC	EIVERS	
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
16G/8G FC	DWDM-SFP16G-40	Customized 16G DWDM SFP+ C20-C61 100GHz 40km DDM LC SMF Transceiver Module#73084
	DWDM-SFP16GH-40	Customized 16G DWDM SFP+ 50GHz 40km DDM LC SMF Transceiver Module #73085
	CWDM-SFP16G-40	Customized 16G Fiber Channel CWDM SFP+ 1470-1610nm 40km DDM LC SMF Transceiver Module #80765
10G SFP+	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
	DWDM-SFP10G-C	10G DWDM C-band Tunable SFP+ 50GHz 80km DOM LC SMF Transceiver Module #69267
	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
1G SFP	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-EZX	1000BASE-CWDM SFP 1270nm 120km DOM LC SMF Transceiver Module #102776
	CWDM-SFP1G-ZX	1000BASE-CWDM SFP 1270nm 80km DOM LC SMF Transceiver Module #33234









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