# 4ch Single Fiber 1295.56-1309.14nm LAN-WDM Mux Demux, Side-A

ABS Pigtailed Module, LC/UPC Easy to Put in Splice Closure/Distribution Box for Outdoor Application



#### Overview

Single Fiber LAN-WDM Mux Demux is usually used for 5G fronthaul network where wavelengths are packed tightly together over the O-band, up to 8 wavelengths in 800GHz grid (4.5nm).

Based on Thin-Film-Filter (TFF), this LAN-WDM Mux Demux features small form factor, ultra-low insertion loss, high channel isolation, and unparallel reliability.

## Features

- Based on high quality TFF technology
- Nearly at the zero-dispersion wavelength
- Low insertion loss
- Industrial temperature -40 °C~+ 85 °C
- Passive, no electric power required (MTBF ca. 500 years)
- Following 100Gbps IEEE 802.3ba Standard
- Combines/separates 4 channels with a LAN WDM spacing

## Technical Data

Parameter	Value
Center Wavelength	1295.56nm, 1300.05nm, 1304.58nm, 1309.14nm
Channel Spacing	4.5nm
Channel Passband	± 1.15nm
Insertion Loss (Passband)	≤ 1.9dB
Adjacent Channel Isolation	≥ 25dB
Non-adjacent Channel Isolation	≥ 30dB
Technology	TFF (Thin Film Filter)
Passband Ripple	≤ 0.3dB
Directivity	≥ 50dB
Return Loss	≥ 45dB
PDL	≤ 0.3dB
PMD	≤ 0.1ps
Power Handling	≤ 300mW
Operating Temperature	-40 °C~+ 85 °C
Storage Temperature	-40 °C~+ 85 °C
Fiber Type	G657 A1
Connector Type	LC/UPC
Pigtail Type	0.9mm loose tube
Fiber Length	$1.00 \pm 0.05 m$
Warranty	3 years warranty with free technical support
Dimensions (Hx Wx D)	0.39"x 3.15"x 3.94" (10x 80x 100mm)

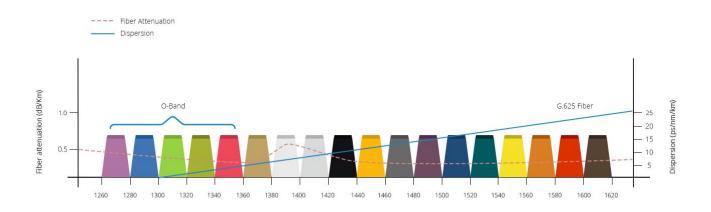
#### Notes:

1. Specified with connectors and adapters.

# Product Highlights

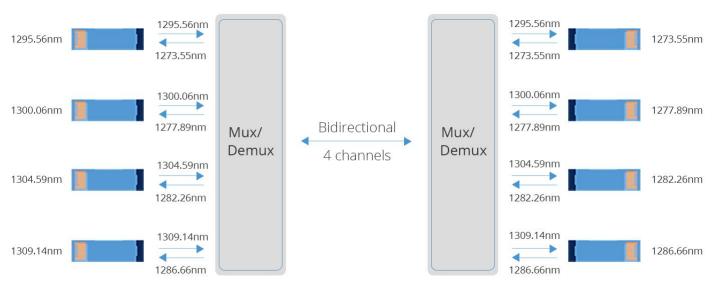
# 1. Low Dispersion Wavelengths

The LAN-WDM wavelengths are more tightly spaced than CWDM wavelengths, and are located nearly at the zero-dispersion wavelength of the fiber (ITU-T G.652 fiber). This wavelength allocation enables signal transmission without restricted by fiber dispersion.



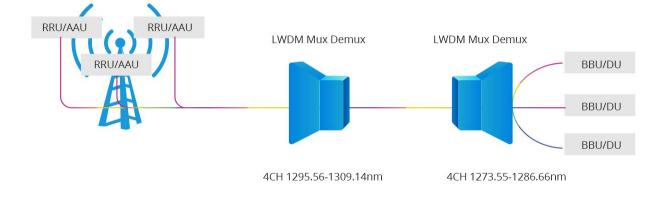
# 2. Single Fiber BIDI Transmission

LAN-WDM Mux Demux can multiplex different wavelengths into one fiber to save fiber resources.

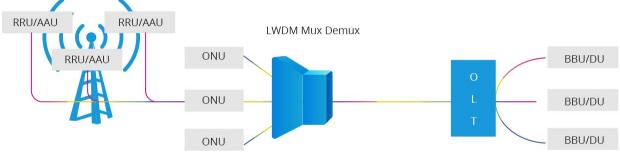


# 5G Network Fronthaul Application

## 1. Point-to-Point WDM Network



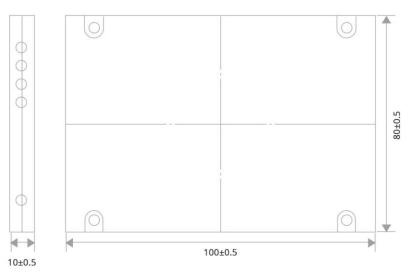
# 2. WDM-PON Network



4CH 1295.56-1309.14nm

## Layout and Dimensions

The dimensions of LAN-WDM Mux Demux is 10x 80x 100mm, which enables multiple use without taking up any extra space and is suitable for different cabinets to meet diverse needs.



#### Dimensions (HxWxD): 10x 80x 100mm

# 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		
	<u>M6200-D2160M</u>	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	RS & MUXPONDERS	
8x 200G	<u>M6800-TSP16</u>	16x 100G QSFP28 to 8x 200G CFP2 OTN Managed Transport Platform#111053
100G/200G	<u>M6500-TMXP5</u>	2x 100G QSFP28/4x 40G QSFP+ to 1x 200G CFP2 Transponder/Muxponder#111049
10G	M6200-OEO10G	5 Channels WDM Transponder (Converter), 10 SFP/SFP+ Slots#107365
Chassis	<u>M6500-CH2U</u>	2U Managed Chassis Unloaded Platform, Supports 2x 200G Transponder/Muxponder #96454
	<u>M6500-CH5U</u>	5U Managed Chassis Unloaded Platform, Supports 6x 200G Transponder/Muxponder #111050
	<u>M6200-CH2U</u>	2U Managed Chassis Unloaded Platform, Supports 7x Mux/DEMUX/EDFA/OEO/OLP/DCM Cards #107371
	<u>M6200-CH5U</u>	5U Managed Chassis Unloaded Platform, Supports 15x MUX/DEMUX/EDFA/OEO/OLP/DCM Cards #111052
OPEN LINE SY	'STEM	
Amplifiers	<u>M6200-25PA</u>	25dB Gain DWDM EDFA Pre-Amplifier, 16dBm Output#107367
	<u>M6200-20BA</u>	20dBm Output DWDM EDFA Booster Amplifer, 16dB Gain#107366
Dispersion Compensation	<u>M6200-DCM40</u>	40KM DCF-based Passive Dispersion Compensation Module#107370
	M6200-DCM80	80KM DCF-based Passive Dispersion Compensation Module#119071
Line Protection	M6200-OLP2	1+1 Optical Line Protection Switch (OLP)#107368
Red/Blue Filter	<u>M6200-RB</u>	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	<u>M6200-CH2U</u>	2U Managed Chassis Unloaded Platform, Supports 7x Mux/DEMUX/EDFA/OEO/OLP/DCM Cards #107371
	<u>M6200-CH5U</u>	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		
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		

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



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