

NEW



DWDM (FRM220 Mux/DeMux)

4 and 8 Channel DWDM Mux/DeMUX

CTC Union DWDM Mux/DeMux Modules with 100GHz channel spacing can be used to combine or separate wavelength channels at standard ITU grid. We supply the common configuration including 4, 8, 16 channels. These DWDM modules passively multiplex the optical signal outputs from 4 or more electronic devices, and send them over a single optical fiber and then de-multiplex the signals into separate, distinct signals for input into electronic devices at the other end of the fiber optic link. All the DWDM Mux/DeMux modules provide excellent optical performance and high reliability to ease of fiber handling and power saving solution.

Features

- Low Optical Insertion Loss
- High channel isolation
- Low PDL
- Good channel-to-channel uniformity
- LC connectors for interfacing
- Reliable passive WDM optical technology
- Scales easily for ring networks
- Compliance with RoHS

Specifications

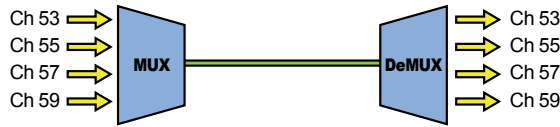
Model Name	Functional description
FRM220-DWDM-DX40-C35/C33/C31/C29	DWDM 100GHz 4 channels 155x DEMUX
FRM220-DWDM-MX40-C35/C33/C31/C29	DWDM 100GHz 4 channels 155x MUX
Optical Specification	
Connector	LC/UPC
ITU-T channel and wavelength	Ch Wavelength(nm)
	35 1549.32
	33 1550.92
	31 1552.52
	29 1554.13

Model Name	Functional description
FRM220-DWDM-DX40-C59/C57/C55/C53	DWDM 100GHz 4 channels 153x DEMUX
FRM220-DWDM-MX40-C59/C57/C55/C53	DWDM 100GHz 4 channels 153x MUX
Optical Specification	
Connector	LC/UPC
ITU-T channel and wavelength	Ch Wavelength(nm)
	59 1530.33
	57 1531.90
	55 1533.47
	53 1535.04

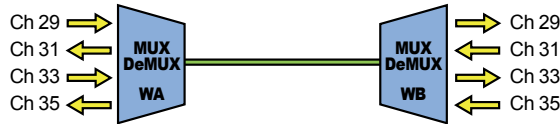
Environmental Specification	
Operating Temperature	-5 to 70°C
Relative humidity	10 to 85%, non-condensing
Storage Temperature	-40 to 85°C

Parameter	Specification	Unit
Center Wavelength	-	ITU Grid Channels
Channel Spacing	-	100
Channel Pass Band	-	ITU +/- 0.11
Pass Band Insertion Loss	max	2.0
MUX/DEMUX Combination Insertion Loss	max	3.9
Pass Band Ripple	max	0.4
Adjacent Port Isolation	min	30
Non-Adjacent Port Isolation	min	40
Optical Return Loss	min	45
Directivity	min	50
Polarization Dependent Loss	max	0.2
Polarization Mode Dispersion	max	0.2
Optical Power Handling	max	500

Application



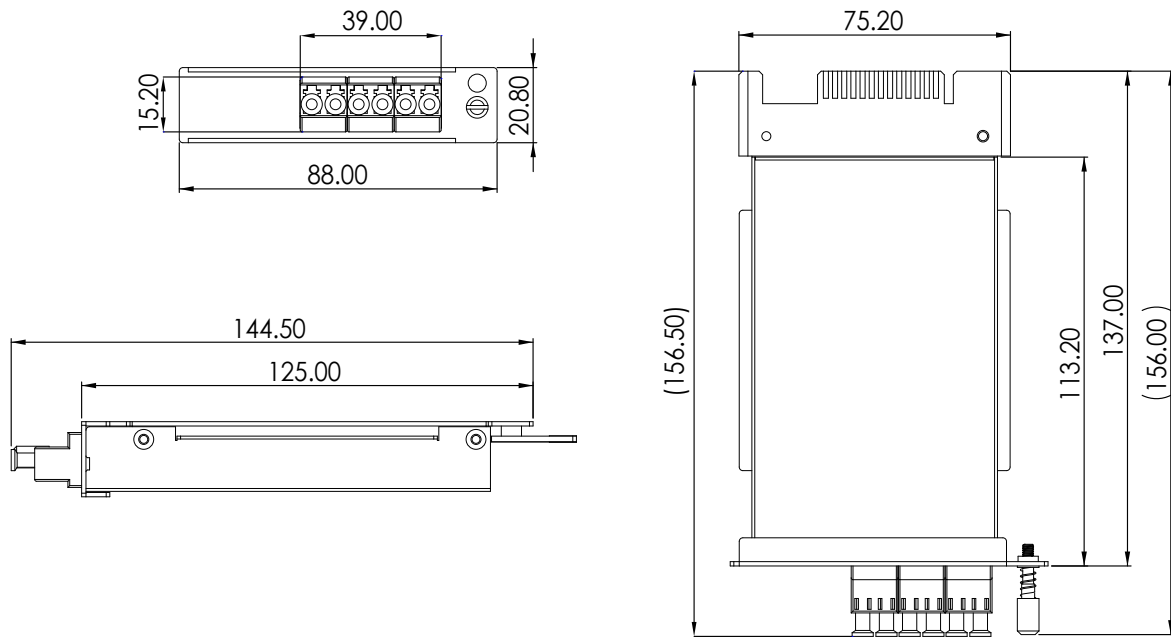
DWDM MUX must be used with DEMUX on the other side



Simplex Bi-Directional Transmission should be used in pairs WA and WB

- Access networks
- Metro WDM systems
- Long haul WDM systems
- Enterprise networks
- Telecommunication
- Cellular Application
- Fiber optical amplifier
- Metro Network /Access Network/FTTH
- CATV fiber optic links

Dimension Drawing



Ordering Information

Model Name	Description
	ab → DX: DeMux, MX: Mux, MD: Mux/DeMux
	cd → 40: 4ch, 80: 8ch
FRM220-DW-ab-cde-xxx	e → 1:100GHz
	xxx → Grid Channel

Example

- FRM220-DW-DX401-C35/C33/C31/C29
DWDM 100GHz 4 channels 155x DEMUX, Ch35/33/31/29, LC/UPC
- FRM220-DW-MX401-C35/C33/C31/C29
DWDM 100GHz 4 channels 155x MUX, Ch35/33/31/29, LC/UPC
- FRM220-DW-DX401-C59/C57/C55/C53
DWDM 100GHz 4 channels 153x DEMUX, Ch59/57/55/53, LC/UPC
- FRM220-DW-MX401-C59/C57/C55/C53
DWDM 100GHz 4 channels 153x MUX, Ch59/57/55/53, LC/UPC
- FRM220-DW-MD401-C59/C57/C55/C53-WA
DWDM 100GHz 4 channels 153x MUX, Ch59/57, Ch55/53, LC/UPC
- FRM220-DW-MD401-C57/C59/C53/C55-WB
DWDM 100GHz 4 channels 153x MUX, Ch57/59, Ch53/55, LC/UPC

Grid Channel

- C21 C22 C23 C24 C25
- C26 C27 C28 C29 C30
- C31 C32 C33 C34 C35
- C36 C37 C38 C39 C40
- C41 C42 C43 C44 C45
- C46 C47 C48 C49 C50
- C51 C52 C53 C54 C55
- C56 C57 C58 C59 C60