



## FRM220-DWMD

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

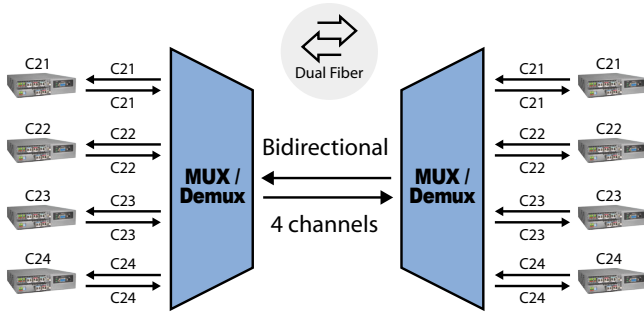
- Low Optical Insertion Loss
- High channel isolation
- Low PDL
- Good channel-to-channel uniformity
- Exceptional reliability and stability
- Reliable passive WDM optical technology
- Scales easily for ring networks
- Compliance with RoHS

### // Specifications

Item	100GHz DWDM	
	Mux	DeMux
Type	Mux	DeMux
Channel No.	4 / 8 / 16	
Center Wavelength, nm	Ch 21~60 or ITU Standard (specity)	
Channel Spacing, nm	0.8	
Channel Spacing, GHz	100	
Passband @0.5dB, nm	ITU $\pm$ 0.1	
Insertion Loss, dB for 4 channel	$\leq$ 2.0	
Insertion Loss, dB for 8 channel	$\leq$ 3.5	
Insertion Loss, dB for 16 channel	$\leq$ 4.5	
Adjacent Channel Isolation, dB	N/A	$\geq$ 25
Non-adjacent Channel Isolation, dB	N/A	$\geq$ 35
Uniformity, dB	$\leq$ 1.5 (Mux-DeMux Pair only)	
Directivity, dB	$\geq$ 45	
Optical Input Return Loss, dB	$\geq$ 45	
Polarization Dependent Loss, dB	$\leq$ 0.15	
Polarization Mode Dispersion (PMD), ps	$\leq$ 0.1	
Thermal Stability Drift, pm/°C	$\leq$ 1	
Max. Optical Power, mW	300	
Max. Tensile Load, N	5	
Storage Temperature, °C	-40~85	
Operating Temperature, °C	0~70	
Dimensions	4ch: 159.5 × 20.8 × 88mm (D×W×H)	8ch: 159.5 × 42.1 × 88mm (D×W×H)

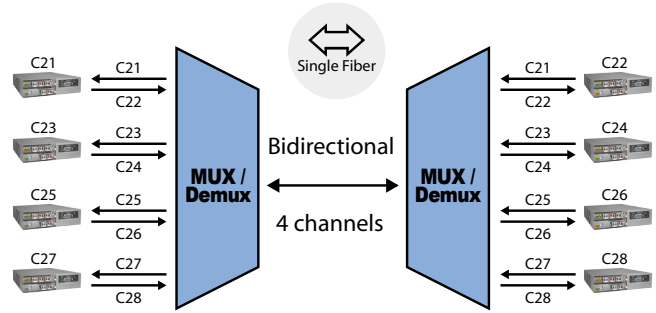
**// Application**

Figure 1 :



The DWDM transceivers connected to DWDM Mux/Demux should have the same wavelength as the client.

Figure 2 :



The DWDM transceivers should have the same wavelength as the transmit wavelength of the client port.

**// Ordering Information**

Model Name	Description
FRM220-DWMD401-C21C24	FRM220 DWDM 100GHz 4 channels MUX/DEMUX, C21~ C24, LC/UPC, dual fiber on WAN port
FRM220-DWMD801-C21C28	FRM220 DWDM 100GHz 8 channels MUX/DEMUX C21 ~ C28 LC/UPC, dual fiber on WAN port
FRM220-DWMX1601-C21C36	FRM220 DWDM 100GHz 16 channels MUX C21 ~ C36 LC/UPC, single fiber on WAN port
FRM220-DWDX1601-C21C36	FRM220 DWDM 100GHz 16 channels DEMUX C21~ C36 LC/UPC, single fiber on WAN port