



# FRM220-DWDM

## 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.

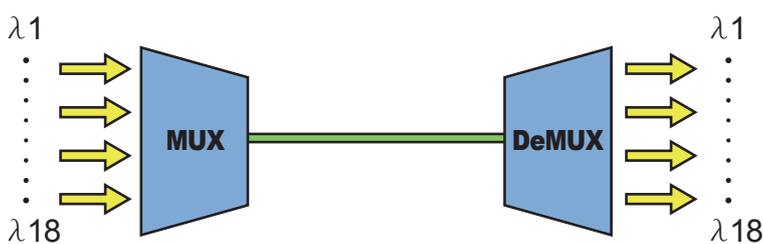
### Features

- 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		
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 ± 0.1	
Insertion Loss, dB for 4 channel	≤2.0	
Insertion Loss, dB for 8 channel	≤3.5	
Insertion Loss, dB for 16 channel	≤4.5	
Adjacent Channel Isolation, dB	N/A	≥25
Non-adjacent Channel Isolation, dB	N/A	≥35
Uniformity, dB	≤1.5 (Mux-DeMux Pair only)	
Directivity, dB	≥45	
Optical Input Return Loss, dB	≥45	
Polarization Dependent Loss, dB	≤0.15	
Polarization Mode Dispersion (PMD), ps	≤0.1	
Thermal Stability Drift, pm/°C	≤1	
Max. Optical Power, mW	300	
Max. Tensile Load, N	5	
Storage Temperature, °C	-40~85	
Operating Temperature, °C	0~70	

### Application

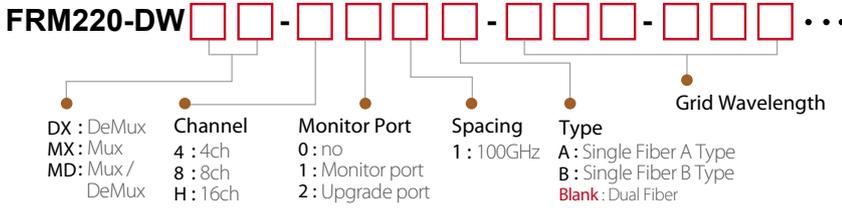


DWDM MUX must be used with DeMux on the other side

- 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

## Ordering Information

Model Name	Description
	ab → DX: DeMux, MX: Mux, MD: Mux/DeMux
	c → 4: 4ch, 8: 8ch, H: 16ch
FRM220-DWab-cdef-xxxx-xxxx	d → 0: no, 1: Monitor port, 2: 1x Upgrade Port
	e → 1: 100GHz
	f → A: Single Fiber A Type B: Single Fiber B Type Blank: Dual Fiber



### Order Code -100GHz Grid Wavelength (Please ✓select all the apply from below list)

Label	Frequency (THz)	Center Wavelength (nm)	Label	Frequency (THz)	Center Wavelength (nm)
<input type="checkbox"/> C21	192.1	1560.61	<input type="checkbox"/> C41	194.1	1544.53
<input type="checkbox"/> C22	192.2	1559.79	<input type="checkbox"/> C42	194.2	1543.73
<input type="checkbox"/> C23	192.3	1558.98	<input type="checkbox"/> C43	194.3	1542.94
<input type="checkbox"/> C24	192.4	1558.17	<input type="checkbox"/> C44	194.4	1542.14
<input type="checkbox"/> C25	192.5	1557.36	<input type="checkbox"/> C45	194.5	1541.35
<input type="checkbox"/> C26	192.6	1556.55	<input type="checkbox"/> C46	194.6	1540.56
<input type="checkbox"/> C27	192.7	1555.75	<input type="checkbox"/> C47	194.7	1539.77
<input type="checkbox"/> C28	192.8	1554.94	<input type="checkbox"/> C48	194.8	1538.98
<input type="checkbox"/> C29	192.9	1554.13	<input type="checkbox"/> C49	194.9	1538.19
<input type="checkbox"/> C30	193.0	1553.33	<input type="checkbox"/> C50	195.0	1537.40
<input type="checkbox"/> C31	193.1	1552.52	<input type="checkbox"/> C51	195.1	1536.61
<input type="checkbox"/> C32	193.2	1551.72	<input type="checkbox"/> C52	195.2	1635.82
<input type="checkbox"/> C33	193.3	1550.92	<input type="checkbox"/> C53	195.3	1535.04
<input type="checkbox"/> C34	193.4	1550.12	<input type="checkbox"/> C54	195.4	1534.25
<input type="checkbox"/> C35	193.5	1549.32	<input type="checkbox"/> C55	195.5	1533.47
<input type="checkbox"/> C36	193.6	1548.51	<input type="checkbox"/> C56	195.6	1532.68
<input type="checkbox"/> C37	193.7	1547.72	<input type="checkbox"/> C57	195.7	1531.90
<input type="checkbox"/> C38	193.8	1546.92	<input type="checkbox"/> C58	195.8	1531.12
<input type="checkbox"/> C39	193.9	1546.12	<input type="checkbox"/> C59	195.9	1530.33
<input type="checkbox"/> C40	194.0	1545.32	<input type="checkbox"/> C60	196.0	1529.55

**Example:**

**FRM220 - DW M X - 4 0 1 A - C 2 1 - C 2 4**

↳ (DWDM, Mux, 4ch, 100GHz, Single Fiber A Type, 1560.61, 1558.17 Grid Wavelength)

**FRM220 - DW**   -     -    -    -    -

Description