



## DWDM MUX / DEMUX Module Card

**Part Number:** F520-DW-xxx



### Overview

The DW-xxx card is made with DWDM TFF components to realize the function of DWDM wavelength Multiplexing or Demultiplexing of 2~16 channels. It can multiplex different DWDM wavelengths into one single fiber or demultiplex the DWDM signal from one single fiber to different wavelengths. It is a flexible and low-cost solution which enables the expansion of existing capacity for service providers without investing on fiber lines.

### Applications

- Long-Haul / Metro DWDM system
- DWDM networks

### Features

- 100GHz Channel Spacing
- Support up to 16 channels
- Plug and play, no configuration required
- Passive products without power and cooling needs
- High Isolation and Low Insertion Loss
- Stable and Reliable performance
- High integration card package
- Support Monitoring and Express channel



## Specification

| Parameters                           | Specification Values                    |      |      | Unit |
|--------------------------------------|-----------------------------------------|------|------|------|
| Fiber Type                           | SMF-28e or equivalent Single Mode Fiber |      |      |      |
| Center Wavelength                    | ITU-Grid                                |      |      | nm   |
| Channel Spacing                      | 100                                     |      |      | GHz  |
| Center Wavelength Accuracy           | ±0.05                                   |      |      | nm   |
| Channel Passband (@-0.5dB) (nm)      | 0.22                                    |      |      | nm   |
| Passband Ripple (dB)                 | ≤ 0.5                                   |      |      | dB   |
| Optical Insertion Loss at ITU grid*1 | 4CH                                     | 8CH  | 16CH |      |
|                                      | <1.8                                    | <3.0 | <4.5 | dB   |
| Adjacent Channel Isolation           | ≥ 25                                    |      |      | dB   |
| Non-Adjacent Channel Isolation       | ≥ 40                                    |      |      | dB   |
| PDL / Polarization Dependent Loss*2  | ≤ 0.2                                   |      |      | dB   |
| PMD / Polarization Mode Dispersion   | ≤ 0.1                                   |      |      | ps   |
| Directivity                          | ≥ 50                                    |      |      | dB   |
| Optical Return Loss                  | ≥ 45                                    |      |      | dB   |
| Maximum Handling Power               | 300                                     |      |      | mW   |
| Size                                 | 191(W) x 253(D) x 20(H)                 |      |      | mm   |
| Operating Temperature                | -10 ~ +60                               |      |      | °C   |
| Storage Temperatur                   | -40 ~ +85                               |      |      | °C   |
| Relative Humidity (no condensation)  | 5 ~ 95                                  |      |      | %    |

**Note1:** The Insertion Loss values not including Connector Loss.

**Note2:** PDL was measured on average polarization over a ±0.08nm window around the ITU wavelength.



## Ordering Information

F520-DW-

### Configuration

M: Mux                      P: Mux\*2  
D: Demux                  Q: Demux\*2  
U: Mux+Demux

### Channel Counts

02- 2 Channels  
04- 4 Channels  
08- 8 Channels  
16- 16 Channels  
XX- XX Channels