

## Features:

- Low optical insertion loss
- Mux/Demux four/eight wavelengths
- SC connectors (LC version available)
- Reliable passive WDM technology
- Scales easily for ring networks
- Low-profile modular design
- Fits in 1RU 19" rack mount chassis
- RoHS compliant

## 4/8 Channels 200GHz DWDM MUX/DEMUX Plug-in Module



Four or eight channel FWSFMDMUX2Dwxxyy DWDM Plug-in module is a passive optical multiplexer/demultiplexer designed for metro access applications that represent the state of the art in fiber optics design. These MUX/DEMUX modules multiplex and demultiplex four or eight DWDM wavelengths of 200GHz channel spacing into two-fiber paths, going in opposite directions into a network (east/west).

The MUX/DEMUX module plugs into one half of a 1RU, 19" rack mount chassis for simple installation and modularity. This chassis based system offers network equipment manufacturers a more scalable and higher-density solution to add DWDM capability to their existing and new networks with simple pluggable interface.

Finisar's DWDM product delivers dramatic cost savings to network equipment manufacturers, enabling them to develop metro access systems that are lower in cost, easier to provision and simpler to operate.

## FWSFMDMUX2Dwxxyy Plug-in Module

## Product selection

**FWSFMDMUX2Dwxxyy**

|    |                                                           |
|----|-----------------------------------------------------------|
| 2  | 200GHz spacing                                            |
| w  | Channel number ( w=8, 4 channels)                         |
| xx | The first channel ID (see below table channel wavelength) |
| yy | The last channel ID (see below table channel wavelength)  |

| Channel ID<br>("xx"/"yy") | Center<br>Wavelength (nm) | Channel ID<br>("xx"/"yy") | Center<br>Wavelength (nm) | Channel ID<br>("xx"/"yy") | Center<br>Wavelength (nm) |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| 61                        | 1528.773                  | 40                        | 1545.322                  | 20                        | 1561.419                  |
| 60                        | 1529.553                  | 39                        | 1546.119                  | 19                        | 1562.233                  |
| 59                        | 1530.334                  | 38                        | 1546.917                  | 18                        | 1563.047                  |
| 58                        | 1531.116                  | 37                        | 1547.715                  | 17                        | 1563.863                  |
| 57                        | 1531.898                  | 36                        | 1548.515                  | 16                        | 1564.679                  |
| 56                        | 1532.681                  | 35                        | 1549.315                  | 15                        | 1565.496                  |
| 55                        | 1533.465                  | 34                        | 1550.116                  | 14                        | 1566.314                  |
| 54                        | 1534.250                  | 33                        | 1550.918                  | 13                        | 1567.133                  |
| 53                        | 1535.036                  | 32                        | 1551.721                  | 12                        | 1567.952                  |
| 52                        | 1535.822                  | 31                        | 1552.524                  | 11                        | 1568.773                  |
| 51                        | 1536.609                  | 30                        | 1553.329                  | 10                        | 1569.594                  |
| 50                        | 1537.397                  | 29                        | 1554.134                  | 09                        | 1570.416                  |
| 49                        | 1538.186                  | 28                        | 1554.940                  | 08                        | 1571.239                  |
| 48                        | 1538.976                  | 27                        | 1555.747                  | 07                        | 1572.063                  |
| 47                        | 1539.766                  | 26                        | 1556.555                  | 06                        | 1572.888                  |
| 46                        | 1540.557                  | 25                        | 1557.363                  | 05                        | 1573.714                  |
| 45                        | 1541.349                  | 24                        | 1558.173                  | 04                        | 1574.540                  |
| 44                        | 1542.142                  | 23                        | 1558.983                  | 03                        | 1575.368                  |
| 43                        | 1542.936                  | 22                        | 1559.794                  | 02                        | 1576.196                  |
| 42                        | 1543.730                  | 21                        | 1560.606                  | 01                        | 1577.025                  |
| 41                        | 1544.526                  |                           |                           |                           |                           |

For example: **FWSFMDMUX2D82741** – 8 channels, from CH27 to CH41, 200 GHz DWDM MUX/DEMUX plug-in module, SC connectors

## Specifications

### Mechanical

#### Dimensions:

8.3" x 1.7" x 10.4",  
210mm x 43mm x 264mm,  
plug-in for 1RU rack-mount

### Connectors:

FWSFMDMUX2Dwxyy  
• SC/PC

### Environmental:

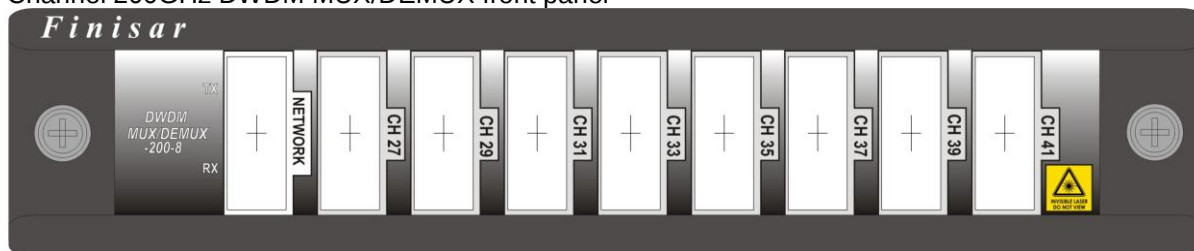
- Operating -5 to 70°C
- Relative humidity:  
10 to 85%, non-condensing
- Storage - 40 to 85°C

### FWSFMDMUX2Dwxyy Parameter Specifications (connector loss included)

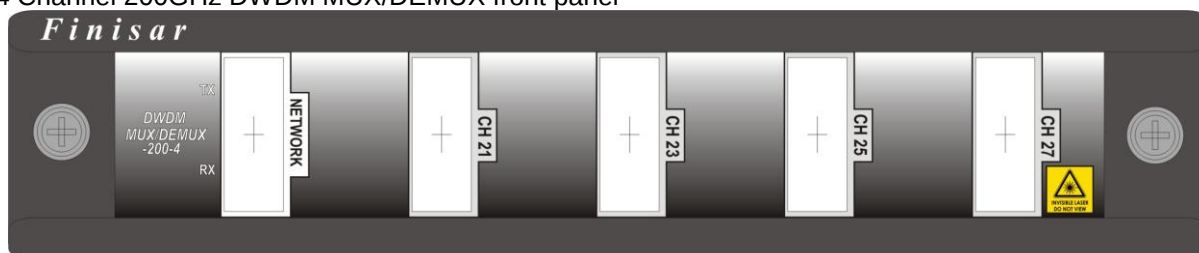
| Parameter                       |            |     | Specifications    |            | Unit |
|---------------------------------|------------|-----|-------------------|------------|------|
| Center Wavelength               |            | -   | ITU Grid Channels |            | nm   |
| Channel Spacing                 |            | -   | 200               |            | GHz  |
| Channel Pass band               |            | -   | ITU± 0.25         |            | nm   |
| Pass Band Insertion Loss        |            | Max | 8 channels        | 4 channels | dB   |
|                                 |            |     | 3.0               | 2.0        |      |
| Pass Band Ripple                |            | Max | 0.4               |            | dB   |
| Adjacent Channel Isolation      | Mux side   | Min | 15                |            | dB   |
|                                 | DeMux      | Min | 30                |            |      |
| Non- Adjacent Channel Isolation | Mux side   | Min | 15                |            | dB   |
|                                 | Demux side | Min | 40                |            |      |
| Optical Return Loss             |            | Min | 45                |            | dB   |
| Directivity                     |            | Min | 50                |            | dB   |
| Polarization Dependent Loss     |            | Max | 0.2               |            | dB   |
| Polarization Mode Dispersion    |            | Max | 0.2               |            | ps   |
| Optical Power Handling          |            | Max | 500               |            | mW   |

## Front Panel (Channel description is only for example)

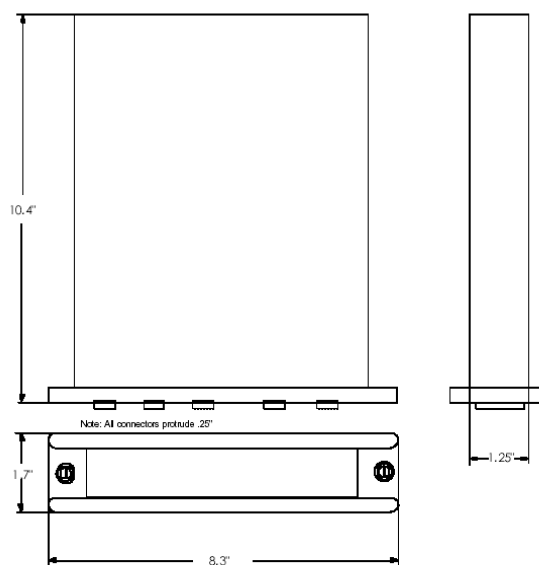
8 Channel 200GHz DWDM MUX/DEMUX front panel



4 Channel 200GHz DWDM MUX/DEMUX front panel



## Dimensions (Unit: inch)



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