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## 9490CWDM-4MX-LC 4-Channel CWDM Multiplexer

## 9490CWDM-4DX-LC 4-Channel CWDM Demultiplexer

### Installation Instructions

This manual provides safety and installation instructions for the 9490CWDM-4MX-LC 4-Channel CWDM Multiplexers and 9490CWDM-4DX-LC 4-Channel CWDM Demultiplexers. All units use type LC connectors and use the following wavelength divisions:

**9490CWDM-4MX-LC** 4-Ch mux with expansion port; 1350nm - 1370nm - 1430nm - 1450nm

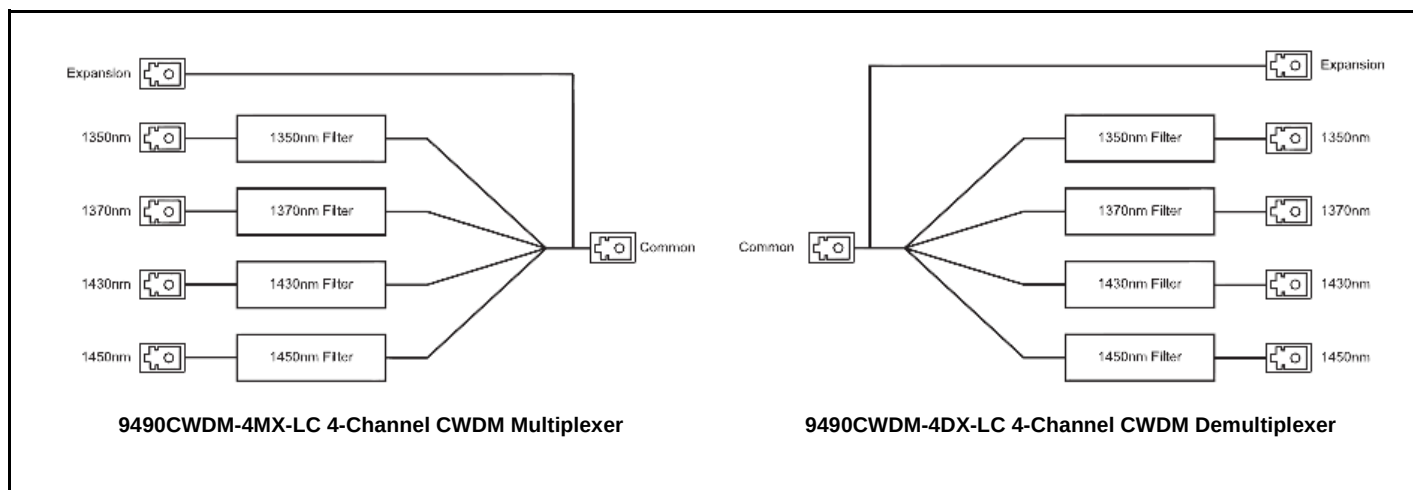
**9490CWDM-4DX-LC** 4-Ch demux with expansion port; 1350nm - 1370nm - 1430nm - 1450nm

## Laser Safety Instructions and Notices



- Do not look into fiber cable ends or connectors.
- Only trained and authorized personnel shall be permitted to perform laser/fiber optic installation and/or maintenance.

## 9490CWDM-4MX-LC and 9490CWDM-4DX-LC Block Diagrams



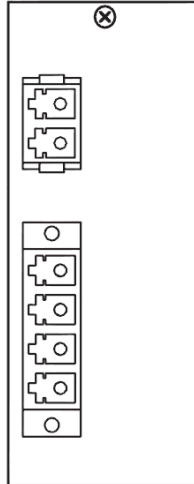
## Unit Installation and Rear I/O Module Connections

Install the mux/de-mux units and connect fiber cabling as shown in the illustration below and as described below.

1. Install the rear module in the desired 20-slot frame slot pair (mux or de-mux unit and its rear module occupies 2 card slots).
2. Install the mux or demux unit in the frame to mate with the rear module.
3. Remove protective caps on couplers and install cable onto connectors.

Please see other side

Common  
Expansion



Typical 9490CWDM-4MX-LC / 9490CWDM-4DX-LC Rear Module Connections

| Item                                                                                   | Characteristic                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Part number, nomenclature, and filter wavelength divisions                             | <b>9490CWDM-4MX-LC 4-Channel Optical Mux with expansion port</b><br>1350nm - 1370nm - 1430nm - 1450nm. Includes type LC connector Rear I/O Module<br><b>9490CWDM-4DX-LC 4-Channel Optical De-Mux with expansion port</b><br>1350nm - 1370nm - 1430nm - 1450nm. Includes type LC connector Rear I/O Module |
| Insertion Loss                                                                         | 3.1 dB (max) per channel (mux or demux)                                                                                                                                                                                                                                                                   |
| <b>Note:</b> When used as a pair, max. 4.1 dB insertion loss (exluding expansion port) | 3.0 dB (max) (expansion port; mux or demux)                                                                                                                                                                                                                                                               |
| Adjacent Channel Isolation                                                             | 30 dB (min)                                                                                                                                                                                                                                                                                               |
| Non-Adjacent Channel Isolation                                                         | 40 dB (min)                                                                                                                                                                                                                                                                                               |
| Passband Ripple                                                                        | 0.3 dB                                                                                                                                                                                                                                                                                                    |
| Channel Passband                                                                       | +/- 6.5 nm                                                                                                                                                                                                                                                                                                |
| Channel Spacing                                                                        | 20 nm                                                                                                                                                                                                                                                                                                     |
| Return Loss                                                                            | 50 dB (min)                                                                                                                                                                                                                                                                                               |
| Frame Slot Usage                                                                       | 2 per unit                                                                                                                                                                                                                                                                                                |
| Connector Type                                                                         | Single Mode, Type LC/UPC                                                                                                                                                                                                                                                                                  |

9490CWDM-4MX-LC / 9490CWDM-4DX-LC Specifications