

7705CWDM

Coarse WDM Optical Modules

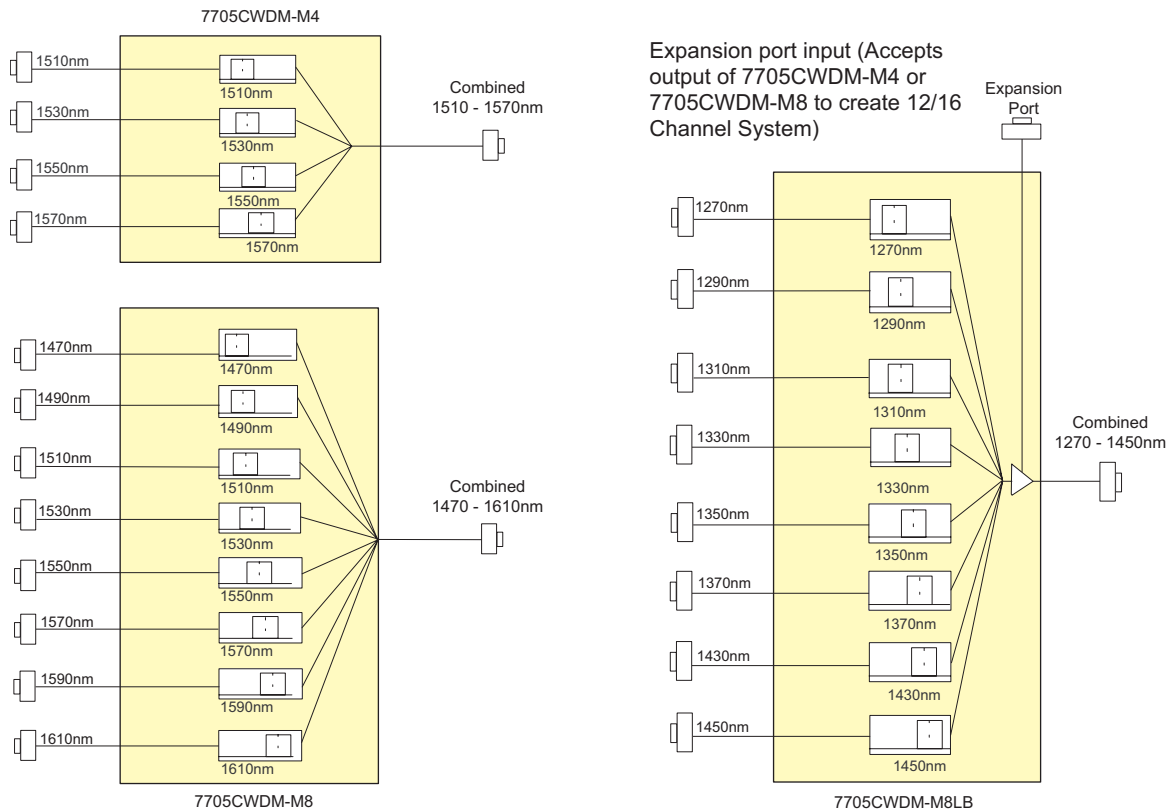
► Features & Benefits

- Bi-directional mux/demux of up to 16 wavelengths in the 1270nm to 1610nm spectrum (ITU-T G.694.2 compliant)
- Expandable from 4 or 8 to 12 or 16 channel systems
- Passive design for any bit rate
- Low insertion loss to conserve system power
- High optical isolation for low crosstalk
- Fully hot-swappable from front of frame with no fiber disconnect/reconnect required
- SC/PC, ST/PC*, FC/PC* connector options
- Fiber protector to prevent connector damage

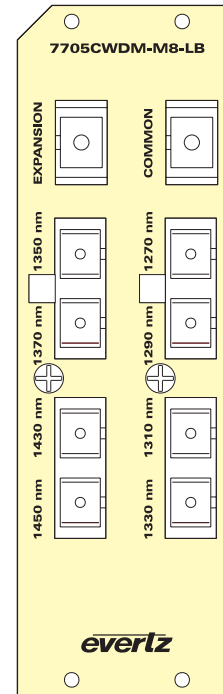
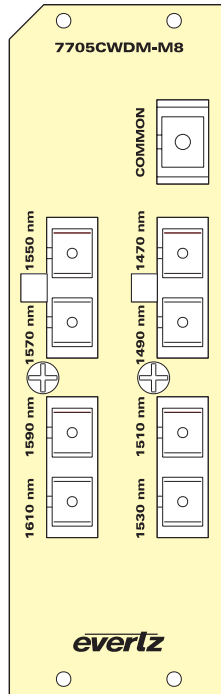
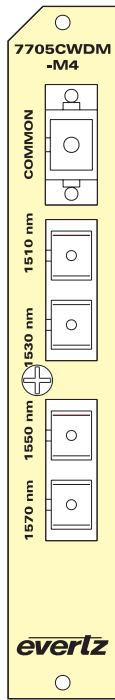
Applications

- Multi-channel transport of video, audio, data, control in fiber limited applications
- Cost reduction exercises through fewer leased fibers
- Studio and Facility extension/expansion
- STL and TSL links
- Signal aggregation for outdoor and event coverage
- Signal aggregation for security and monitoring

*7705CWDM to be used ONLY in Single Mode Fiber applications



| Function | Ordering Information | Description | Slots Occupied |
|-----------------------|-----------------------------|---------------------------------------|----------------|
| 4 Channel CWDM Mux | 7705CWDM-M4 | 4 Channel CWDM Mux (1510nm-1570nm) | 1 |
| 4 Channel CWDM Demux | 7705CWDM-D4 | 4 Channel CWDM Demux (1510nm-1570nm) | 1 |
| 8 Channel CWDM Mux | 7705CWDM-M8 | 8 Channel CWDM Mux (1470nm-1610nm) | 2 |
| 8 Channel CWDM Demux | 7705CWDM-D8 | 8 Channel CWDM Demux (1470nm-1610nm) | 2 |
| 12 Channel CWDM Mux | 7705CWDM-M4 & 7705CWDM-M8LB | 12 Channel CWDM Mux (1270nm-1570nm) | 3 |
| 12 Channel CWDM Demux | 7705CWDM-D4 & 7705CWDM-D8LB | 12 Channel CWDM Demux (1270nm-1570nm) | 3 |
| 16 Channel CWDM Mux | 7705CWDM-M8 & 7705CWDM-M8LB | 16 Channel CWDM Mux (1270nm-1610nm) | 4 |
| 16 Channel CWDM Demux | 7705CWDM-D8 & 7705CWDM-D8LB | 16 Channel CWDM Demux (1270nm-1610nm) | 4 |



► Specifications

Optical Input/Output:

Connector: SC/PC, ST/PC or FC/PC* female housing
 Wavelength:
 7705CWDM-4: 1510-1570nm
 7705CWDM-8: 1470-1610nm
 7705CWDM-8LB: 1270-1450nm
 Channel Spacing: 20nm
 Passband @ 0.5dB: > 13nm
 Channel Uniformity: < 1.5dB
 Isolation Adjacent Channel:
 > 30dB
 > 50dB
 Directivity: > 50dB
 Fiber Size: 9µm core/125µm overall
 Return Loss: > 45dB

Link Loss with Mux and Demux Combination:

7705CWDM-4: < 2.5dB Maximum Loss
 7705CWDM-8: < 3.5dB Maximum Loss
 7705CWDM-8LB: < 5.5dB Maximum Loss
 Expansion Port: < 3.5dB Maximum Loss
 7707CWDM-4 + 7707CWDM-8LB:
 < 6.0dB (1270nm-1570nm)
 7705CWDM-8 + 7705CWDM-8LB:
 < 5.5dB (1270nm-1450nm)
 < 7.0dB (1470nm-1610nm)

Physical (number of slots) 350FR, 7700FR-C & 7800FR:

7705CWDM-D4: 1
 7705CWDM-D8: 2
 7705CWDM-D8LB: 2
 7705CWDM-M4: 1
 7705CWDM-M8: 2
 7705CWDM-M8LB: 2

► Ordering Information

| | |
|----------------------|---|
| 7705CWDM-D4 | 4 Channel CWDM Demux (1510nm-1570nm) |
| 7705CWDM-D8 | 8 Channel CWDM Demux (1470nm-1610nm) |
| 7705CWDM-D8LB | 8 Channel Low Band CWDM Demux (1270nm-1450nm) |
| 7705CWDM-M4 | 4 Channel CWDM Mux (1510nm-1570nm) |
| 7705CWDM-M8 | 8 Channel CWDM Mux (1470nm-1610nm) |
| 7705CWDM-M8LB | 8 Channel Low Band CWDM Mux (1270nm-1450nm) |

Connector Suffix

+SC SC/PC
+ST ST/PC*
+FC FC/PC*

*Note: ST/PC & FC/PC connector option is available on 'COMMON' port only (SC/PC on remaining fiber I/O ports)

**Note: Retention screws have been added to the rear panels of these units. Please note that rear panels from older MUX/DEMUX units will not be backwards compatible with newer rear panel units. (See block diagram for rear panel drawings).

Ordering Options Rear Plate and Fiber Connector must be specified at time of order
 Eg: Model +3RU +SC

Rear Plate Suffix

+3RU 3RU Rear Plate for use with 350FR, 7700FR-C or 7800FR Multiframe
+1RU 1RU Rear Plate for use with 7701FR Multiframe
+SA Standalone Enclosure (with power supply)

Enclosures

350FR 3RU Portable Multiframe which holds up to 7 single slot modules
7700FR-C 3RU Multiframe which holds up to 15 single slot modules
7800FR 3RU Multiframe which holds up to 15 single slot modules
7801FR 1RU Multiframe which holds up to 4 single or 2 dual slot modules
7701FR 1RU Multiframe which holds up to 3 single or dual slot modules
S7701FR Standalone Enclosure