

# 3400CWDM

## 3400 Series Coarse WDM Optical Modules

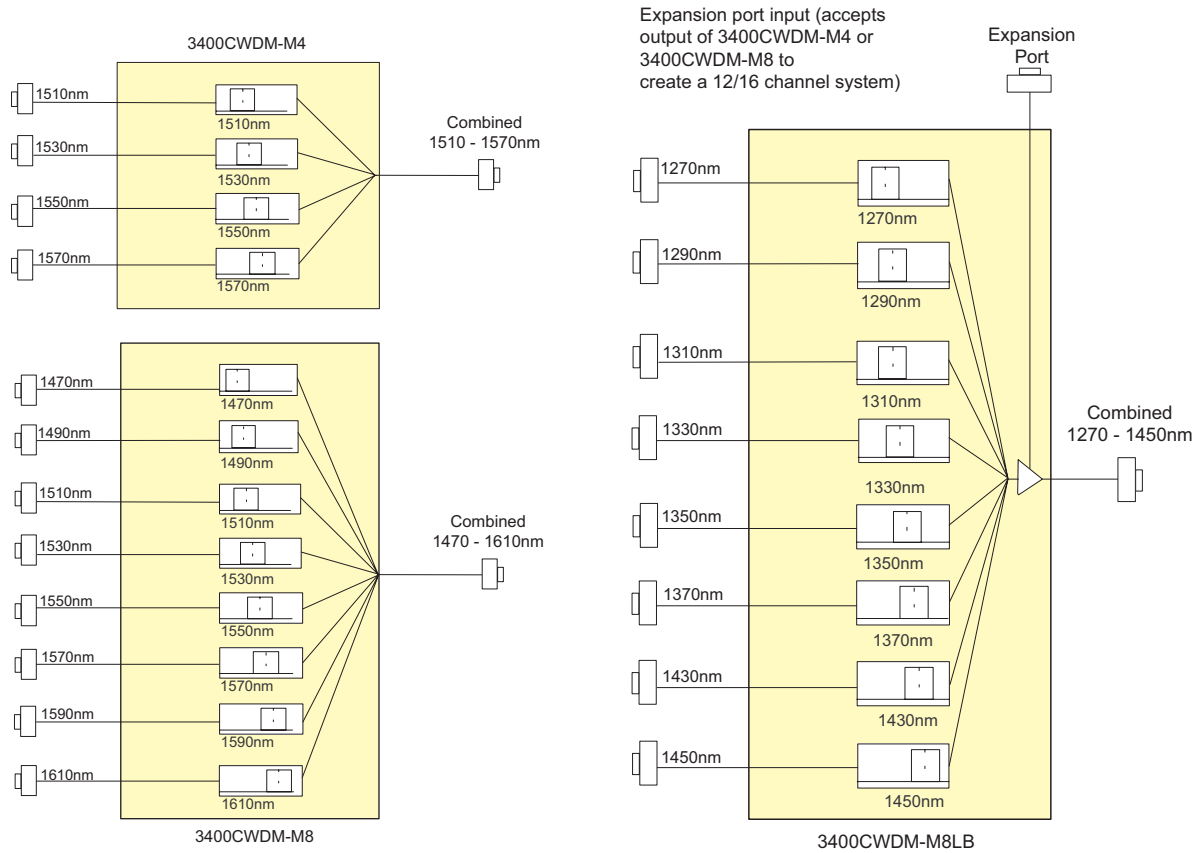
### Features & Benefits

- To be used with 3400FR 1RU Passive Optical Frame
- Also available in standalone enclosure (+SA)
- 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
- LC/PC or LC/APC 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

\*3400CWDM to be used ONLY in Single Mode Fiber applications



Function	Ordering Information	Description	3400FR Slots Occupied
4 Channel CWDM Mux	3400CWDM-M4	4 Channel CWDM Mux (1510nm-1570nm)	1
4 Channel CWDM Demux	3400CWDM-D4	4 Channel CWDM Demux (1510nm-1570nm)	1
8 Channel CWDM Mux	3400CWDM-M8	8 Channel CWDM Mux (1470nm-1610nm)	1
8 Channel CWDM Demux	3400CWDM-D8	8 Channel CWDM Demux (1470nm-1610nm)	1
12 Channel CWDM Mux	3400CWDM-M4 & 3400CWDM-M8LB	12 Channel CWDM Mux (1270nm-1570nm)	2
12 Channel CWDM Demux	3400CWDM-D4 & 3400CWDM-D4LB	12 Channel CWDM Demux (1270nm-1570nm)	2
16 Channel CWDM Mux	3400CWDM-M8 & 3400CWDM-M8LB	16 Channel CWDM Mux (1270nm-1610nm)	2
16 Channel CWDM Demux	3400CWDM-D8 & 3400CWDM-D8LB	16 Channel CWDM Demux (1270nm-1610nm)	2

\*For use with 3400FR 1RU Passive Optical Frame or as Standalone enclosure  
 \*Cross compatible with 7700 series CWDM Mux & Demux

### ► Specifications

#### Optical Input/Output:

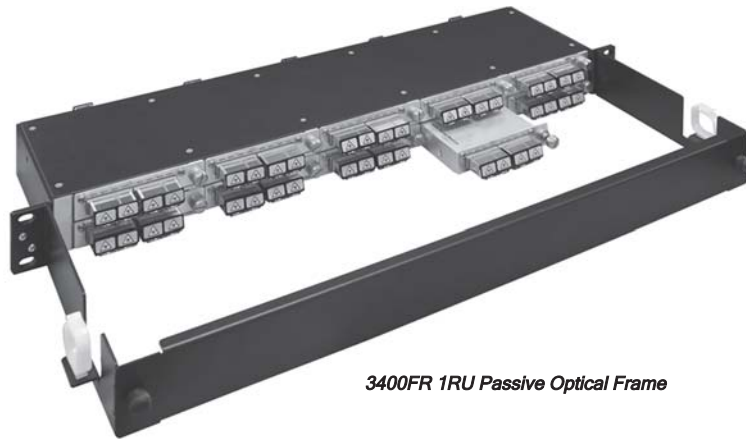
Connector: LC/PC, or LC/APC female housing  
 Wavelength:  
 3400CWDM-4: 1510-1570nm  
 3400CWDM-8: 1470-1610nm  
 3400CWDM-8LB: 1270-1450nm  
 Channel Spacing: 20nm  
 Passband @ 0.5dB: > 13nm  
 Channel Uniformity: < 1.5dB  
 Isolation Adjacent Channel:  
 > 30dB  
 > 50dB  
 Directivity:  
 > 50dB  
 Fiber Size: 9µm core/125µm overall  
 Return Loss: > 45dB

#### Link Loss with Mux and Demux Combination:

3400CWDM-4: < 3dB Maximum Loss  
 3400CWDM-8: < 4dB Maximum Loss  
 3400CWDM-8LB: < 5dB Maximum Loss  
 Expansion Port: < 3dB Maximum Loss  
 3400CWDM-4 + 3400CWDM-8LB  
 < 6dB (1270nm - 1570nm) Maximum Loss  
 3400CWDM-8 + 3400CWDM-8LB  
 < 5dB (1270nm - 1450nm)  
 < 7dB (1470nm - 1610nm) Maximum Loss

#### Physical (number of slots):

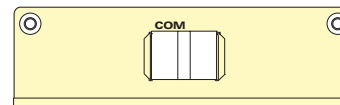
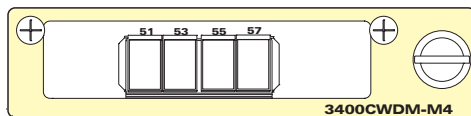
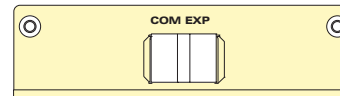
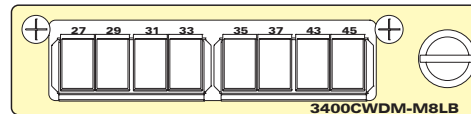
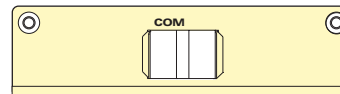
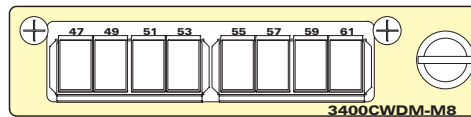
3400FR: 1



3400FR 1RU Passive Optical Frame



3400CWDM Standalone Alone



### ► Ordering Information

<b>3400CWDM-M4</b>	4 Channel CWDM Mux (1510nm - 1570nm) with LC/PC Connectors
<b>3400CWDM-D4</b>	4 Channel CWDM Demux (1510nm - 1570nm) with LC/PC Connectors
<b>3400CWDM-M8</b>	8 Channel CWDM Mux (1470nm - 1610nm) with LC/PC Connectors
<b>3400CWDM-D8</b>	8 Channel CWDM Demux (1470nm - 1610nm) with LC/PC Connectors
<b>3400CWDM-M8LB</b>	8 Channel Low Band CWDM Mux with Exp Port (1270nm to 1450nm) with LC/PC Connectors
<b>3400CWDM-D8LB</b>	8 Channel Low Band CWDM Demux with Exp Port (1270nm to 1450nm) with LC/PC Connectors
<b>3400CWDM-M4-AP</b>	4 Channel CWDM Mux (1510nm - 1570nm) with LC/APC Connectors
<b>3400CWDM-D4-AP</b>	4 Channel CWDM Demux (1510nm - 1570nm) with LC/APC Connectors
<b>3400CWDM-M8-AP</b>	8 Channel CWDM Mux (1470nm - 1610nm) with LC/APC Connectors
<b>3400CWDM-D8-AP</b>	8 Channel CWDM Demux (1470nm - 1610nm) with LC/APC Connectors
<b>3400CWDM-M8LB-AP</b>	8 Channel Low Band CWDM Mux with Exp Port (1270nm to 1450nm) with LC/APC Connectors
<b>3400CWDM-D8LB-AP</b>	8 Channel Low Band CWDM Demux with Exp Port (1270nm to 1450nm) with LC/APC Connectors
<b>3400CWDM-M4-SA</b>	Standalone 4 Channel CWDM Mux (1510nm - 1570nm) with LC/PC Connectors
<b>3400CWDM-D4-SA</b>	Standalone 4 Channel CWDM Demux (1510nm - 1570nm) with LC/PC Connectors
<b>3400CWDM-M8-SA</b>	Standalone 8 Channel CWDM Mux (1470nm - 1610nm) with LC/PC Connectors
<b>3400CWDM-D8-SA</b>	Standalone 8 Channel CWDM Demux (1470nm - 1610nm) with LC/PC Connectors

<b>3400CWDM-M8LB-SA</b>	Standalone 8 Channel Low Band CWDM Mux with Exp Port (1270nm to 1450nm) with LC/PC Connectors
<b>3400CWDM-D8LB-SA</b>	Standalone 8 Channel Low Band CWDM Demux with Exp Port (1270nm to 1450nm) with LC/PC Connectors
<b>3400CWDM-M4-AP-SA</b>	Standalone 4 Channel CWDM Mux (1510nm - 1570nm) with LC/APC Connectors
<b>3400CWDM-D4-AP-SA</b>	Standalone 4 Channel CWDM Demux (1510nm - 1570nm) with LC/APC Connectors
<b>3400CWDM-M8-AP-SA</b>	Standalone 8 Channel CWDM Mux (1470nm - 1610nm) with LC/APC Connectors
<b>3400CWDM-D8-AP-SA</b>	Standalone 8 Channel CWDM Demux (1470nm - 1610nm) with LC/APC Connectors
<b>3400CWDM-M8LB-AP-SA</b>	Standalone 8 Channel Low Band CWDM Mux with Exp Port (1270nm to 1450nm) with LC/APC Connectors
<b>3400CWDM-D8LB-AP-SA</b>	Standalone 8 Channel Low Band CWDM Demux with Exp Port (1270nm to 1450nm) with LC/APC Connectors

**Enclosures:**  
**3400FR** 1RU Passive Optical Frame