

# OCM 5891

**fiber**

**SERIES 5000**

**CardModules**

## 9 Channel CWDM Optical MUX/DEMUX

### Description

The OCM 5891 is a 9 channel CWDM passive optical multiplexer and/or de-multiplexer. This module allows the combination of up to 9 optical signals into a single unidirectional or bi-directional fiber link.

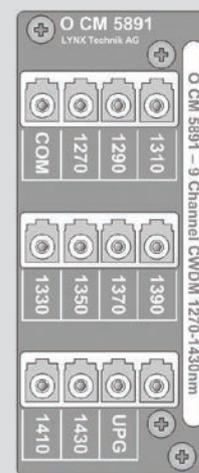
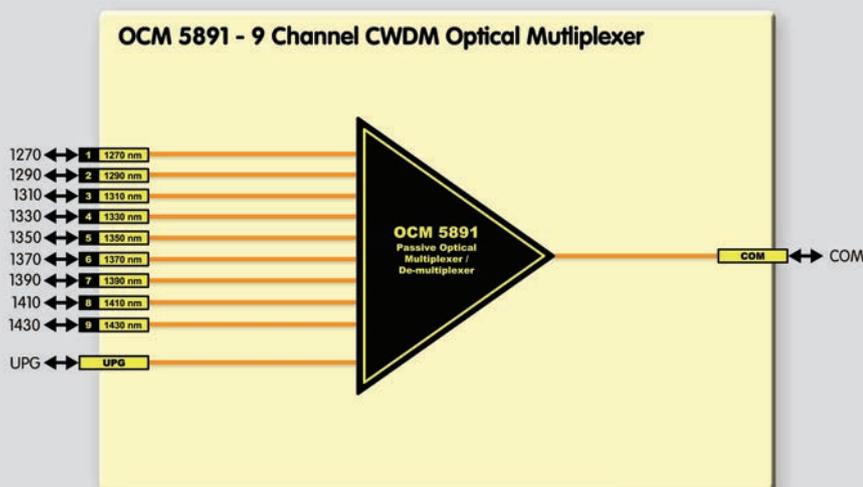
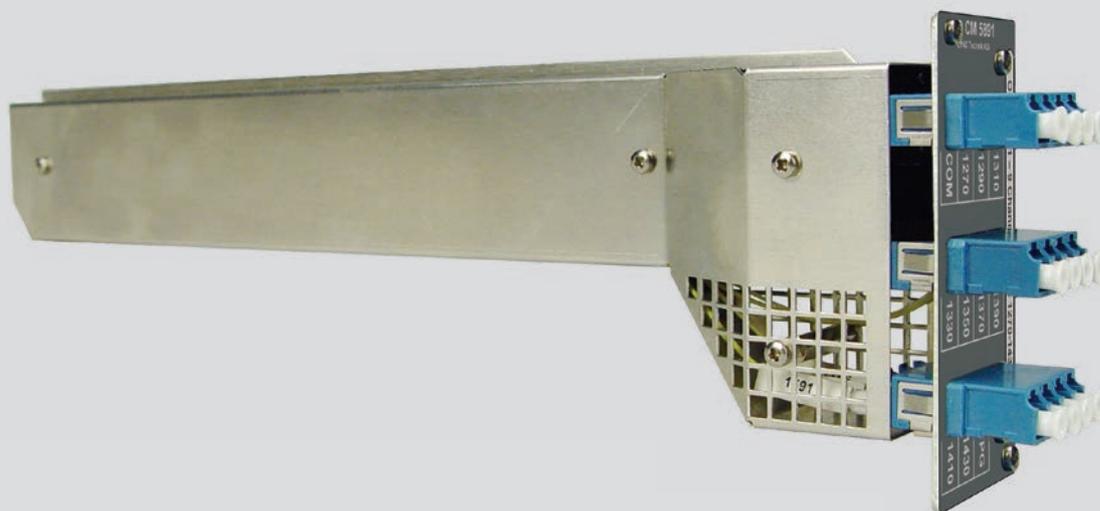
This version of the module supports 9 of the 18 wavelengths as specified in the ITU standard CWDM channel spacing grid (ITU-T G694.2) namely 1270nm through 1430nm wavelengths.

The module features a Upgrade Port (UPG) for expansion, when connected to the OCM 1892 the two modules (combined) will support all 18 CWDM wavelengths.

The module is passive in operation, meaning it requires no power, and is mechanically compatible with all Series 5000 rack frames and installs from the rear of the rack.

### Features

- Mux and / or Demux up to 9 optical signals
- ITU standard wavelength divisions: ITU-T G694.2
- UPG (upgrade) port for expansion
- Passive operation
- Compatible with all Series 5000 rack frames (2RU and 1RU)
- Occupies one card slot
- LC - PC connectors (singlemode)



**Backplane**

## 9 Channel CWDM Optical MUX/DEMUX

### Specifications

Optical I/O	
Optical I/O Ports	9 ( Wavelength Specific )
Supported I/O Wavelengths (ITU-T G694.2)	1270nm, 1290nm, 1310nm, 1330nm, 1350nm, 1370nm, 1390nm, 1410nm, 1430nm
UPG Port	Upgrade port (for connection to OCM 5892)
COM Port	Common I/O port ( Primary I/O with combined optical signals )
Connector Type	LC - PC (singlemode)
Performance	
Channel insertion loss	2.7dB
UPG port insertion loss	2.7dB
Polarization dependant loss	max 0.2dB
Return Loss	> 45dB
Isolation (To adjacent channel)	> 30dB
Directivity	> 55dB
Temperature dependant loss	< 0.005 dB / °C
Temperature dependant change of wavelength	< 0.003 nm / °C
Max input power	500mw

### Mechanical

Size	85mm x 286mm (not incl. connectors)
Weight	190 g

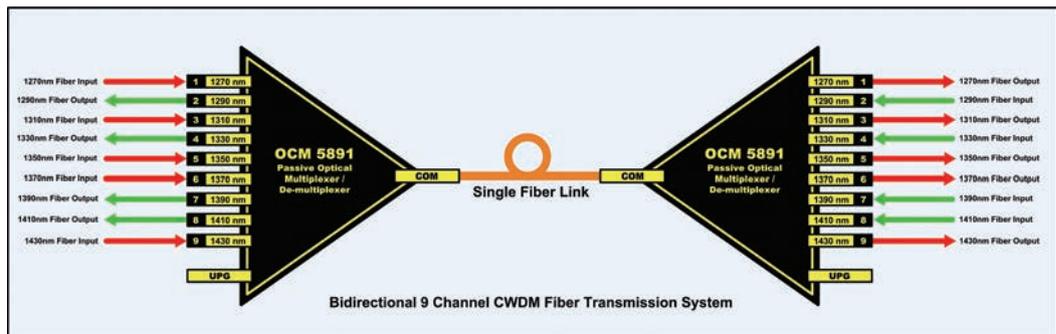
### Ambient

Temperature	-20 C to 85 C Maintaining specifications
Humidity	90% Max non condensing

Specifications subject to change

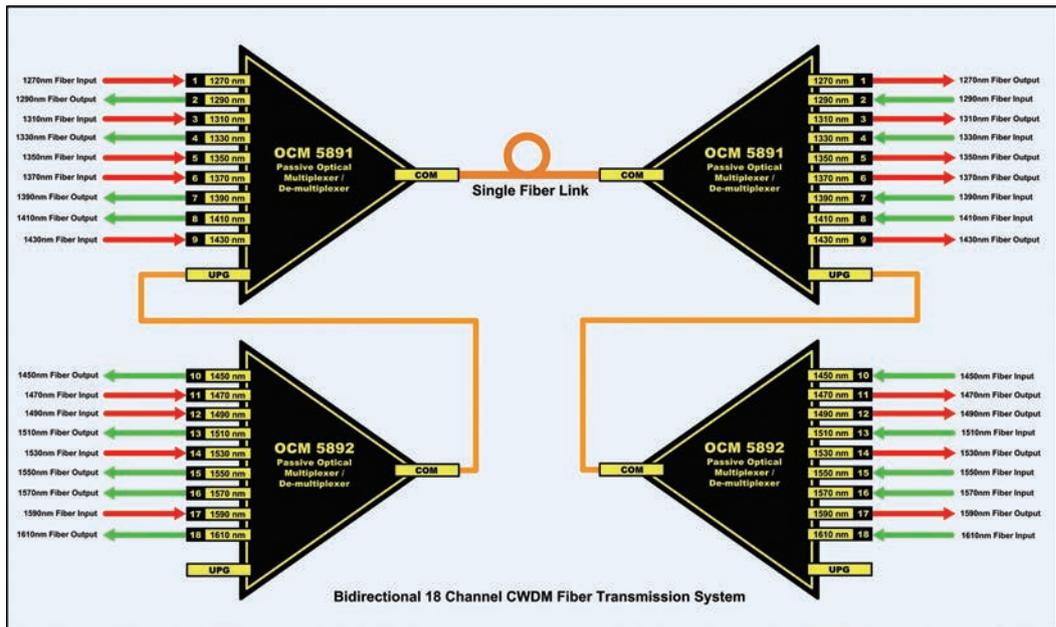
### Applications

Two OCM 5891 modules used for a 9 channel bi-directional fiber transmission system.



This configuration shows how the UPG (upgrade) port is used to connect to the OCM 1892 to add 9 additional channels for a 18 channel bi-directional system.

**Note:** the mix of TX and RX channels in the bi-directional link is determined by the location of the transmitter and receiver modules. This can be any combination.



### Ordering Information

Model #	Part Number	Description	Includes
OCM 5891	100005891	9 Channel CWDM Multiplexer / De-multiplexer	CardModule + Mounting Screws + Reference Manual (on CD)