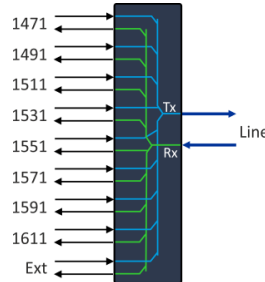
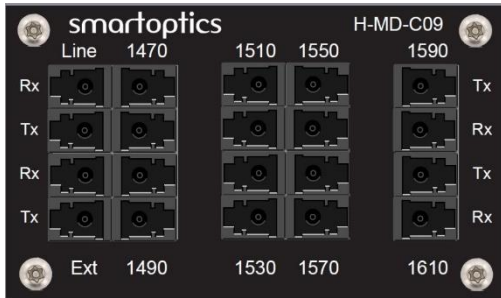


# H-MD-C09

## 8-channel CWDM Mux/Demux with Extension port



### OVERVIEW

The H-MD-C09 is an 8ch CWDM Mux/Demux with an Extension port. The eight wavelength ports of the H-MD-C09 operates on the high CWDM band channels; 1471 to 1611nm. This filter is best used to fully utilize the upper CWDM channels in the region where the SM fiber attenuation is the lowest.

The H-Series supports the industrial temperature range of -40°C to +85°C (-40°F to +185°F) which gives an extended application range into sites without temperature control. The H-Series filters are mounted in a 1 RU mounting bracket solution, and the filter module sizes vary depending on type of filter.

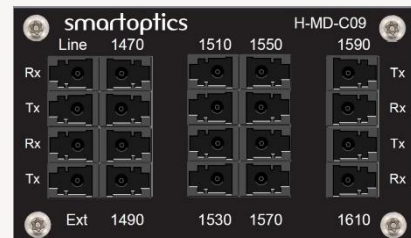
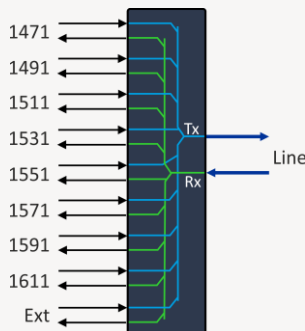
### FUNCTIONAL DESCRIPTION

The extension port can be used for the following applications:

- Connect legacy 1310nm wavelengths
- Connect the H-MD-C08 unit to expand with 8 additional wavelengths in the CWDM low-band

The H-MD-C09 is compliant with ITU-T G.694.2

### FUNCTIONAL OVERVIEW AND PORT DESCRIPTION



Line Rx	1470 Tx	1510 Rx	1550 Tx	1590 Tx
Line Tx	1470 Rx	1510 Tx	1550 Rx	1590 Rx
Ext Rx	1490 Tx	1530 Rx	1570 Tx	1610 Tx
Ext Tx	1490 Rx	1530 Tx	1570 Rx	1610 Rx

Note: The channel labels “1470”, “1490” etc on the overlay are not representing the actual center wavelengths. The actual center wavelengths are at 1471nm, 1491nm etc. as listed in the table below. Note row dependent location of Tx and Rx ports.

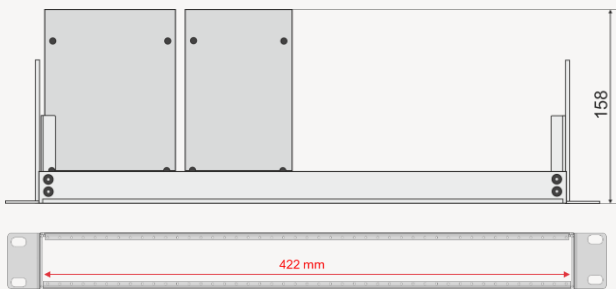
Subject to change without notice.

For more information visit [smartoptics.com](http://smartoptics.com).

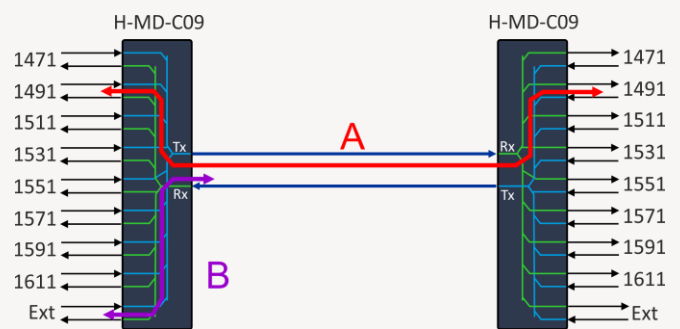
## TECHNICAL SPECIFICATIONS

Parameter	Values	
Channels	1471, 1491, 1511, 1531, 1551, 1571, 1591, 1611nm	
Channel spacing	20nm (ITU-T G.694.2)	
Channel passband	ITU±7nm	
Extension port channels	1271-1451nm	
Link loss, per channel (A)	Typical 4.0dB	Max 4.5dB
Insertion loss, extension port (B)	Typical 3.2dB	Max 3.5dB
Isolation, adjacent channel	Min 28dB	
Isolation, non-adjacent channel	Min 40dB	
Ripple, passband	Max 0.5 dB	
Directivity	Min 45dB	
Return loss	Min 40dB	
Polarization dependent loss	Max 0.2dB	
Polarization mode dispersion	Max 0.20ps	
Operating temperature	-40°C to +85°C	
Connector type	LC/UPC	
Module width	75 mm	

Note! A typical loss value is to be seen as a value that ~90% of a population has at beginning of life and at room temperature. The max value is the guaranteed worst-case value over time and over temperature.



Mounting bracket dimensions with two example filters.



## ORDER INFORMATION

The table below shows the part numbers and a short description for the H-MD-C09.

Part number	Description
H-MD-C09	H-Series: 8ch CWDM Mux/Demux + Ext-port, 1471, 1491, 1511, 1531, 1551, 1571, 1591, 1611, 75mm, LC/UPC