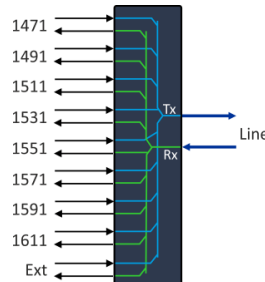
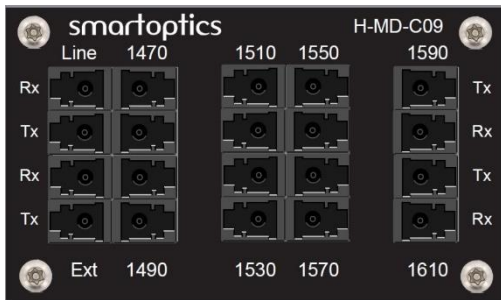


H-MD-C09

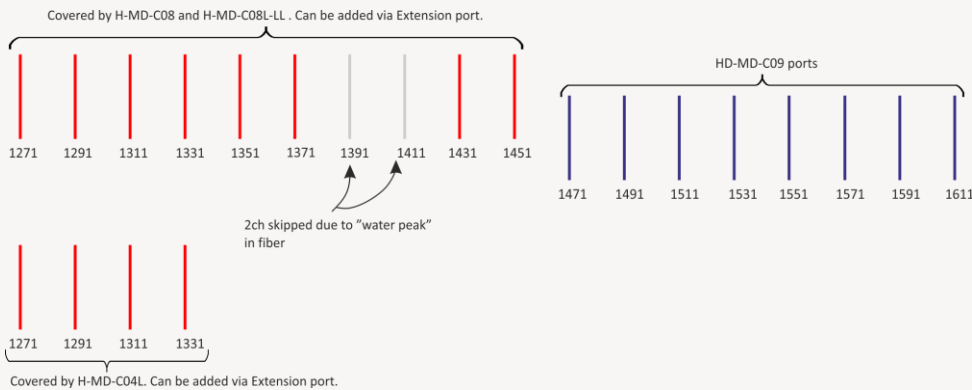
8-channel CWDM Mux/Demux with Extension port



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.

As shown in the figures below, the extension port can be used to add on the low CWDM channel band via the H-MD-C04L, H-MD-C08 or H-MD-C08L-LL Mux/DeMux'es.

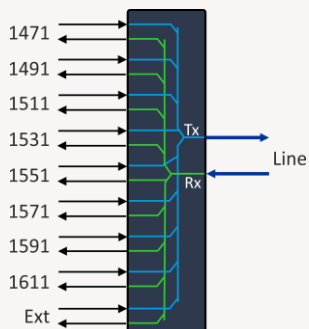


The table below lists what filters that can be connected to the Extension port.

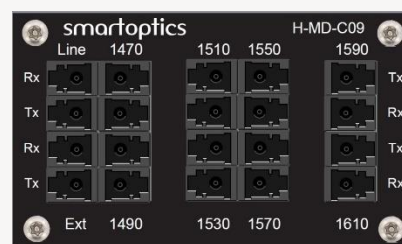
Parameter	
Extension port wavelength band H-MD-C09	1264 – 1458nm
Filters matching Ext port	H-MD-C04L (CWDM channels 1271 – 1331nm)
	H-MD-C08 (CWDM channels 1271 – 1451nm)
	H-MD-C08L-LL (CWDM channels 1271 – 1451nm)

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.

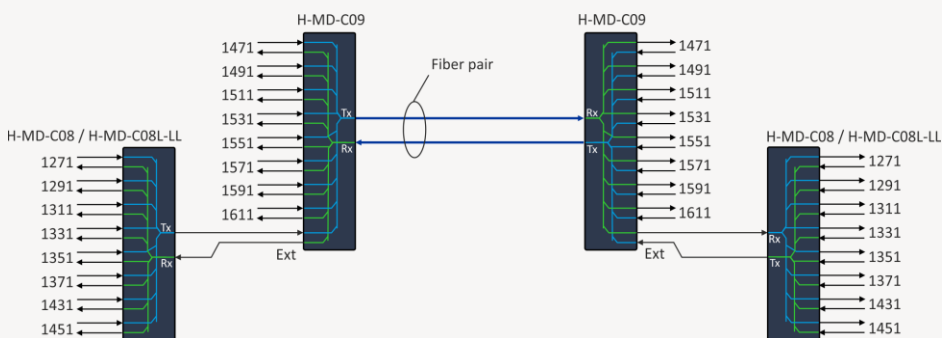
FILTER OVERVIEW AND PORT ALLOCATION



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 column dependent location of Tx and Rx ports.

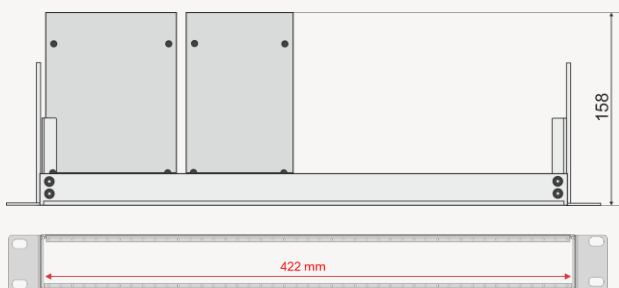


Example with H-MD-C09 combined with 8ch CWDM low band filters.

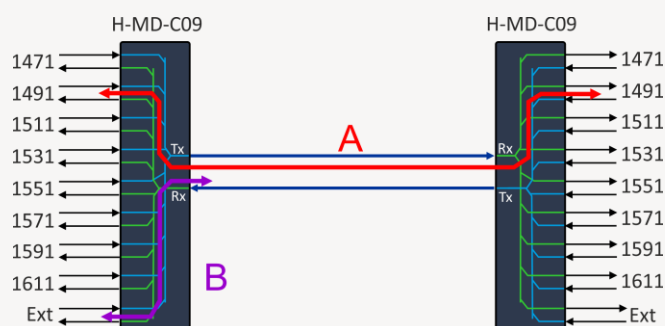
TECHNICAL SPECIFICATIONS

Parameter	C-temp conditions	I-temp Conditions
Channels	1471, 1491, 1511, 1531, 1551, 1571, 1591, 1611nm	⇐
Channel spacing	20nm	⇐
Channel passband	ITU±7nm	⇐
Extension port channels	1271-1451nm	⇐
Link loss, per channel (A)	Typical 3.8dB Max 4.3dB	Typical 4.0dB Max 4.5dB
Insertion loss, extension port (B)	Typical 3.0dB Max 3.3dB	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	0°C to +70°C	-40°C to +85°C
Storage 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

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

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