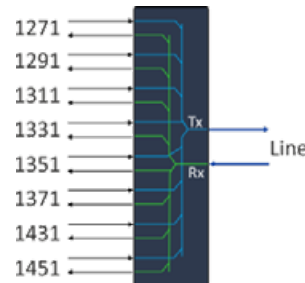
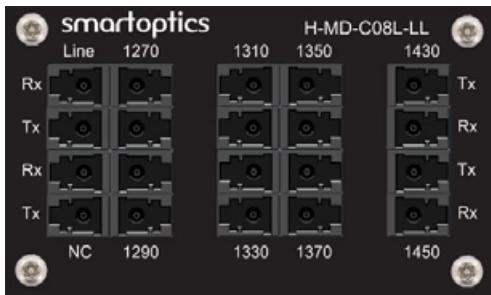


DATASHEET 5.0

# H-MD-C08L-LL

Low-loss 8-channel CWDM Low Band Mux/Demux



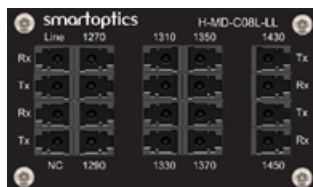
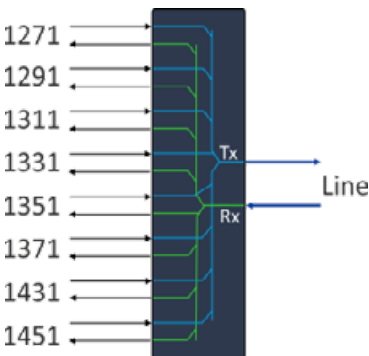
## OVERVIEW

The H-MD-C08-LL is a low-loss 8ch CWDM Mux/DeMux operating on the low CWDM channel, 1271 to 1451nm. The two channels 1391 and 1411nm are skipped since these are subject to the high water-peak attenuation that can be present in older fiber types. The H-MD-C08-LL can be used stand-alone or in combination with e.g. the H-MD-C09H-E-LL filters.

The H-MD-C08-LL filter supports the industrial temperature (I-temp) range of -40°C to +85°C (-40°F to +185°F) which gives an extended application range into sites without temperature control. If the operating temperature is kept within 0 to +70oC (+32 to +158°F) some of the worst-case loss values will be reduced. The listed loss values in the below table are for 0 to +70°C operation. Loss values increased at I-temp conditions are marked.

The H-Series filters are mounted in a 1 RU mounting bracket solution, and the filter module sizes vary depending on type of filter. The H-MD-C08-LL is compliant with ITU-T G.694.2

## FUNCTIONAL OVERVIEW AND PORT DESCRIPTION



Client and Line signals entering the filter is denoted "Rx". Client and Line signals exiting the filter is denoted "Tx".

Line Rx	1270 Tx	1310 Rx	1350 Tx	1430 Tx
Line Tx	1270 Rx	1310 Tx	1350 Rx	1430 Rx
NC	1290 Tx	1330 Rx	1370 Tx	1450 Tx
NC	1290 Rx	1330 Tx	1370 Rx	1450 Rx

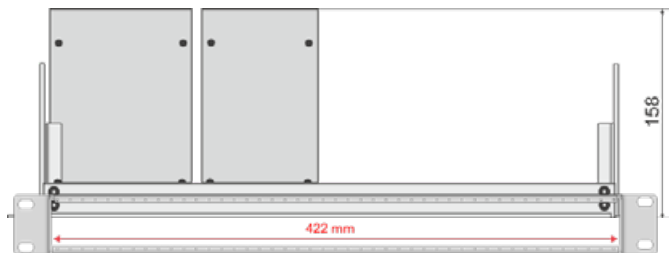
Note: The channel labels "1270", "1290" etc on the overlay are not representing the actual center wavelengths. The actual center wavelengths are at 1271nm, 1291nm etc. as listed in the table below. Note row dependent location of Tx and Rx ports.

## TECHNICAL SPECIFICATIONS

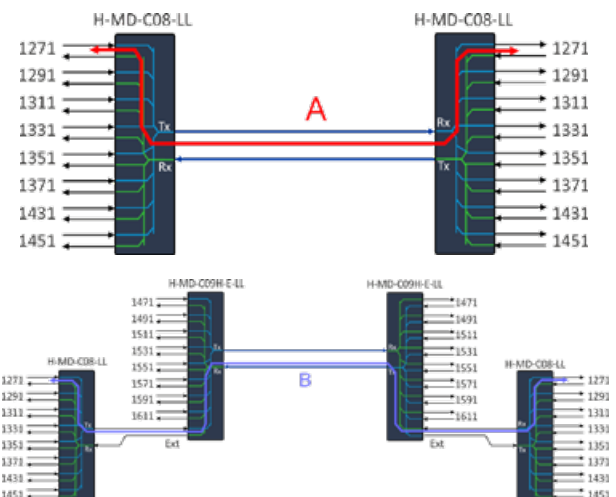
Parameter	Min	Max
Operating wavelength range	1260nm	1620nm
Channels	1271, 1291, 1311, 1331, 1351, 1371, 1431, 1451	
Channel spacing	20nm	
Channel passband	ITU±7nm	
Passband Extension port	1264nm	1458nm
Link loss, per channel (A)	2.6dB typical <sup>1)</sup>	3.0dB typical <sup>1)</sup>
Link loss, channels when combined with H-MD-C09H-E-LL (B)	4.2dB typical <sup>1)</sup>	4.6dB typical <sup>1)</sup>
Isolation, adjacent channel	30dB	
Isolation, non-adjacent channel	40dB	
Ripple, passband		0.5dB
Directivity	45dB	
Return loss	40dB	
Polarization dependent loss		0.2dB
Polarization mode dispersion		0.20ps
Max optical power		300mW
Normal operating temperature	0 °C	+70 °C
Operating temperature	-40 °C	+85 °C
Connector type	LC/UPC	
Module width	75mm	
Mounting bracket	H-Chassi-1RU (19"), 422 mm slot width	
Mounting depth (flush mount)	158mm	

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.

1) The given loss values are for "normal operating temperature" conditions. When used in "extended operating temperature" i.e. I-temp conditions, the values shall be increased by 0.2dB.



Mounting bracket dimensions with two example filters.



## ORDERING INFORMATION

The table below shows part number and a short description.

Part number	Description
H-MD-C08L-LL	8ch CWDM Mux/Demux Low band C27-C45 LL