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 high CWDM-band filters H-MD-C09H-E-LL, H-MD-C09 or H-MD-C05.

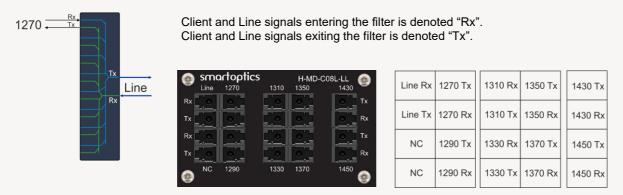
H-MD-C08L-LL has the exact same channel coverage as the H-MD-C08 but has a different filter design to provide lower losses. H-MD-C08L-LL can thus be a better/necessary choice in networks with higher losses, stretched distances or networks with cascaded filters. H-MD-C08 is a more cost-effective choice where its losses are within the requirements.

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



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 column dependent location of Tx and Rx ports.

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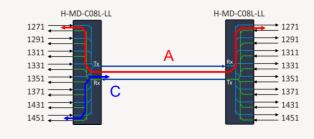
TECHNICAL SPECIFICATIONS

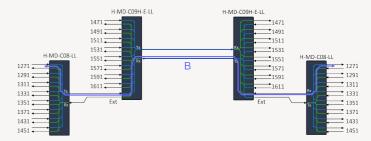
Parameter	C-temp conditions	I-temp Conditions
Operating wavelength range	1260nm to 1620nm	¢
Channels	1271, 1291, 1311, 1331, 1351, 1371, 1431, 1451nm	¢
Channel spacing	20nm	⇐
Channel passband	ITU±7nm	⇐
Insertion loss ch \Leftrightarrow Line (C)	Typical 2.0dB Max 2.2dB	Typical 2.2dB Max 2.4dB
$Link\;loss,\;\;ch\LeftrightarrowLine\Leftrightarrowch\;\;(A)$	Typical 2.6dB Max 3.0dB	Typical 2.8dB Max 3.2dB
Link loss, channels when combined with H-MD-C09H-E-LL (B)	Max 4.6dB	¢
Isolation, adjacent channel	Min 30dB	¢
Isolation, non-adjacent channel	Min 40dB	¢
Ripple, passband	Max 0.5dB	¢
Directivity	Min 45dB	¢
Return loss	Min 40dB	¢
Polarization dependent loss	Max 0.2dB	¢
Polarization mode dispersion	Max 0.20ps	¢
Max optical power	Max 300mW	¢
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-C08L-LL	H-Series: 8ch CWDM Low band Low Loss Mux/Demux, 1271, 1291, 1311, 1331, 1351, 1371, 1431, 1451nm, 75mm, LC/UPC

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