H-MD-3155-HI

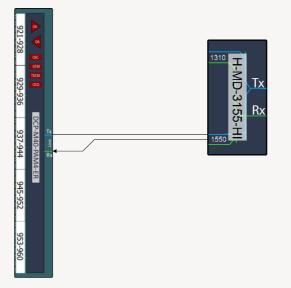
1310/1550nm band MuxDemux, high isolation



OVERVIEW

The H-MD-3155-HI is a 1310/1550nm band Mux/Demux unit with high isolation between the operating ports. The H-MD-3155-HI band splitter is intended for cases where a legacy 1310nm channel is to be combined with CWDM channels in the upper CWDM band (1460 nm - 1650 nm) or DWDM channels. The high isolation makes the filter applicable to amplified DWDM solutions using amplifiers.

The figure shows an example configuration with the H-MD-3155-HI filter.



The 1310nm port covers 1265.5-1350nm which also includes the low band CWDM channels 1271-1331nm. This port can thus be used for e.g. 100G CWDM4-MSA channels, enabling a 100G channel to be carried as an alternative via this port.

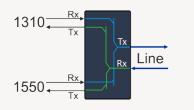
The H-MD-3155-HI filter supports the industrial temperature (I-temp) range of -40° C to $+85^{\circ}$ C (-40° F to $+185^{\circ}$ F) which gives an extended application range into sites without temperature control. If the operating temperature is kept within 0 to $+70^{\circ}$ C (+32 to $+158^{\circ}$ 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.

Subject to change without notice. For more information visit smartoptics.com.

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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".



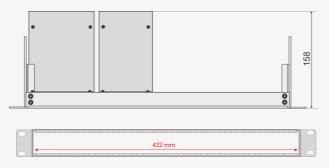
Line Rx	1310 Tx
Line Tx	1310 Rx
Not Connected	1550 Tx
Not Connected	1550 Rx

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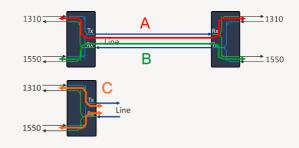
TECHNICAL SPECIFICATIONS

Parameter	C-temp conditions	I-temp Conditions
Operating wavelength range 1310 port	1264.5nm to 1350nm	⇐
Operating wavelength range 1550 port	1460nm to 1650nm	¢
Link loss 1310 ⇔ 1310 (A)	Max 2.4dB	Max 2.8dB
Link loss 1550 ⇔ 1550 (B)	Max 2.4dB	Max 2.8dB
Insertion loss 1310/1550 ⇔ Line (C)	Max 1.2dB	Max 1.4dB
Isolation, Line Tx \leftarrow 1310	Min 30dB	¢
Isolation, Line Tx \leftarrow 1550	Min 50dB	¢
Ripple, passband	Max 0.5dB	⇐
Directivity	Min 50dB	¢
Return loss	Min 40dB	¢
Polarization dependent loss	Max 0.2dB	⇐
Polarization mode dispersion	Max 0.20ps	⇐
Max optical power	Max 300mW	¢
Connector type	LC/UPC	¢
Module width	45 mm	⇐
Operating temperature (I-temp)	0°C to +70°C	-40°C to +85°C
Storage temperature	-40°C to +85°C	⇐

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 part number and a short description.

Part number	Description
H-MD-3155-HI	1310/1550nm band MuxDemux, High isolation

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