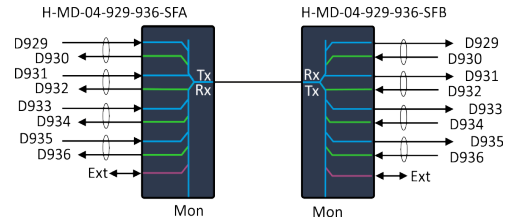
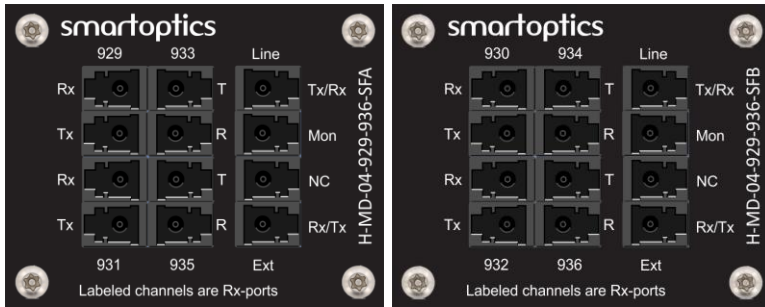


H-MD-04-929-936-SFx

4-channel DWDM Mux/Demux for single-fiber configurations



OVERVIEW

The H-MD-04-929-936-SFx filters are two DWDM-filters for single-fiber configurations. There are eight DWDM channels defined and the H-MD-04-929-936-SFx filters are using one channel in uplink and another in downlink, providing 4 bi-directional channels in total. Consequently, there are two different filters, denoted “A” and “B” where the difference lies in the transmitted and received channels.

The filters have an Extension port enabling an additional four channels to be added via the H-MD-04-921-928-SFx filters. The Extension port covers 1460 -1630nm which opens for OTDR solutions over the same infrastructure.

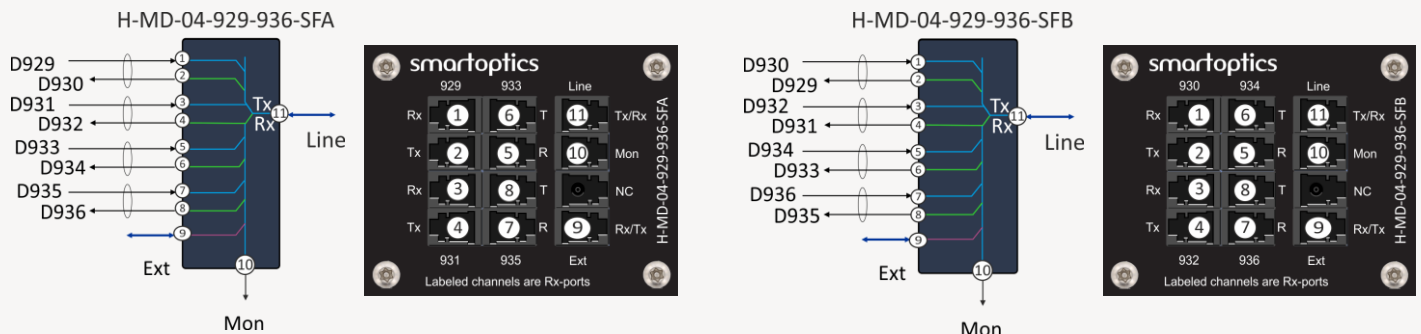
A Monitor port that taps off 1% of the transmitted and received line signal provides the ability to monitor the channel power levels via a connected Optical Channel Monitoring (OCM) device or an optical spectrum analyzer.

The H-MD-04-929-936-SFx filters support 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. The table with optical parameters below lists values at C-temp and I-temp conditions.

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 OVERVIEW AND PORT DESCRIPTION

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

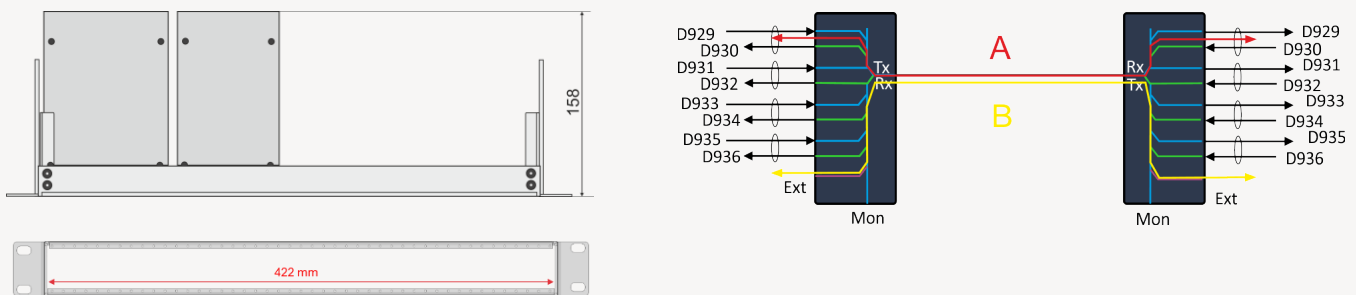


Note row dependent location of Tx and Rx ports. This is due to the usage of duplex LC connectors.

TECHNICAL SPECIFICATIONS

Parameter	C-temp Conditions	I-temp conditions
Channels	H-MD-04-929-936-SFA	
Bi-directional channel 1:	Tx: 192.9THz / Rx: 193.0THz	← (same as C-temp)
Bi-directional channel 2:	Tx: 193.1THz / Rx: 193.2THz	←
Bi-directional channel 3:	Tx: 193.3THz / Rx: 193.4THz	←
Bi-directional channel 4:	Tx: 193.5THz / Rx: 193.6THz	←
Channels	H-MD-04-929-936-SFB	
Bi-directional channel 1:	Tx: 193.0THz / Rx: 192.9THz	←
Bi-directional channel 2:	Tx: 193.2THz / Rx: 193.1THz	←
Bi-directional channel 3:	Tx: 193.4THz / Rx: 193.3THz	←
Bi-directional channel 4:	Tx: 193.6THz / Rx: 193.5THz	←
Channel spacing	100GHz ITU G.694.1	←
Channel passband	ITU±0.11nm	←
Passband Ext-port, Ext Tx/Rx↔Line Tx/Rx, excl add/drop ch	1460 - 1630nm / 183.92 to 205.34THz excl. ch passband	←
Link loss, per channel, Ch Rx↔Line Tx↔Line Rx↔Ch Tx (A)	≤ 4.6	≤ 5.0dB
Link loss, Extension, Ext Rx↔Line Tx↔Line Rx↔Ext Tx (B)	≤ 1.8	≤ 2.0dB
Insertion loss, monitor	18-22dB without including the mux, demux or passband loss	←
Isolation, adjacent channel	≥ 28dB	←
Isolation, non-adjacent channel	≥ 40dB	←
Ripple, passband	≤ 0.5dB	←
Directivity	≥ 45dB	←
Return loss	≥ 40dB	←
Max power handling	≤ 500mW	←
Operating temperature	0°C - +70 °C	-40°C - +85 °C
Connector type	LC/UPC	←
Mounting	H-Series	←

1) The I-temp column only shows values that differ from C-temp conditions.



ORDER INFORMATION

Part number	Description
H-MD-04-929-936-SFA	4ch DWDM SF Mux/Demux, Extension & Monitor ports 929-936 A
H-MD-04-929-936-SFB	4ch DWDM SF Mux/Demux, Extension & Monitor ports 929-936 B

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