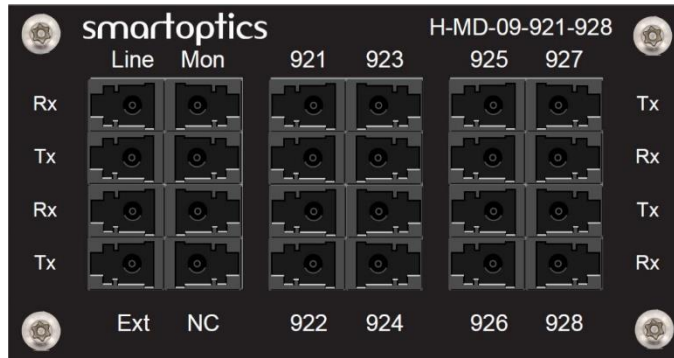


H-MD-09-xxx-yyy

8-channel DWDM Mux/Demux with Extension and Monitor ports



OVERVIEW

The H-MD-09-xxx-yyy filters are a range of passive 8-channel DWDM protocol transparent Mux/Demux units. They operate with 100GHz spacing and have an additional DWDM Extension port so that additional channels can be seamlessly added to increase capacity. The channels operate in the standard C-band in dual fiber working configuration. The H-MD-09-xxx-yyy has two Monitor ports that tap off 1% of the transmitted and received line signal. This provides the ability to monitor the channel power levels via a connected Optical Channel Monitoring (OCM) device or an optical spectrum analyzer.

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.

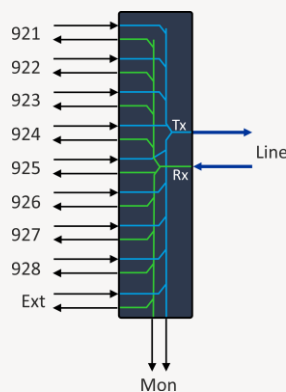
FUNCTIONAL DESCRIPTION

The extension port can be used for the following applications:

- Connect any of the other H-MD-09-xxx-yyy units to expand with 8 additional DWDM wavelengths.
- Connect any of the H-MD-16-xxx-yyy units to expand with 16 additional DWDM wavelengths.

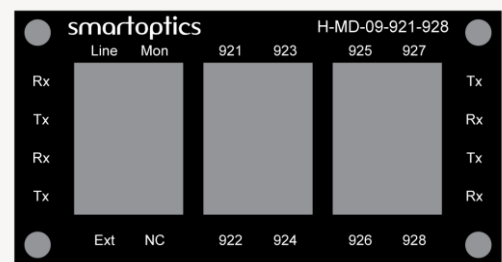
Monitor ports are used to analyze outgoing and incoming line signals. Compliant with ITU-T G.694.1

FUNCTIONAL OVERVIEW AND PORT DESCRIPTION



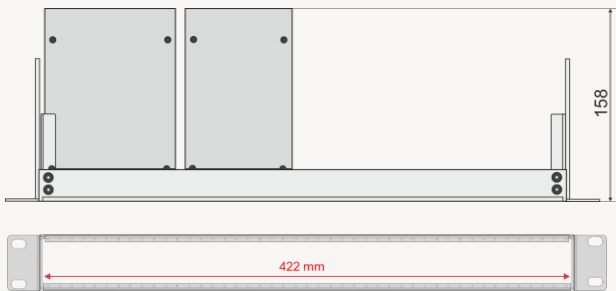
Line Rx	Mon Tx	921 Rx	923 Tx	925 Rx	927 Tx
Line Tx	Mon Rx	921 Tx	923 Rx	925 Tx	927 Rx
Ext Rx	NC	922 Rx	924 Tx	926 Rx	928 Tx
Ext Tx	NC	922 Tx	924 Rx	926 Tx	928 Rx

The examples show H-MD-09-921-922

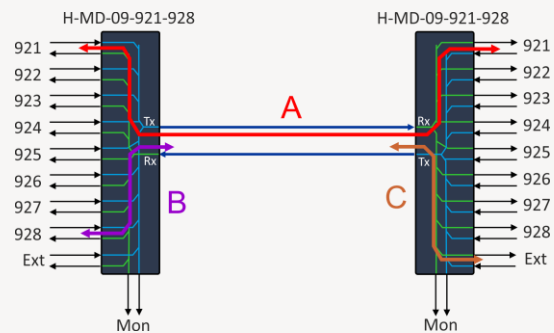


TECHNICAL SPECIFICATIONS

Parameter	Min	Max
Operating wavelength range	1500nm	1600nm
Channels H-MD-09-921-928		192.1 to 192.8 THz
H-MD-09-929-936		192.9 to 193.6 THz
H-MD-09-937-944		193.7 to 194.4 THz
H-MD-09-945-952		194.5 to 195.2 THz
H-MD-09-953-960		195.3 to 196.0 THz
Channel spacing		100GHz
Channel passband		ITU±0.11nm
Link loss, per channel (A)		4.5 dB
Insertion loss, per channel (B)		3.1 dB
Insertion loss, extension port (C)		3.5 dB
Insertion loss, monitor	18dB	22dB
Isolation, adjacent channel	28dB	
Isolation, non-adjacent channel	40dB	
Ripple, passband		0.5dB
Directivity	45dB	
Return loss	40dB	
Polarization dependent loss		0.2dB
Polarization mode dispersion		0.20ps
Connector type		LC/UPC
Module width		84mm
Mounting bracket		H-Chassi-1RU (19"), 422mm slot width



Mounting bracket dimensions with two example filters.



ORDER INFORMATION

The H-MD-09-xxx-yyy is available in 5 different versions depending on desired channel plan. The table below shows the part numbers and a short description.

Part number	Description
H-MD-09-921-928	H-Series: 8ch DWDM Mux/Demux + Ext- & Mon-port, 192.1 to 192.8THz, 84mm, LC/UPC
H-MD-09-929-936	H-Series: 8ch DWDM Mux/Demux + Ext- & Mon-port, 192.9 to 193.6THz, 84mm, LC/UPC
H-MD-09-937-944	H-Series: 8ch DWDM Mux/Demux + Ext- & Mon-port, 193.7 to 194.4THz, 84mm, LC/UPC
H-MD-09-945-952	H-Series: 8ch DWDM Mux/Demux + Ext- & Mon-port, 194.5 to 195.2THz, 84mm, LC/UPC
H-MD-09-953-960	H-Series: 8ch DWDM Mux/Demux + Ext- & Mon-port, 195.3 to 195.6THz, 84mm, LC/UPC

Subject to change without notice.

For more information visit smaroptics.com.