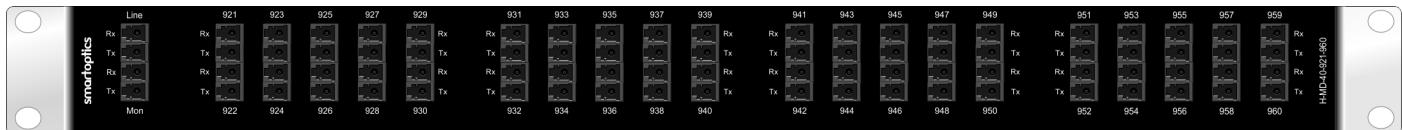


# H-MD-40-921-960

40-channel DWDM Mux/Demux with Monitor ports

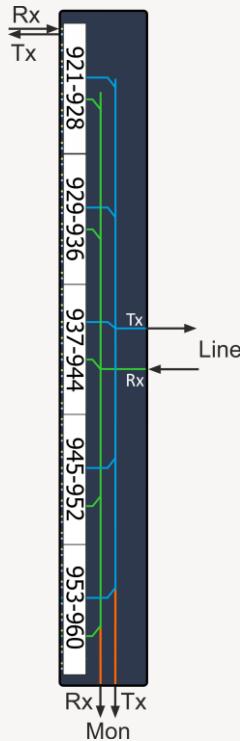


## OVERVIEW

The H-MD-40-921-960 filter is a 40-channel DWDM protocol transparent Mux/Demux unit in accordance with the ITU-T G.694.1 100GHz grid. The channels operate in the standard C-band in dual fiber working configuration. The H-MD-40-921-960 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.

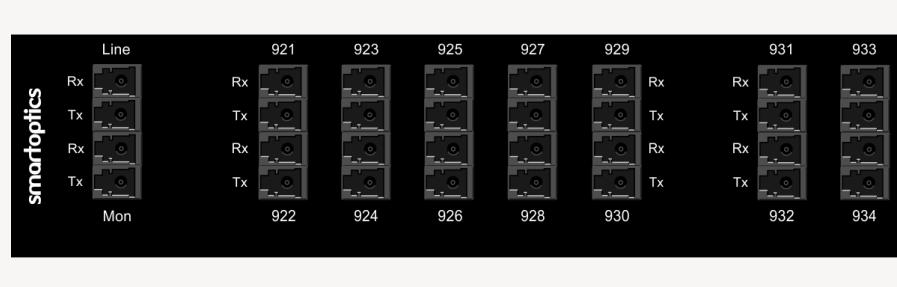
The H-MD-40-921-960 is based on athermal AWG technology and is totally passive. This technology is restricted to -5 to +65°C operating temperature.

## FUNCTIONAL OVERVIEW AND PORT DESCRIPTION



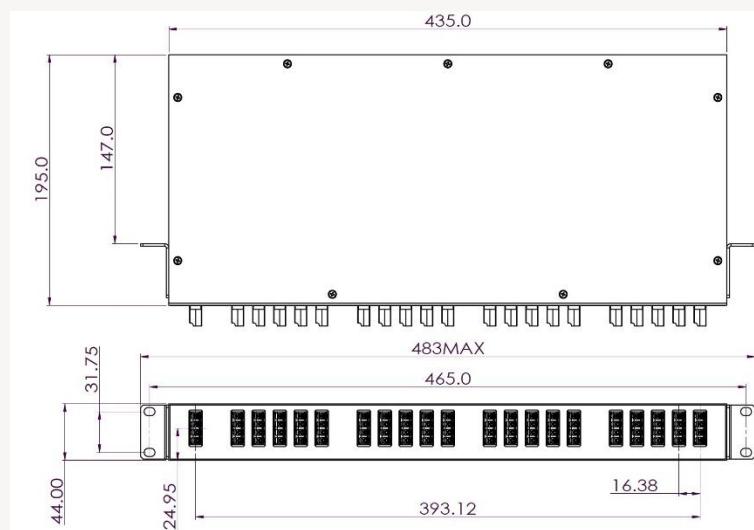
Client and Line signals entering the filter is denoted "Rx".  
Client and Line signals exiting the filter is denoted "Tx".

The monitor ports tap off 1% (18 - 22dB) of the line signal.  
The monitor port from transmitted line signal is denoted "Tx".  
The monitor port from received line signal is denoted "Rx".



## TECHNICAL SPECIFICATIONS

Parameter	
Channels	192.1 to 196.0 THz
Channel spacing	100GHz ± 33GHz (ITU)
Channel passband 1.5dB	60GHz
Channel passband 3.0dB	80GHz
Insertion loss, per channel (ch Rx ⇒ Line Tx)	Typical 5.4dB Max 5.9 dB
Insertion loss, monitor	18dB to 22dB
Isolation, adjacent channel <sup>1)</sup>	Min 8dB
Isolation, adjacent channel, typical <sup>2)</sup>	Min 20dB
Isolation, non-adjacent channel, typical <sup>2)</sup>	Min 35dB
Total crosstalk <sup>1)</sup>	Min 5dB
Ripple, passband	Max 1.0dB
Return loss	Min 40dB
Chromatic dispersion	Min -20ps/nm Max 20ps/nm
Polarization mode dispersion	Max 0.70ps
Connector type	LC/UPC
Dimensions	1RU height, 19" rack mount
Operating temperature	-5 to + 65 °C
Storage temperature	-40 to + 85 °C
Max optical power	Max 24dBm (251mW)



1) Difference between the insertion loss in channel and the minimum loss over all other channels, for all polarization states, under the worst case in the guard band.

2) The typical value reflects a 10G NRZ modulated signal located in the middle of the ITU-channel.

## ORDER INFORMATION

Part number	Description
H-MD-40-921-960	H-Series: 1RU 19", 40ch DWDM Mux/Demux + Mon-port, 192.1 to 196.0THz, Link-loss channel=11.8dB, Insertion-loss channel=5.9dB, LC/UPC

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