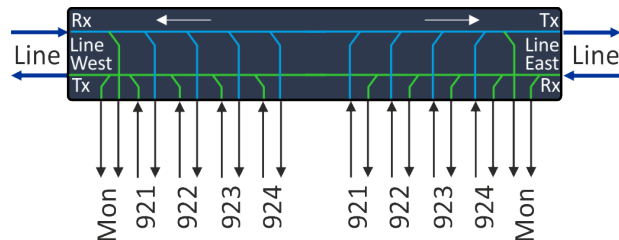
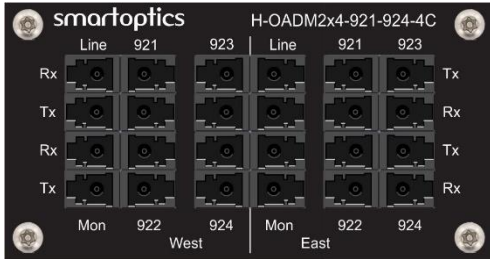


# H-OADM2X4-xxx-yyy-4C

4-channel 400G 16QAM DWDM 2-way OADM with Monitor ports



## OVERVIEW

The H-OADM2x4-xxx-yyy-4C is a two-way 4ch DWDM add/drop filter where the channel bandwidth is wide enough to support 400G 16QAM signals. The H-OADM2x4-xxx-yyy-4C filters are part of the 400G supporting filter family which is shown via the suffix “-4C” in the part number. There are ten different filter products that together will cover the 40ch DWDM band 921 to 960.

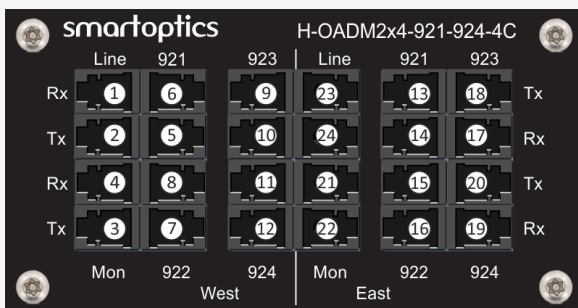
The filter has four add/drop ports and one Line in “West” direction and a same setup in “East” direction. Channels outside the add/drop channel bands are glassed through the filter. The Extension port is extremely wide, covering 1264 -1630nm which opens for a wide variety of combinations of LANWDM, CWDM, DWDM and OTDR solutions over the same infrastructure. The bandwidth even extends up to 1670, but with a slightly higher loss.

The monitor ports (Mon) 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 DWDM channels are compliant with ITU-T G.694.1.

The H-OADM2x4-xxx-yyy-4C 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

Signals entering the filter are denoted “Rx”. Signals exiting the filter are denoted “Tx”. The Monitor ports are both Tx-ports, but “Mon Tx” refers to the Line Tx port while “Mon Rx” refers to Line Rx port.



Line West Rx	921 West Tx	923 West Rx	Line East Tx	921 East Rx	923 East Tx
Line West Tx	921 West Rx	923 West Tx	Line East Rx	921 East Tx	923 East Rx
Mon West Rx	922 West Tx	924 West Rx	Mon East Tx	922 East Rx	924 East Tx
Mon West Tx	922 West Rx	924 West Tx	Mon East Rx	922 East Tx	924 East Rx

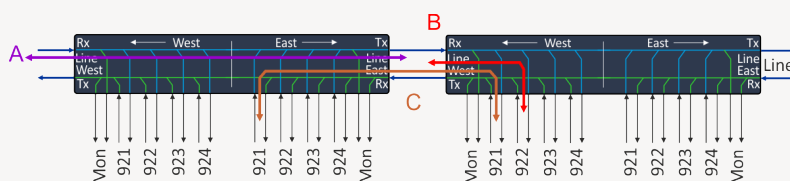
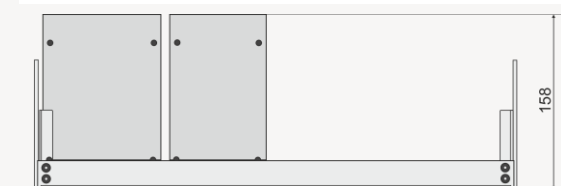


The port allocation and overlay example is for H-OADM2X4-921-924-4C. Note row dependent location of Tx and Rx ports. This is to match duplex connectors.

## TECHNICAL SPECIFICATIONS

Parameter	C-temp Conditions	I-temp conditions
Channels H-OADM2x4-921-924-4C	192.1 to 192.4 THz	← (same as C-temp)
H-OADM2x4-925-928-4C	192.5 to 192.8 THz	←
H-OADM2x4-929-932-4C	192.9 to 193.2 THz	←
H-OADM2x4-933-936-4C	193.3 to 193.6 THz	←
H-OADM2x4-937-940-4C	193.7 to 194.0 THz	←
H-OADM2x4-941-944-4C	194.1 to 194.4 THz	←
H-OADM2x4-945-948-4C	194.5 to 194.8 THz	←
H-OADM2x4-949-952-4C	194.9 to 195.2 THz	←
H-OADM2x4-953-956-4C	195.3 to 195.6 THz	←
H-OADM2x4-957-960-4C	195.7 to 196.0 THz	←
Channel spacing	100GHz ITU G.694.1	←
Channel passband -3dB	Min 72.5GHz	←
Passband Line Rx ↔ Line Tx, excl add/drop ch	1264 -1630nm / 183.9 to 237.2THz excl. ch passband	←
Insertion loss Line Rx ↔ Line Tx (A)	≤ 1.8dB ≤ 2.4dB between 1375-1405nm <sup>1)</sup>	≤ 2.0dB ≤ 2.6dB between 1375-1405nm <sup>1)</sup>
Channel insertion loss: Line Rx ↔ Ch Tx (B)	≤ 2.2dB	≤ 2.8dB
Channel link loss, Ch Rx ↔ Line Tx ↔ Line Rx ↔ Ch Tx (C)	≤ 3.6dB	≤ 4.5dB
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	Up to 500mW	←
Operating temperature	0°C - +70 °C	-40°C - +85 °C
Connector type	LC/U/PC	←
Mounting	H-Series, 84mm wide	←

<sup>1)</sup> The higher insertion loss affects CWDM channels 1371, 1391, 1410nm



## ORDER INFORMATION

Part number	Part number
H-OADM2x4-921-924-4C	H-OADM2x4-941-944-4C
H-OADM2x4-925-928-4C	H-OADM2x4-945-948-4C
H-OADM2x4-929-932-4C	H-OADM2x4-949-952-4C
H-OADM2x4-933-936-4C	H-OADM2x4-953-956-4C
H-OADM2x4-937-940-4C	H-OADM2x4-957-960-4C

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