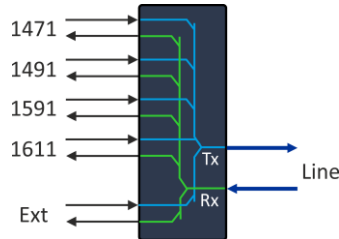
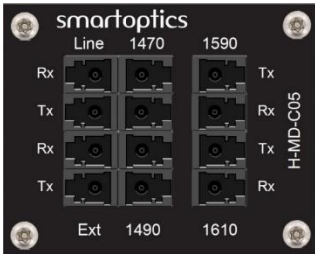


# H-MD-C05

## 4-channel CWDM Mux/Demux with Extension port



### OVERVIEW

The H-MD-C05 is a 4ch CWDM Mux/Demux unit with an Extension port. The four wavelength ports of the H-MD-C05 operates on the high CWDM band channels; 1471/1491nm & 1591/1611nm. The wavelength band between these can be utilized for DWDM channels via the Extension port. Alternatively, the Extension port can be used to add 8 channels in the low CWDM band or for legacy 1310nm services.

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. The H-Series filters are mounted in a 1 RU mounting bracket solution, and the filter module sizes vary depending on type of filter.

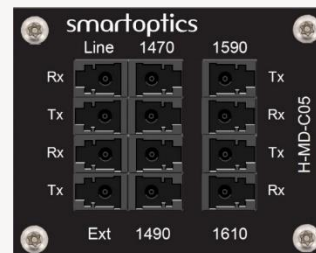
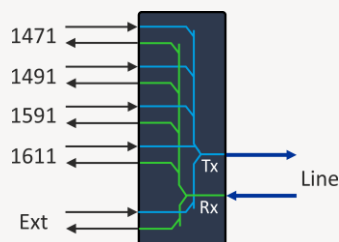
### FUNCTIONAL DESCRIPTION

The Extension port can be used for the following applications:

- Connect legacy 1310nm wavelengths
- Connect the H-MD-C08 unit to expand with 8 additional wavelengths in the CWDM low-band
- Connect any of the H-MD-09-xxx-yyy units to expand with 8 DWDM wavelengths.
- Connect any of the H-MD-16-xxx-yyy units to expand with 16 DWDM wavelengths.

The H-MD-C05 filter is compliant with ITU-T G.694.2.

### FUNCTIONAL OVERVIEW AND PORT DESCRIPTION



Line Rx	1470 Tx	1590 Rx
Line Tx	1470 Rx	1590 Tx
Ext Rx	1490 Tx	1610 Rx
Ext Tx	1490 Rx	1610 Tx

Note: The channel labels “1470”, “1490” etc on the overlay are not representing the actual center wavelengths. The actual center wavelengths are at 1471nm, 1491nm etc. as listed in the table below.

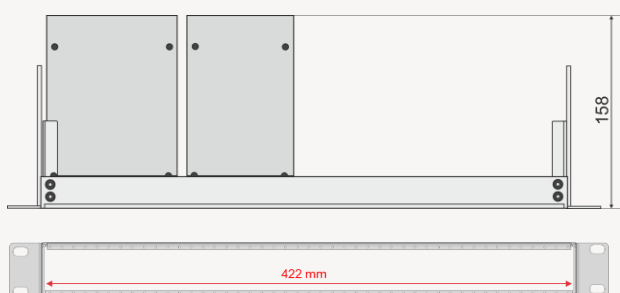
Subject to change without notice.

For more information visit [smartoptics.com](http://smartoptics.com).

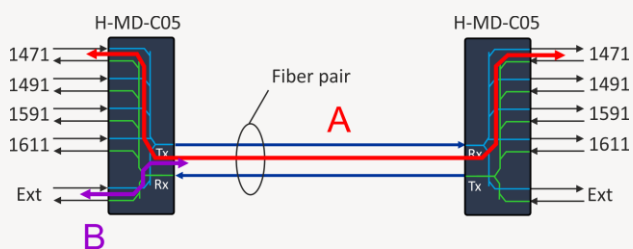
## TECHNICAL SPECIFICATIONS

Parameter	Min	Max
Channels		1471, 1491, 1591, 1611
Channel spacing		20nm
Channel passband		ITU±7nm
Extension port channels		1271-1451, 1511-1571nm
Link loss, per channel (A)	2.7 dB typical	3.0 dB max
Insertion loss, extension port (B)	1.6dB typical	1.8 dB max
Isolation, adjacent channel	28 dB	
Isolation, non-adjacent channel	40 dB	
Ripple, passband		0.5 dB
Directivity	45 dB	
Return loss	40 dB	
Polarization dependent loss		0.2 dB
Polarization mode dispersion		0.20 ps
Operating temperature	-40°C	+85°C
Connector type		LC/UPC
Module width		55 mm
Mounting bracket		H-Chassi-1RU (19"), 422 mm slot width
Mounting depth (flush mount)		158 mm

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-C05	H-Series: 4ch CWDM Mux/Demux + Ext-port, 1471, 1491, 1591, 1611nm, 55mm, LC/UPC