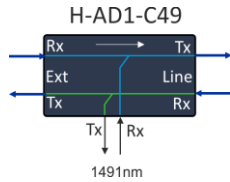
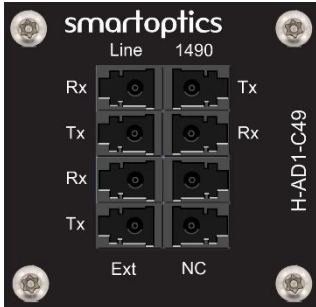


# H-AD1-CXX

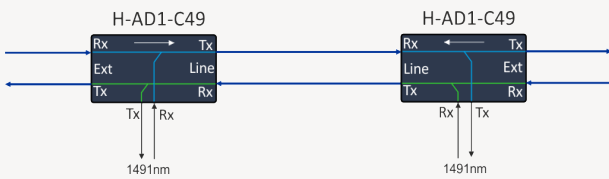
1-channel CWDM Add-drop filter, 1471nm, 1491nm, 1511nm, 1531nm, 1551nm, 1571nm, 1591nm & 1611nm



## OVERVIEW

The H-AD1-xx filters are CWDM Add-drop filter modules for the CWDM channels 1471nm to 1610nm. The typical application is for OSC and/or OTDR configurations in DWDM line systems.

The Line-ports shall always face inwards a connection as shown in the figure below.

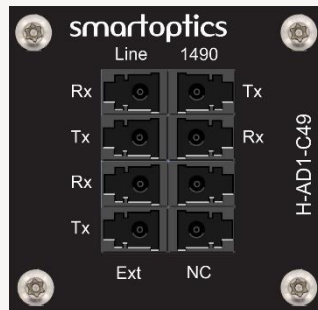


The filters are in the compact H-Series form-factor and are only 45mm wide. The filters can be combined with other filter modules within the same mounting brackets. The filters support the industrial temperature (I-temp) range of -40°C to +85°C (-40°F to +185°F) which gives an extended application range into sites without temperature control. If the operating temperature is kept within 0 to +70°C (+32 to +158°F) some of the worst-case loss values will be reduced. The listed loss values in the below table are for 0 to +70°C operation. Loss values increased at I-temp conditions are marked.

The H-AD1-Cxx filters are compliant with ITU-T G.694.2.

## FUNCTIONAL OVERVIEW AND PORT DESCRIPTION

Line Rx	1491 Tx
Line Tx	1491 Rx
Ext Rx	NC
Ext TX	NC

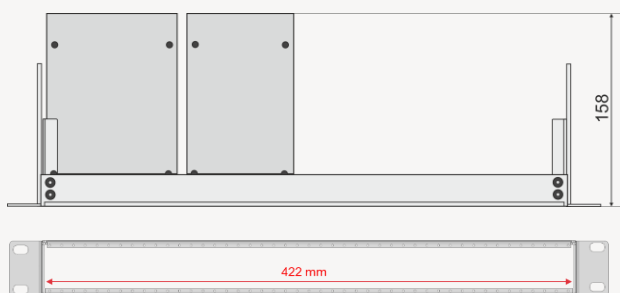


Signals entering the filter is denoted “Rx”.  
Signals exiting the filter is denoted “Tx”.

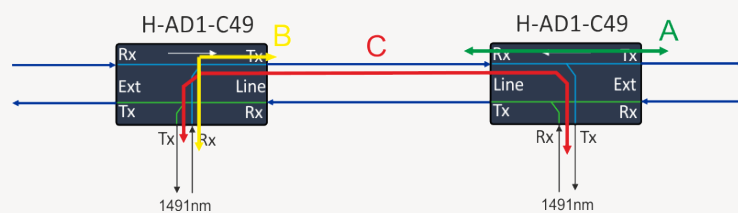
## TECHNICAL SPECIFICATIONS

Parameter	C-TEMP CONDITIONS	I-TEMP CONDITIONS
Channels H-AD1-C47	1471nm (ITU-T G.694.2)	←
H-AD1-C49	1491nm (ITU-T G.694.2)	←
H-AD1-C51	1511nm (ITU-T G.694.2)	←
H-AD1-C53	1531nm (ITU-T G.694.2)	←
H-AD1-C55	1551nm (ITU-T G.694.2)	←
H-AD1-C57	1571nm (ITU-T G.694.2)	←
H-AD1-C59	1591nm (ITU-T G.694.2)	←
H-AD1-C61	1611nm (ITU-T G.694.2)	←
CWDM channel passband	ITU±7nm	←
Pass-through channel band (excluding add/drop channel)	1260 – 1620nm	←
Insertion loss, per channel Ch Rx ⇒ Line Tx / Line Rx ⇒ Ch Tx	Typical 0.9dB Max 1.1dB	Typical 1.0dB Max 1.2dB
Pass-through loss Line Rx ⇒ Ext Tx / Ext Rx ⇒ Line Tx	Typical 0.7dB Max 0.8dB	←
Link loss, per channel Ch Rx ⇒ Ch Tx (C)	Typical 1.5dB Max 1.7dB	←
Isolation, adjacent channel Line Tx/Rx ⇒ Ch Rx/Tx	Min 30dB	←
Isolation, non-adjacent channel Line Tx/Rx ⇒ Ch Rx/Tx	Min 40dB	←
Ripple, passband	Max 0.5dB	←
Directivity	Min 45dB	←
Return loss	Min 40dB	←
Polarization dependent loss	Max 0.2dB	←
Polarization mode dispersion	Max 0.20ps	←
Power handling	Max 300mW / +24.8dBm	←
Connector type	LC/UPC	←
Module width	45mm	←
Operating temperature	0°C to +70°C	-40°C to +85°C
Storage temperature	-40°C to +85°C	←

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-AD1-C47	H-Series: 1ch CWDM AD-filter 1471nm, 45mm, Pass-through E-W= 0.8dB, AD-loss=1.1dB, LC/UPC
H-AD1-C49	H-Series: 1ch CWDM AD-filter 1491nm, 45mm, Pass-through E-W= 0.8dB, AD-loss=1.1dB, LC/UPC
H-AD1-C51	H-Series: 1ch CWDM AD-filter 1511nm, 45mm, Pass-through E-W= 0.8dB, AD-loss=1.1dB, LC/UPC
H-AD1-C53	H-Series: 1ch CWDM AD-filter 1531nm, 45mm, Pass-through E-W= 0.8dB, AD-loss=1.1dB, LC/UPC
H-AD1-C55	H-Series: 1ch CWDM AD-filter 1551nm, 45mm, Pass-through E-W= 0.8dB, AD-loss=1.1dB, LC/UPC
H-AD1-C57	H-Series: 1ch CWDM AD-filter 1571nm, 45mm, Pass-through E-W= 0.8dB, AD-loss=1.1dB, LC/UPC
H-AD1-C59	H-Series: 1ch CWDM AD-filter 1591nm, 45mm, Pass-through E-W= 0.8dB, AD-loss=1.1dB, LC/UPC
H-AD1-C61	H-Series: 1ch CWDM AD-filter 1611nm, 45mm, Pass-through E-W= 0.8dB, AD-loss=1.1dB, LC/UPC