



# DWDM OADM Passive Filter

## ISP (Indoor Use)



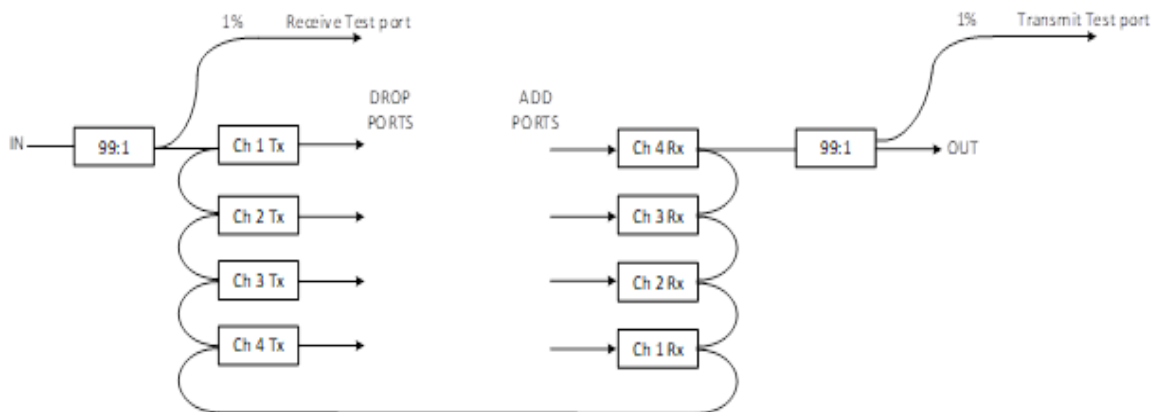
### Part Number / Description Examples

Part Number	Description
OD12-2F-F-XSLU-TRI-21_22	OADM DWDM, 100GHz, 2-Channel, Dual Add/Drop, Full Spectrum (includes C-Band), Single LGX, LC-UPC, with Transmit Test, Receive Test, I-Temp, Add and Drop Channels 21 & 22
OD11-AD-F-XSLA-TR-23	OADM DWDM, 100GHz, 1-Channel, Add & Drop, Full Spectrum (includes C-Band), Single LGX, LC-APC, with Transmit Test, Receive Test, Add and Drop Channel 23
OD18-2F-F-XDLU-TRI-28_35	OADM DWDM, 100GHz, 8-Channel, Dual Add/Drop, Full Spectrum (includes C-Band), Double-width LGX, LC-UPC, with Transmit Test, Receive Test, I-Temp, Add and Drop Channels 28 thru 35

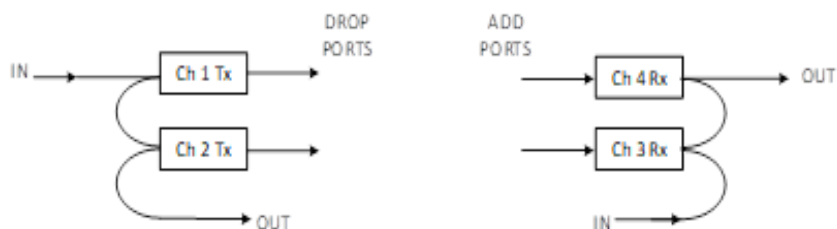
### Optical Characteristics

Parameter	Value				Unit
DWDM Passband @ -0.5dB	$\lambda_c \pm 0.125$				nm
	1-CH	2-CH	4-CH	8-CH	
DWDM Passband Insertion Loss @ -0.5dB (IN→ DROP, ADD→ OUT)	< 1.5	< 2.0	< 2.5	< 3.0	dB
Upper Spectrum Pass Through Insertion Loss @ -0.5dB (IN→ DROP, ADD→ OUT)	< 2.0	< 2.5	< 3.0	< 4.0	dB
Full Spectrum Pass Through Insertion Loss @ -0.5dB (IN→OUT @ Ch14-Ch62 excluding channels used)	< 2.5	< 3.0	< 3.5	< 4.5	dB
(IN→OUT @ 1260-1520nm & 1570-1635nm)	< 1.2	< 1.2	< 1.2	< 1.2	dB
DWDM Uniformity	---	< 1.0	< 1.2	< 1.5	dB
DWDM Passband Ripple @ -0.5dB	< 0.5				dB
Adjacent Isolation	> 30				nm
Non-Adjacent Isolation	> 40				dB
DWDM Directivity	> 50				dB
Return Loss	> 45				dB
Polarization Dependent Loss	< 0.2				dB
Polarization Mode Dispersion	< 0.2				dB
IL Thermal Stability	< 0.005				dB/°C
Wavelength Thermal Stability	< 0.001				nm/°C
Maximum Input Power	300 / 24.8				mW/dBm
Operating Temperature (Indoor)	0 to 70				°C
Operating Humidity	5 to 95				%RH
Tensile Strength/Pull Strength (up to 10 seconds max)	> 20 <sup>3</sup>				N
Fiber Type (all ports)	SMF -28e (G.657 .A1)				

## Filter Optical Design

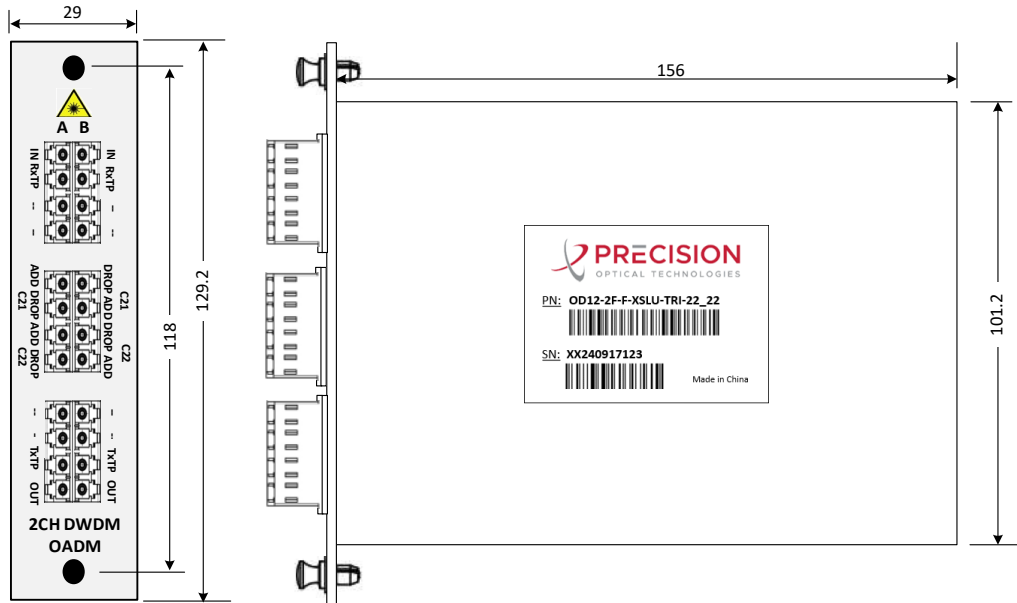


**4 Channel DWDM Add/Drop Design Example**

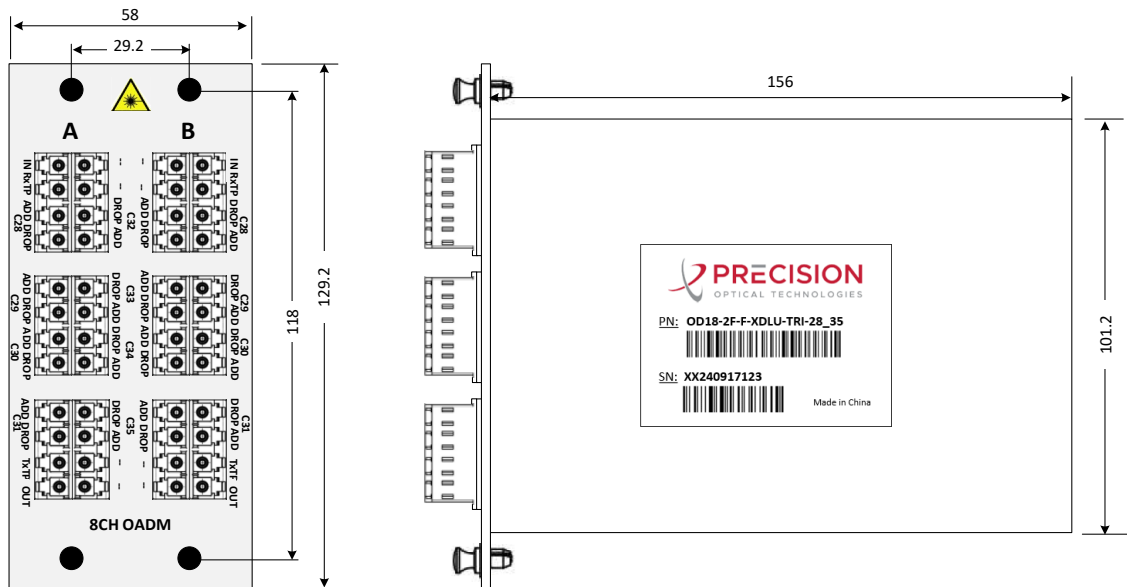


**2-Channel Drop & 2-Channel Add Design**

## Filter Physical Design



**2-Channel OADM External Design (mm)**  
(P/N OD12-2F-F-XSLU-TRI-21\_22 shown)



**8-Channel OADM External Design (mm)**  
(P/N OD18-2F-F-XDLU-TRI-28\_35 shown)