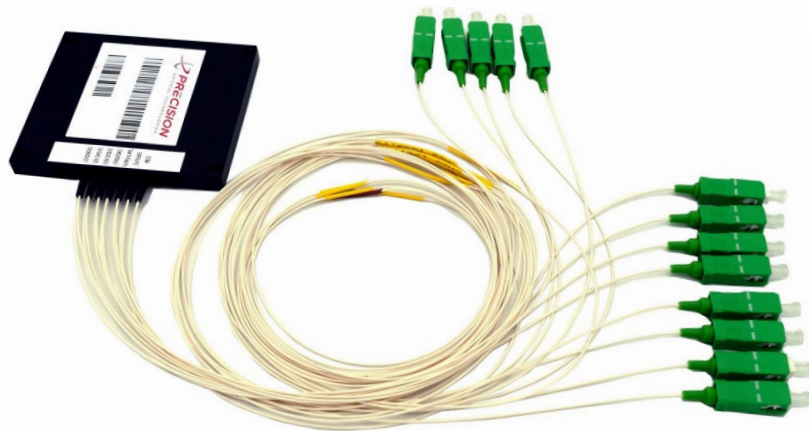


5 or 8-Channel CWDM Passive Filter OSP (Outdoor Use)

Product Description:

5 or 8-Channel CWDM Filter with the following options:

- Express/Test Ports
- 1310 Wideband Ports
- Multiple Cassette Sizes/Pigtail Lengths
- UPC/APC Connectors



Product Ordering Information

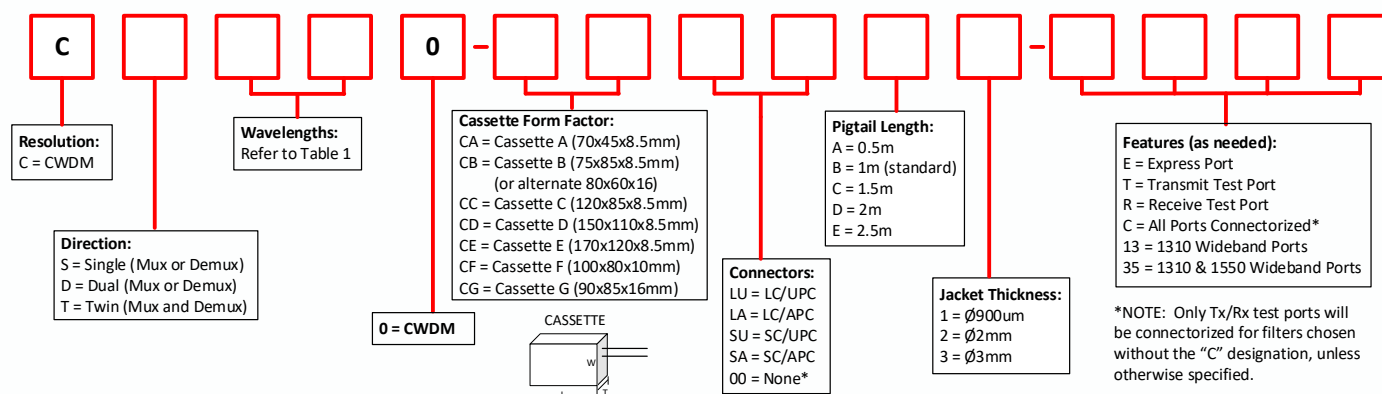


Table 1

CHANNEL DESIGNATION
8A = ITU 1431 - 1611 (skipping 1551 & 1571)
8B = ITU 1471 - 1611
8C = ITU 1431 - 1611 (skipping 1531 & 1551)
5B = ITU 1471 - 1511, 1591 - 1611

Part Number / Description Examples

Part Number	Description
CD8A0-CBSAB1-ETR	CWDM Dual, 8 Channels Filter, 1431-1611nm, without 1551 & 1571nm, Outdoor Cassette Type B (75x85x8.5mm), Ø900um 1 meter pigtail with label, with SC-APC on Transmit/Receive Test ports, Unterminated CWDM + Express ports, Thin Film Filter
CD8B0-CBSAB1-ETR	CWDM Dual, 8 Channels Filter, 1471-1611nm, Outdoor Cassette Type B (75x85x8.5mm), Ø900um 1 meter pigtail with label, with SC-APC on Transmit/Receive Test ports, Unterminated CWDM + Express ports, Thin Film Filter
CT5B0-CBSUA1-EC35	CWDM, Twin (Mux + Demux), 1471, 1491, 1511, 1591, 1611nm, Outdoor Cassette Type B (Alternate Size: 80x60x16mm), Ø900um x 0.5m pigtails with label, SC-UPC on all ports including Express + 1310nm + 1550nm wideband ports, Thin Film Filter

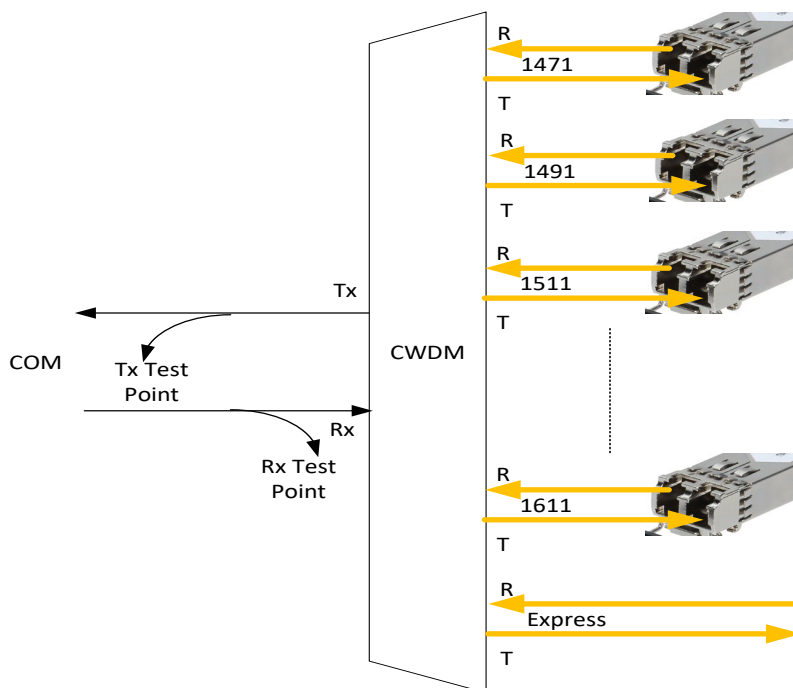
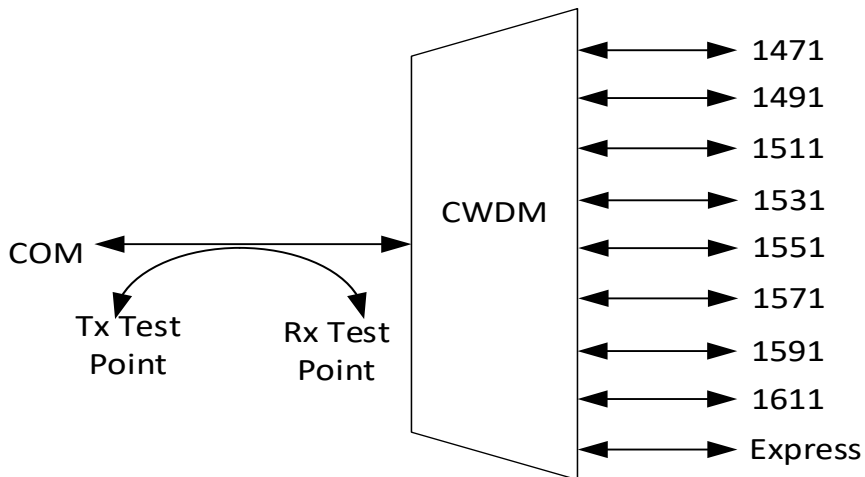
Optical Characteristics (8-channel)

Parameter	Value	Unit
CWDM Channels	1471, 1491, 1511, 1531, 1551, 1571, 1591, 1611	nm
CWDM Passband @ -0.5dB	$\lambda_c \pm 6.5$	nm
CWDM Passband insertion loss @ -0.5dB	< 3.0	dB
CWDM Passband ripple @ -0.5dB	≤ 0.5	dB
Test port insertion loss	20 ± 2	dB
Express insertion loss	< 3.0	dB
Express passband ripple	≤ 0.5	dB
Express passband – Type B	1260-1460 (1420-1460 w/ 1310 Port) 1620-1635	nm
Express passband – Type A	1260-1420 (negligible w/ 1310 Port) 1540-1580, 1620-1635	nm
1310 port insertion loss	< 2.8	dB
1310 port passband ripple	< 0.5	dB
1310 port passband	$\sim 1260-1360$	dB
CWDM uniformity	≤ 2.0	dB
Isolation Adj (COM-CWDM)	> 35	dB
Isolation Non-Adj (COM-CWDM)	> 45	dB
Isolation (COM-EXP)	> 15	dB
CWDM directivity	≥ 50	dB
EXPRESS directivity	≥ 65	dB
Return loss	> 45	dB
Polarization dependent loss	< 0.2	dB
Polarization mode dispersion	≤ 0.1	ps
IL thermal stability	≤ 0.006	dB/°C
Wavelength thermal stability	≤ 0.002	nm/°C
Maximum input power	300 / 24.8	mW/dBm
Operating temperature	-40 to +85	°C
Operating humidity	5 to 95	%RH
Tensile strength pull strength (up to 10 seconds max)	> 20 ³	N
Fiber type (all ports)	SMF-28e (G.657.A1)	

Optical Characteristics (5-channel)

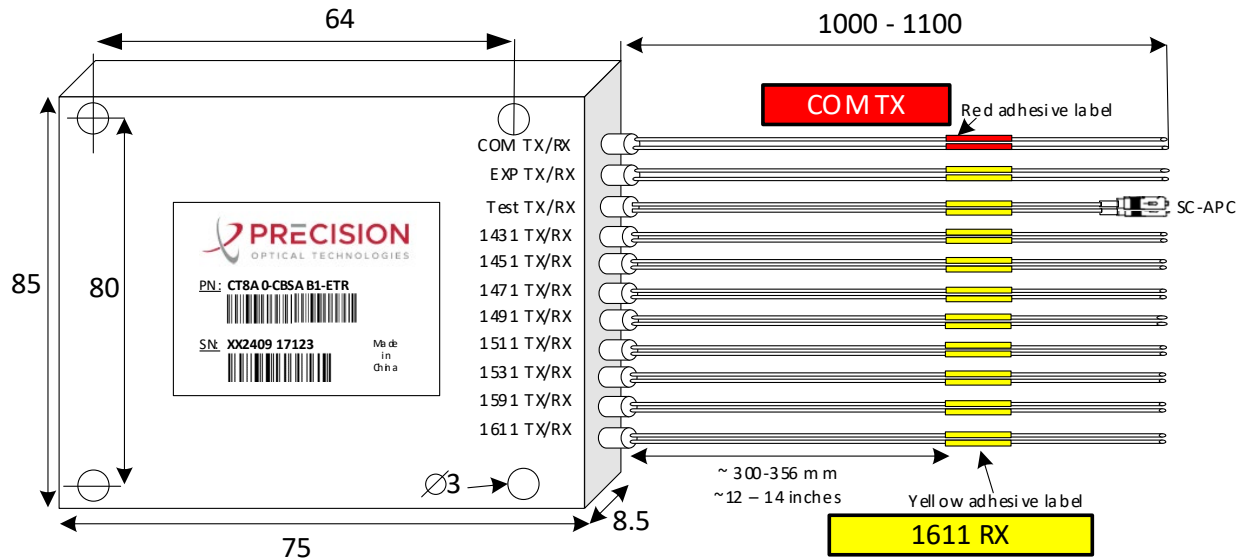
Parameter	Value	Unit
CWDM channels	1471, 1491, 1511, 1591, 1611	nm
CWDM Passband @ -0.5dB	$\lambda_c \pm 6.5$	nm
CWDM passband insertion loss @ -0.5dB	< 2.2	dB
CWDM Passband ripple @ -0.5dB	≤ 0.5	dB
Test port insertion loss	20 ± 2	dB
Express insertion loss	< 2.5	dB
Express passband ripple	≤ 0.5	dB
Express passband	1260-1460 (1420-1460 w/ 1310 Port) 1620-1635	nm
1310 port insertion loss	< 2.8	dB
1310 port passband ripple	≤ 0.5	dB
1310 port passband	~1260-1360	nm
1550 port insertion loss	< 2.5	dB
1550 port passband ripple	≤ 0.5	dB
1550 port passband	~1527-1567	nm
CWDM uniformity	≤ 1.5	dB
Isolation Adj – COM-CWDM	> 35	dB
Isolation Non-Adj – COM-CWDM	> 45	dB
Isolation Non-Adj – COM-EXP	> 15	dB
CWDM directivity	≥ 50	dB
EXPRESS directivity	≥ 65	dB
Return loss	> 45	dB
Polarization dependent loss	< 0.2	dB
Polarization mode dispersion	≤ 0.1	ps
IL thermal stability	≤ 0.006	dB/°C
Wavelength thermal stability	≤ 0.002	nm/°C
Maximum input power	300/24.8	mW/dBm
Operating temperature	-40 to +85	°C
Operating humidity	5 to 95	%RH
Tensile strength pull strength (up to 10 seconds max)	> 20 ³	N
Fiber type (all ports)	SMF-28e (G.657.A1)	

Filter Optical Design



8-Channel CWDM Design (both directions for Twin design)

Filter Physical Design



8-Channel CWDM External Design (mm)
(CT8A0-CBSA B1-ETR shown)