

Introduction:

Fiberdyne Labs specializes in custom configured, reliable, CCWDM products based on customer requirements. Our low loss Compact CWDM (CCWDM) is based on Free Space Optics & has lower loss and better uniformity versus Thin-Film Filter (TFF) designs. Optional -40°C to 85°C operating temperature versions are available. Our high isolation, low PDL CCWDMs offer high quality parameters up to 18 channel solutions and can include a 1310nm upgrade port and test/monitor ports as well.

Contact Sales for alternate configurations.



LGX style module

Almost any connector style / port is available; LC, LC/APC, SC, SC/APC, etc. to fit into a new system or retrofit an older system and features low insertion loss.

Fiberdyne will package the CCWDM to fit multiple applications. The field module has 900um and any connectors or no connectors for use when fusion splicing. The LGX style module can be used as a stand-alone or can be snapped into one of our rackmount or wall mount panels. Fiberdyne's 1U high, 19" rack mount module has a convenient, sleek design and allows the technician easy access to all ports. The LGX and 1U high modules are normally manufactured with adaptor ports but can be made with 3mm pigtailed, with or without connectors.



Field module with 900um pigtailed

Features:

- Low Insertion Loss
- High Isolation, Low PDL
- High Reliability
- Good Channel-to-Channel Uniformity
- Wide Operating Temperature:
From -40°C to 85°C

Applications:

- CCWDM System
- PON Networks
- CATV Links

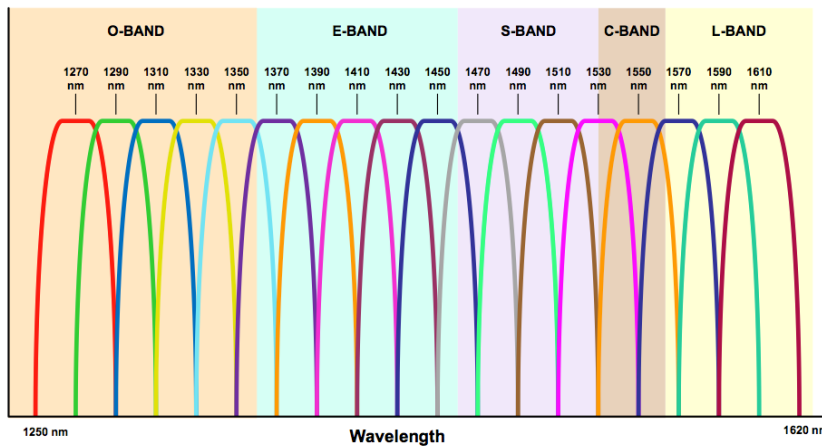


1U high, 19" rack mount module

Parameters	Specification			
	4 Channel	8 Channel	16 Channel	18 Channel
Center Wavelengths (nm)	1270-1610 or 1271-1611			
Passband (nm)	ITU ±6.5			
Operating Wavelength	1260~1620			
Channel Space (nm)	20			
Fiber Type	Corning SMF-28e			
Insertion Loss* (max)	1.0	1.5	≤3.3	≤3.3
Isolation (dB) / Adjacent	30			
Isolation (dB) / Non-Adjacent	40			
Ripple (dB)	0.3			
Polarization Dependent Loss (dB)	0.3			
Polarization Mode Dispersion (ps)	0.2			
Return Loss (dB)	45			
Directivity (dB)	50			
Maximum Power Handling (mW)	300			
Standard Operating Temperature	-10 to 70°C			
Available Operating Temperature	-40 to 85°C			
Storage Temperature	-40 to 85°C			
Package Dimensions (mm)	50L x 50W x6H			

*Note: Insertion loss specified without connectors, add 0.2dB I/L per connector

CWDM Wavelength Grid as Specified by ITU-T G694.2



Center Wavelengths	
1270	1450
1290	1470
1310	1490
1330	1510
1350	1530
1370	1550
1390	1570
1410	1590
1430	1610

Available Packages Include: LGX, 19 Inch Rackmount, Field Modules, Custom Packaging upon request.

CCWDM Single Fiber
(Compact Course Wavelength Division Multiplexer)
Mux

Part Number	Description	Wavelengths	Size
FCX-1000	Passive CCWDM, mux field module, single fiber, with Cascade Upgrade Port, 1.0 meter 900um loose tube legs, No connectors, protocol independent.	8	54 x 32 x 7.4 mm
FCX-1020	Passive CCWDM, mux field module single fiber, with Cascade Upgrade Port, 1.0 meter 900um loose tube legs, LC connectors, protocol independent.	8	54 x 32 x 7.4 mm
FCX-1040	Passive CCWDM, mux field module single fiber, with Cascade Upgrade Port, 1.0 meter 900um loose tube legs, SC connectors, protocol independent.	8	54 x 32 x 7.4 mm
FCX-1060	Passive CCWDM, mux field module, single fiber, with Cascade Upgrade Port, 1.0 meter 900um loose tube legs, LC/APC connectors, protocol independent.	8	54 x 32 x 7.4 mm
FCX-1080	Passive CCWDM, mux field module, single fiber, with Cascade Upgrade Port, 1.0 meter 900um loose tube legs, SC/APC connectors, protocol independent.	8	54 x 32 x 7.4 mm

Demux

Part Number	Description	Wavelengths	Size
FCX-1100	Passive CCWDM, demux field module, single fiber, with Cascade Upgrade Port, 1.0 meter 900um loose tube legs, No connectors, protocol independent.	8	54 x 32 x 7.4 mm
FCX-1120	Passive CCWDM, demux field module, single fiber, with Cascade Upgrade Port, 1.0 meter 900um loose tube legs, LC connectors, protocol independent.	8	54 x 32 x 7.4 mm
FCX-1140	Passive CCWDM, demux field module, single fiber, with Cascade Upgrade Port, 1.0 meter 900um loose tube legs, SC connectors, protocol independent.	8	54 x 32 x 7.4 mm
FCX-1160	Passive CCWDM, demux field module, single fiber, with Cascade Upgrade Port, 1.0 meter 900um loose tube legs, LC/APC connectors, protocol independent.	8	54 x 32 x 7.4 mm
FCX-1180	Passive CCWDM, demux field module, single fiber, with Cascade Upgrade Port, 1.0 meter 900um loose tube legs, SC/APC connectors, protocol independent.	8	54 x 32 x 7.4 mm

Specifications:
1XN CWDM Mux / Demux Module

Parameters		1 x 4	1 x 8
Center Wavelength (nm)		ITU, ITU+1	
Pass band (nm)		ITU±6.5	
Operating Wavelength (nm)		1460~1620 or 1260~1620	
Channel Space (nm)		20	
Fiber Type		SMF-28e with 0.9mm Loose tube	
IL (dB)		1.0	1.5
Isolation (dB)	Adjacent Channel	30	
	Non-Adjacent Channel	40	
Ripple (dB)		0.3	
PDL (dB)		0.2	
PMD (ps)		0.1	
RL (dB)		45	
Directivity (dB)		50	
Maximum Optical Power (mw)		500	
Operating Temperature		-10~70° C	
Storage Temperature		-40~85° C	
Box Package (mm)		54 x 28 x 8	
Note: 1. Specified without connectors 2. Add an additional 0.2dB loss per connector			