Coarse WDM Modules (CWDM)

AFL's Coarse WDM modules are designed using proven thin-film filter technology providing high isolation, 20nm channel separation and a high level of thermal stability. CWDM modules are available in 2, 4, 8, and 16 channel configurations and are factory assembled in a thin cassette or rugged LGX® cassette with industry standard connector options to meet varying system requirements. An optional 1310 nm Mux/Demux Upgrade Port is available to allow seamless integration of legacy voice, video, and data services.

Double-width LGX 118 package shown

Features

- Telcordia® qualified components
- 20 nm channel spacing
- 2, 4, 8, and 16 channel configurations
- Most industry standard connectors
- Low insertion loss
- High isolation
- Custom configurations upon request

Applications

- CATV Systems
- Sensor Systems
- 10G Ethernet Systems
- Metro Optical Networks
- Metro Access Networks

Specifications

PARAMETER	UNIT	VALUE			
Ports		2	4	8	16
Center Wavelength	nm	1271-1611			
Passband @ 0.5 dB	nm	> 14			
Passband	nm	± 6.5			
Passband Flatness	dB	< 0.5			
Insertion Loss (Typ.)	dB	1.4	1.6	1.8	4.3
Insertion Loss (Max.)	dB	1.8	2.0	2.5	5.0
Adjacent Channel Isolation	dB	> 30			
Non-Adjacent Channel Isolation	dB	> 45			
Wavelength Thermal Stability	nm/°C	< 0.002			
IL Thermal Stability	db/°C	< 0.005	< 0.005	< 0.007	< 0.008
Return Loss	dB	> 45			
PMD	ps	< 0.10	< 0.10	< 0.15	< 0.15
PDL	dB	< 0.10	< 0.15	< 0.20	< 0.25
Directivity	dB	> 50			
Operation Temperature	°C	-5 to +65			
Storage Temperature	°C	-40 to +85			
LGX 118 Package		Single-width	Single-width	Double-width	Triple-width
Thin Cassette Package	mm	88.9 x 50.8 x 8.3	120 x 80 x 13	130 x 87 x 13	150 x 115 x 13
Options		2% Tap, 1310 Upgrade			
1310 Channel Wavelength	nm	1260-1360			
1310 Channel Isolation	dB	40 minimum			
1310 Channel Insertion Loss	dB	1.3 maximum			

* Includes Connectors

Ordering Information

CWDM — 04 — 5 — 1271 — 1331 — B — ASC — ISP

Channel Count
02 = 2 Channel
04 = 4 Channel
08 = 8 Channel
16 = 16 Channel

Package/Pigtail
1 = Thin Cassette, 1 Meter Pigtail
3 = Thin Cassette, 3 Meter Pigtail
5 = Thin Cassette, 5 Meter Pigtail
L = LGX 118

Start Wavelength (nm)
1271
1291
1311
1331
1351
1371
1391
1411
1431
1451
1471
1491
1511
1531
1551
1571
1591

End Wavelength (nm)
1291
1311
1331
1351
1371
1391
1411
1431
1451
1471
1491
1511
1531
1551
1571
1591
1611

Options
U = 1310 Upgrade Port
T = 2% Tap Port
X = No Option
B = 1310 Upgrade Port and 2% Tap Port

Connectors
ASC = SC/APC
USC = SC/UPC
ALC = LC/APC
ULC = LC/UPC
X = No connectors