

Dense WDM (DWDM) Modules



Double-width LGX 118 package shown

AFL's Dense WDM modules (DWDM) are designed using proven thin-film filter technology featuring low insertion loss, high isolation, and superior environmental stability. DWDM modules are available in 2, 4, 8, and 16 channel configurations, with 100 GHz and 200 GHz spaced central wavelength options on the ITU-T Grid in the C-Band (1528 nm-1568 nm) and L-Band (1568 nm-1610 nm). All DWDM modules are factory assembled in a thin cassette package or a rugged LGX® cassette with most common industry standard connector options to meet varying system requirements.

Features

- Telcordia® qualified components
- 100 GHz & 200 GHz ITU-T channel spacing
- 2, 4, 8 and 16 channel configurations
- Most industry standard connectors
- Low insertion loss
- High isolation
- Epoxy-free optical path

Applications

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

Specifications

PARAMETER	UNIT	VALUE							
		100 GHZ DWDM				200 GHZ DWDM			
Ports		2	4	8	16	2	4	8	16
Center Wavelength	nm	1531-1561 (CH. 20-58)				1530-1560 (CH. 21-59)			
Passband @ 0.5 dB	nm	>0.25				>0.6			
Passband	nm	±0.11				±0.25			
Passband Flatness	dB	<0.5				<0.5			
Insertion Loss (Typ.)	dB	1.4	1.6	2.6	3.8	1.4	1.6	2.6	3.8
Insertion Loss (Max.)	dB	1.8	2.0	3.2	4.5	1.8	2.0	3.2	4.5
Adjacent Channel Isolation	dB	>25				>25			
Non-Adjacent Channel Isolation	dB	>45				>45			
Wavelength Thermal Stability	nm/°C	<0.001				<0.002			
IL Thermal Stability	db/°C	<0.005	<0.005	<0.007	<0.007	<0.005	<0.005	<0.007	<0.007
Return Loss	dB	>45				>45			
PMD	ps	<0.10	<0.10	<0.10	<0.15	<0.10	<0.10	<0.10	<0.15
PDL	dB	<0.10	<0.20	<0.20	<0.25	<0.10	<0.20	<0.20	<0.25
Directivity	dB	>50				>50			
Operation Temperature	°C	-5 to +65				-5 to +65			
Storage Temperature	°C	-40 to +85				-40 to +85			
LGX 118 Package		Single-width	Single-width	Double-width	Triple-width	Single-width	Single-width	Double-width	Triple-width
Thin Cassette Package	mm	88.9x50.8x8.3	120x80x13	130x87x13	150x115x13	88.9x50.8x8.3	120x80x13	130x87x13	150x115x13

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Ordering Information

DWDM	04	5	1	20	24	ASC	ISP
	Channel Count	Package/Pigtail	Spacing	Start Channel	End Channel	Connectors	
	02 = 2 Channel 04 = 4 Channel 08 = 8 Channel 16 = 16 Channel	1 = Thin Cassette, 1 Meter Pigtail 3 = Thin Cassette, 3 Meter Pigtail 5 = Thin Cassette, 5 Meter Pigtail L = LGX 118	1 = 100 GHz 2 = 200 GHz	20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58	21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59	ASC = SC/APC USC = SC/UPC ALC = LC/APC ULC = LC/UPC X = No connectors	