

Single Directional CWDM MUX/DEMUX Module

Auxora's Coarse Wavelength Division Multiplexer (CWDM) module demonstrates low loss and reliable performance. The module features broad passband and high isolation, making it ideal for functioning with inexpensive, uncooled lasers. The device features up to 4 or 8/16/18 low dispersion channels, thereby enabling it to be a high capacity, low cost product for CATV and metro/access network applications. Easily customizable, Auxora's CWDM module can be configured from a standard list of packaging and connector options.



FEATURES

- Low insertion loss
- Wide pass band
- High channel isolation
- Exceptional reliability and stability
- Epoxy free optical path
- Telcordia GR-1221 and GR1209 compliant

APPLICATIONS

- Access networks
- Metro WDM systems
- Fiber optic instruments

SPECIFICATIONS

Parameters		2CH	4CH	6CH	8CH	9CH	16CH	18CH			
Channel Passband (nm)		ITU±6.5									
Operating Wavelength (nm)		1260~1620									
Channel Spacing (nm)		20									
IL (dB)		≤0.9	≤1.4	≤2.0	≤2.5	≤2.7	≤3.0	≤3.5			
Isolation	Adjacent Chanel	≥30									
(dB)	Non-Adjacent Channel	≥45									
Pass band Ripple (dB)		≤0.5									
PDL (dB)		≤0.2									
PMD (ps)		≤0.1									
RL (dB)		≥50									
Directivity (dB)		≥50									
Max. Optical Power (mw)		500									
Operating Temperature ($^{\circ}$ C)		-5∼75									
Storage Temperature ($^{\circ}\mathbb{C}$)		-40∼85									
Fiber Type		Corning SMF-28e or G657A									
Package Dimension (mm)		ABS or LGX or 19" Rack or Customized									

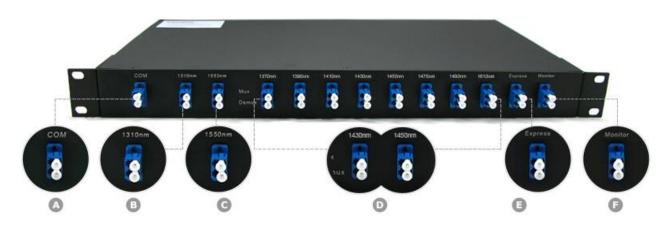
NOTES:

- 1) All specifications are based on the devices without connectors, and guaranteed over wavelength, polarization and temperature.
- 2) PMD and chromatic dispersion values are guaranteed by design.
- 3) IL is 0.3 dB higher, RL is 5 dB lower for connector added.
- 4 For modules with monitoring port/skipper UPG port/1310nm legacy port, IL is 0.3dB higher.
- 5) Specifications are subject to change without notice.



Packing Types & Front Panels

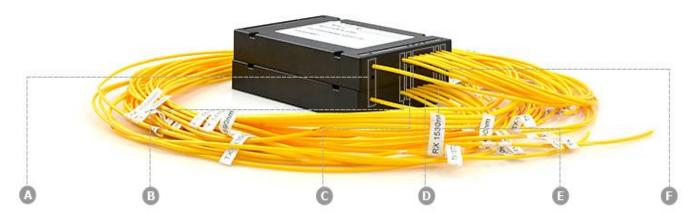
• 19" 1RU Rack chassis or 23" 1RU Rack chassis



● <u>LGX Metal Box</u>



ABS BOX:





A. Common port:

LC, SC, ST and FC connectors available.

B. Standard port 1310nm:

- Allows a legacy 1310nm signal to pass. That is to say, it can carry LR optics, LX optics etc.
- LC, SC, ST and FC connectors available.

C. Standard port 1550nm:

- Allows a legacy 1550nm signal to pass. That is to say, it can carry ER optics, ZR optics, LX optics, ZX optics etc.
- LC, SC, ST and FC connectors available.

D. Mux/Demux port for specific wavelengths:

- LC, SC, ST and FC connectors available.
- Compliant with the ITU G.657A1 standard as default. These are available in ITU G.652, ITU G.652C and ITU G.652D on request. The 1390 and 1410 wavelengths are not recommended at ITU G.652 because of the higher attenuation.

E. Express port:

- Enables the cascading of two CWDM mux/demux modules, doubling the channel capacity on the common fiber link.
- Channel Isolation is 15dB as default, 16dB ~40dB available on request.
 LC, SC, ST and FC connectors available.

F. Monitor port:

- Connects measurement/monitoring equipment, such as power meters or network analyzers, to the module outputs. When finished monitoring, disconnect the instruments and the network is left undisturbed.
- LC, SC, ST and FC connectors available.
- Tap percentage is 1% as default, 2%, 3%, 5%, or 10% available on request.

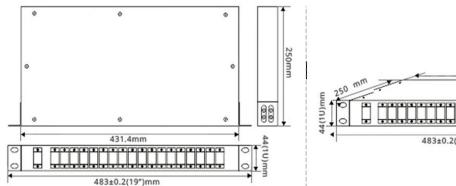
NOTE:

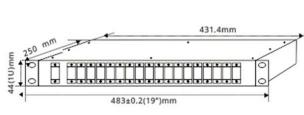
- Actual layout depends on the chosen connector type as well as other factors. However, the principal scheme stays the same.
- We provide optional port configurations such as: Express Port, Monitor Port, 1310nm passband port and 1550nm port for these multiplexers according to customer choice, need more details, please contact saleschina@auxora.cn
- When using with 1310nm legacy SDH/SONET, CWDM wavelengths 1271, 1291, 1311, 1331 and 1351nm should not be used.
- When using with 1550nm legacy SDN/SONET, CWDM wavelengths 1511, 1531, 1551, 1571, 1591, 1611nm should not be used.



Mechanical Drawing: (only for reference)

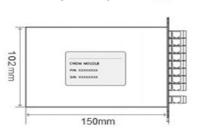
• 19" 1RU Rack chassis or 23" 1RU Rack chassis





LGX Metal Box

LGX-Three (Standard): Fit to Empty 4RU 19 inch Rack Mount beside



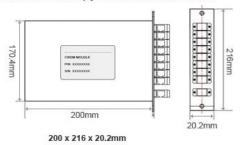
129mm



150 x 129 x 29 mm

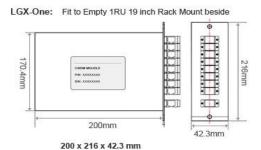
4RU rackomunt holding 12pcs LGX-Three







1RU rackmount holding 4pcs LGX-Two

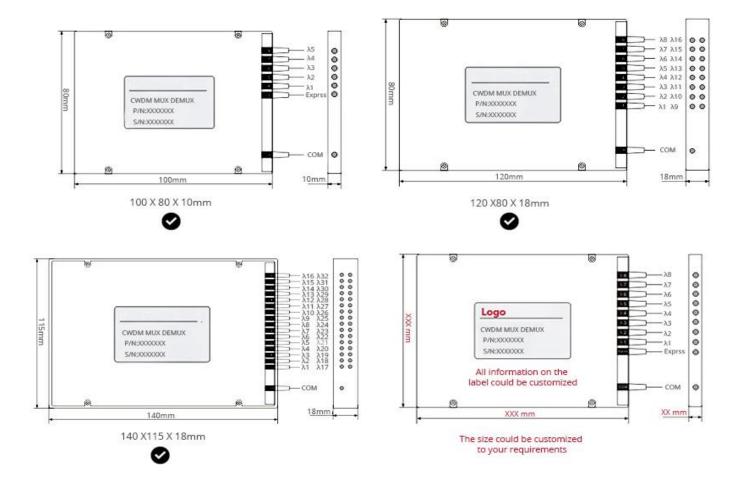




1RU rackmount holding 2pcs LGX-One

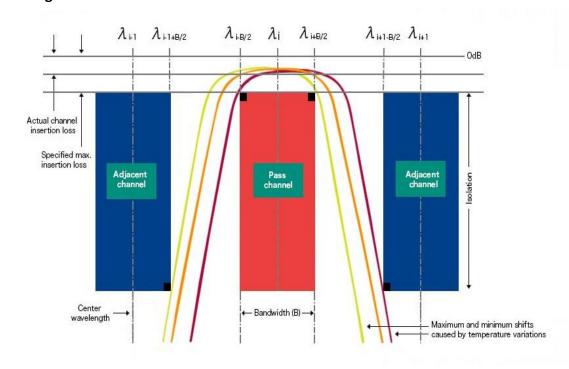


ABS Box



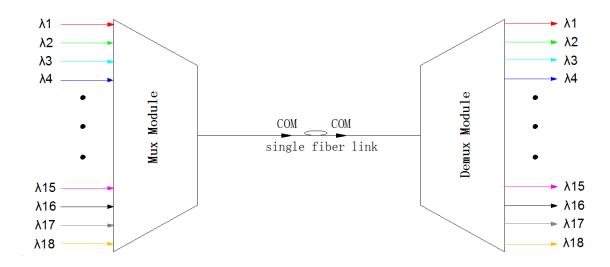
Please note that the drawings shown here only refer to the dimensions and don't not show the specific configuration of the module.

Typical Spectral Diagram:





Inter-connect Diagram:



Ordering Information: (e.g.ACM-1D080047PS1-1010-55)

ACM-	Х	Х	XX	XX(X)	XX	XX	х	-	XX	XX	-	х	х
	ITU	Module Type	Port Configuration	Special Ports	Initial Wavelength	Package Type	Fiber Jacket		Fiber Length			Connector	
									Input	Output		Input	Output
	0=0 Serial	M=Mux	01=1-CH	00=None	27=1270/1271	P0=80*60*8	0=250um Bare fiber		10=1.0m	10=1.0m		0=None	0=None
	1=1 Serial	D=Demux	02=2-CH	01=1310nm Port	29=1290/1291	P1=80*60*12	1=900um tube		12=1.2m	12=1.2m		1=FC/UPC	1=FC/UPC
		X= Customized		02=Monitor Port		P2=125*96*15	2=2.0mm Cable					2=FC/APC	2=FC/APC
			18=18-CH	03=Express Port	61=1610/1611	PS=100*80*10	3=3.0mm Cable		15=1.5m	15=1.5m		3=SC/UPC	3=SC/UPC
				04=UPG with Skipper		PM=120*80*18	N=NA		NA=N/A	NA=N/A		4=SC/APC	4=SC/APC
				12=1310nm+Mon.		PL=140*115*18	X=Customized		XX=customized	XX=customized		5=LC/UPC	5=LC/UPC
				13=1310nm+EXP.		Ll=LGX -One						6=LC/APC	6=LC/APC
				42=UPG+Monitor		L2=LGX -Two						XX=Customized	XX=Customized
						L3=Standard LGX							
				123=Express+Monitor +EXP.		19=19"rack mount							
						XX= Customized							