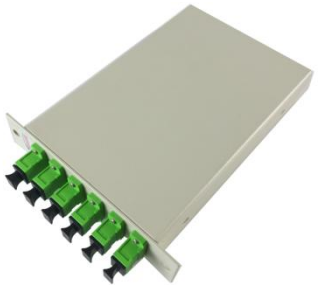
Simplex Bi-directional CWDM Mux & Demux



Auxora's MUX and DEMUX can be combined together into a single piece of equipment for bi-directional data transmission over one fiber.
The module is a flexible, low-cost solution that enables the expansion of existing fiber capacity and allows operators to make full of use of available fiber bandwidth in local loop and enterprise architectures. It can suit many kinds of applications and network solutions, such as Ethernet, SDH/SONET, ATM, ESCON, Fibre Channel, FTTx and CATV.
The module is a universal device that can multiplex optical signals (up to 18 channels) into a fiber pair or single fiber, we can provide full complete configuration such as 2/ 4/ 8/9 channels.

FEATURES

- Low insertion loss
- Wide pass band & high channel isolation
- Optional extension ports for network upgrade
  Fully transparent to all data rates and protocols
- Exceptional reliability and stability
- Telcordia GR-1221/1209-CORE compliant

APPLICATIONS

- Access networks
- Metro WDM systems
- Fiber optic instruments
- Telecommunications
- Add/Drop channels

SPECIFICATIONS

Parameters		1CH	2CH	3CH	4CH	5CH	6CH	7CH	8CH	9CH
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	≤2.9	≤3.3	≤3.7	≤4.3	≤4.5
Isolation (dB)	Adjacent Channel	≥30								
	Non-Adjacent Channel	≥45								
Pass band Ripple (dB)		≤0.5								
PDL (dB)		≤0.2								
PMD (ps)		≤0.1								
RL (dB)		≥50								
Directivity (dB)		≥50								
Maximum Optical Power (mw)		500								
Operating Temperature (℃)		-5～75								
Storage Temperature (℃)		-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.

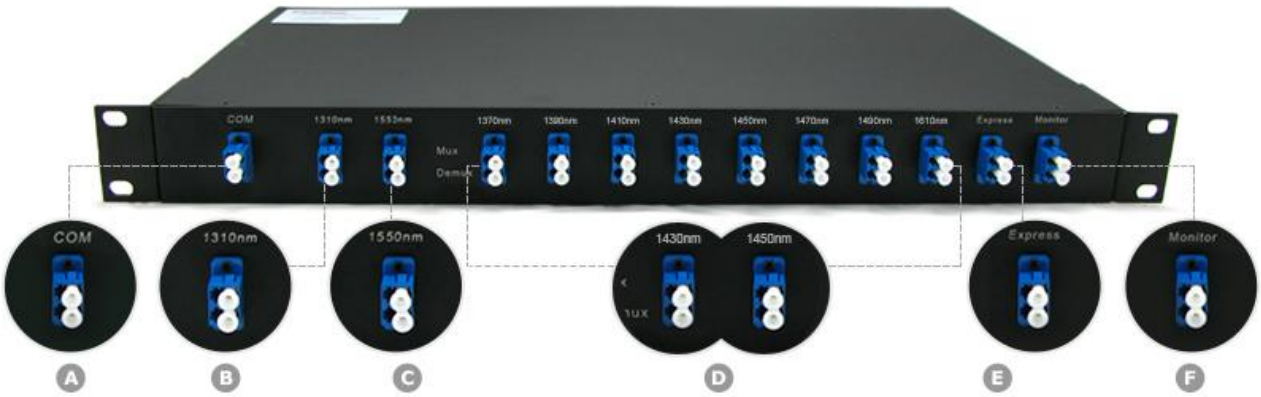
3) IL is 0.3 dB higher, RL is 5 dB lower for connector added.

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**



- **LGX Metal Box**

- **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:

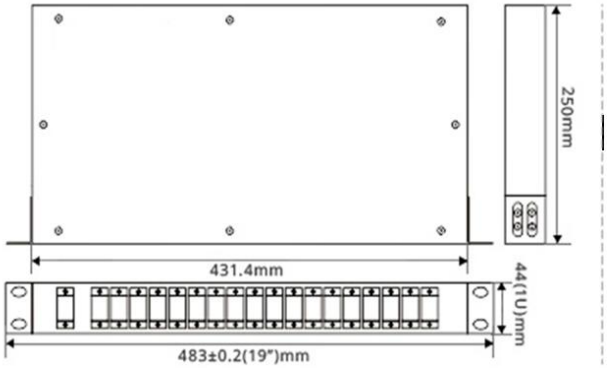
- Connects measurement/monitoring equipment, such as power meters or network analyzers, to the module outputs.When finished monitoring, disconnect the instruments and the network is left undisturbed.
- LC, SC, ST and FC connectors available.
- Tap percentage is 1% as default, 2%, 3%, 5%, or 10% available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

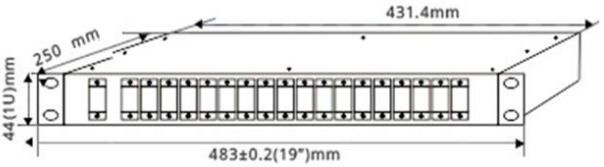
NOTE:

- 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)

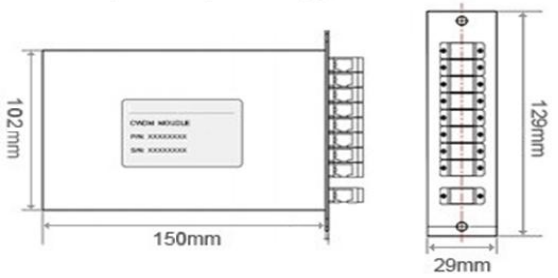
- **19'' 1RU Rack chassis or 23'' 1RU Rack chassis**





- **LGX Metal Box**

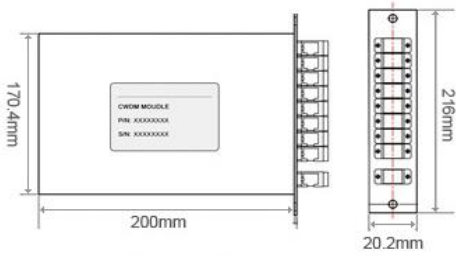
LGX-Three (Standard): Fit to Empty 4RU 19 inch Rack Mount beside



150 x 129 x 29 mm

4RU rackomunt holding 12pcs LGX-Three

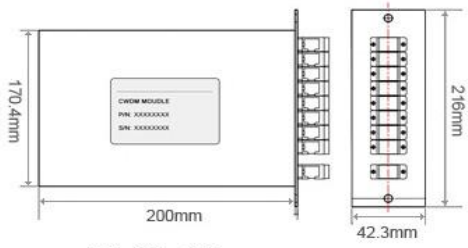
LGX-Two: Fit to Empty 1RU 19 inch Rack Mount beside



200 x 216 x 20.2mm

1RU rackmount holding 4pcs LGX-Two

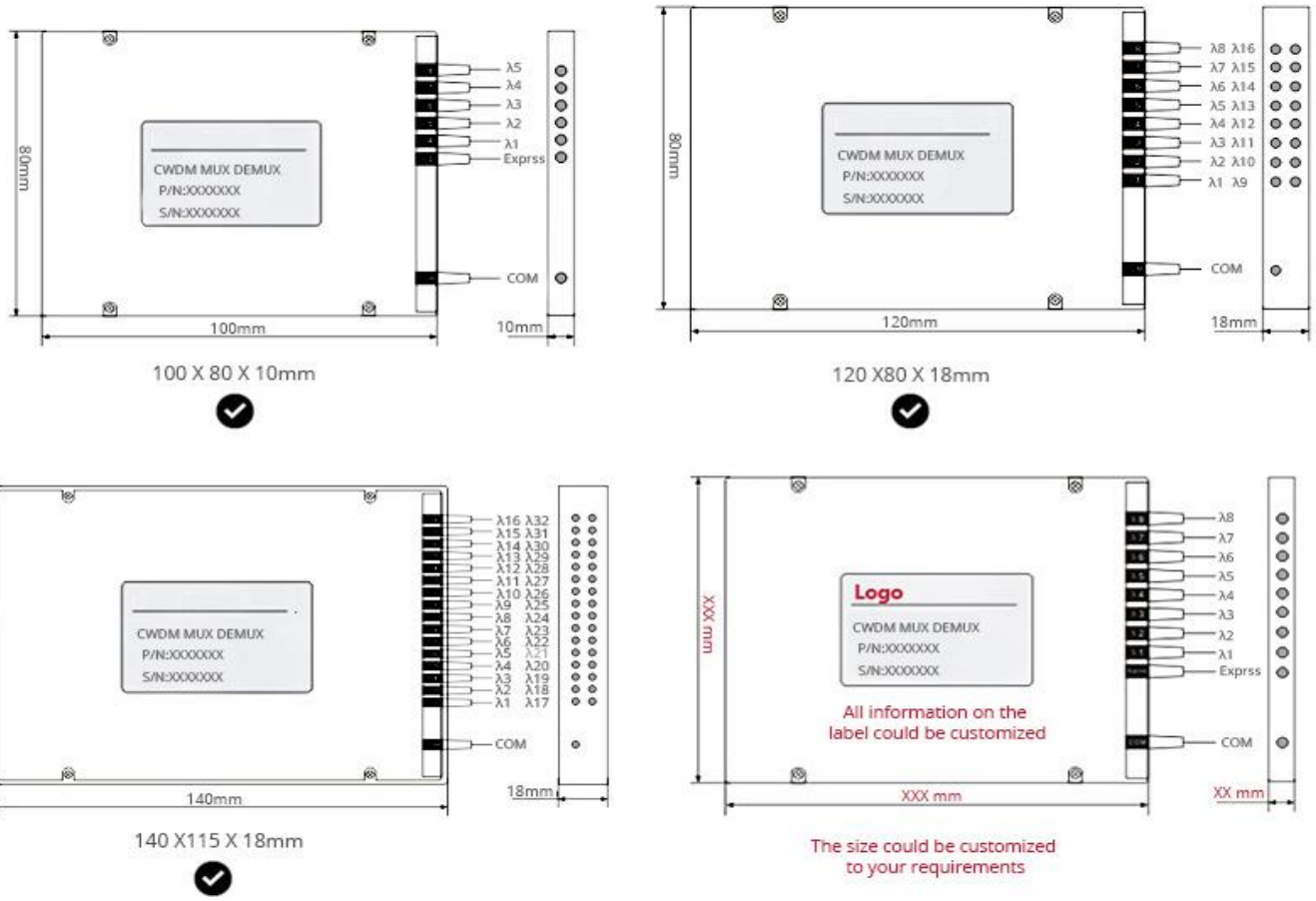
LGX-One: Fit to Empty 1RU 19 inch Rack Mount beside



200 x 216 x 42.3 mm

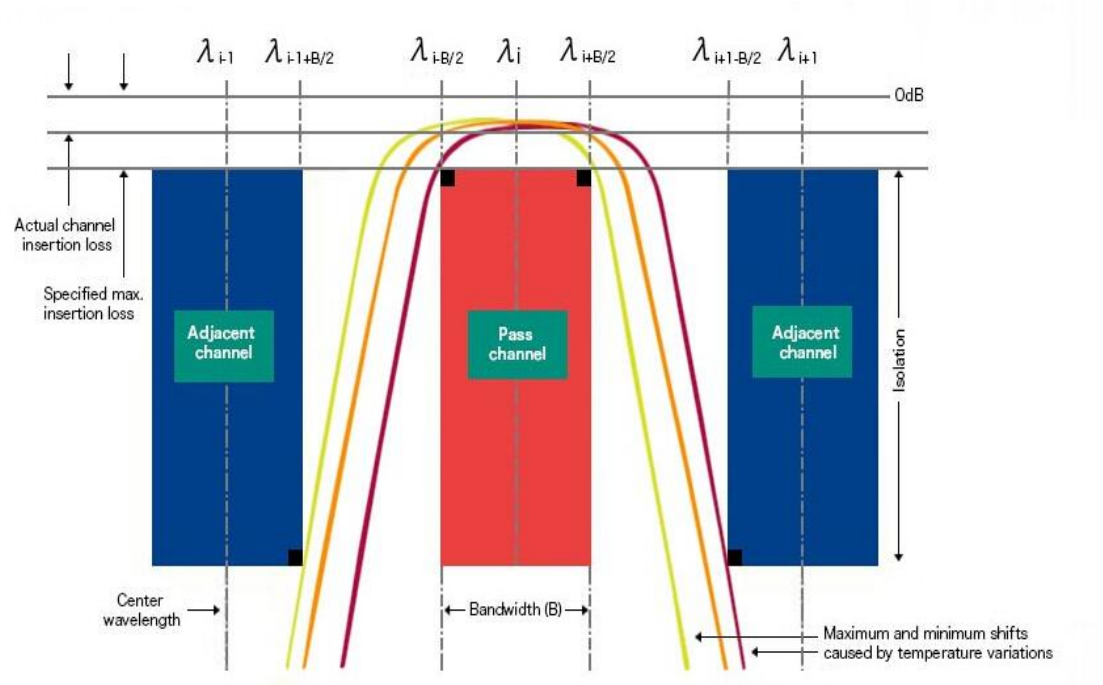
1RU rackmount holding 2pcs LGX-One

- **ABS Box**

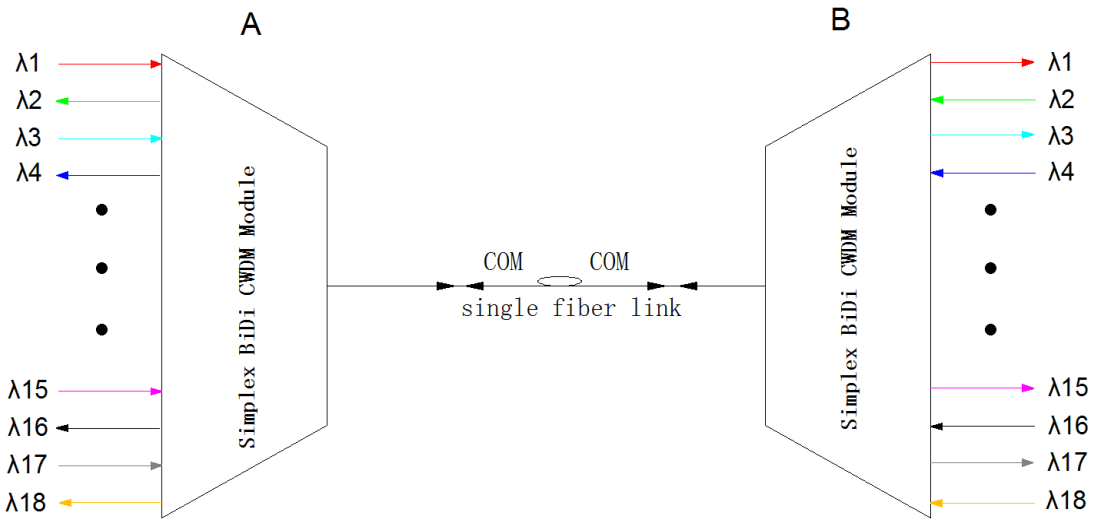


Please note that the drawings shown here only refer to the dimensions and don't not show the specific configuration of the module.

Typical Spectral Diagram:



Inter-connect Diagram:



Ordering Information: (e.g.ACM-12080047PS1-1010-55)

ACM-	X	X	XX	XX(X)	XX	XX	X	-	XX	XX	-	X	X
	ITU	Module Type	Port Configuration	Special Ports	Initial Wavelength	Package Type	Fiber Jacket		Fiber Length			Connector	
									Input	Output		Input	Output
	0=0 Serial	2=Mux+Demux over single fiber	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	X= customized	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
			.....	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.		L1=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							