

# Single Directional DWDM MUX/DEMUX Module

Auxora's DWDM Multiplexer/Demultiplexer is designed to combine/separate several DWDM signals (up to 88 channels) into one or two fibers based on TFF technology. We can provide full complete configuration such as 2, 4, 8, 16, up to 88 channels.

We also provide customized design to suit options of CWDM upgrade port, DWDM upgrade port, monitor ports, bi-directional com port TX/RX, 1310nm and 1550nm wideband port for existing 1310nm and 1550nm equipment.

### **FEATURES**

SPECIFICATIONS

- Low insertion loss and High channel isolation
- Exceptional reliability and stability
- Optional extension and wide band ports for network upgrade, existing equipment or Add/Drop
- Epoxy free optical path
- Telcordia GR-1221 and GR1209 compliant

## **APPLICATIONS**

- DWDM systems
- CATV links
- Wavelength routing
- PON networks

Parameters		2CH	4CH	6CH	8CH	9CH	16CH				
Operating Wavelength (nm)		1520~1620									
Channel Spacing (GHz)		100									
Channel Passband (nm)		ITU±0.11									
IL (dB)		≤1.0	≤1.8	≤2.0	≤2.5	≤2.8	≤4.0				
Isolation (dB)	Adjacent Channel	≥25									
	Non-Adjacent Channel	≥40									
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 ( $^\circ\!{ m C}$ )		-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

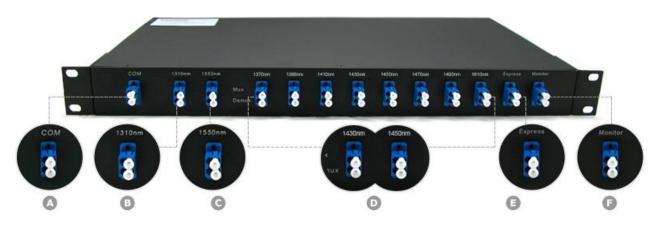




DATASHEET

# Packing Types & Front Panels

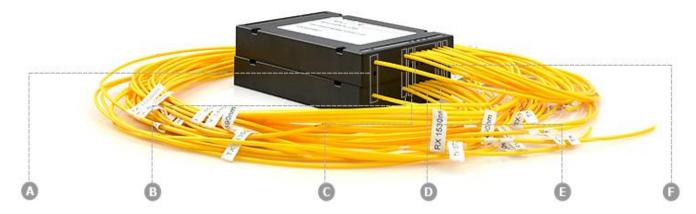
• <u>19" 1RU Rack chassis or 23" 1RU Rack chassis</u>



LGX Metal Box



• ABS BOX:





- A. Common port:
  - LC, SC, ST and FC connectors available.
- **B.** 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.
- C. Express port:
  - Enables the cascading of two DWDM mux/demux modules, doubling the channel capacity on the common fiber link.
  - Channel Isolation is 12dB as default, 16dB ~30dB available on request.
  - LC, SC, ST and FC connectors available.
- D. 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.
- E. Mux/Demux port for specific ITU-Grid Channels
  - 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.

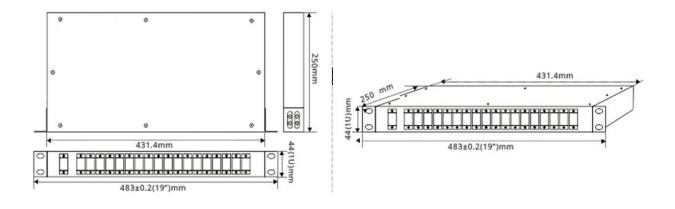
### NOTE:

- 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 <u>saleschina@auxora.cn</u>



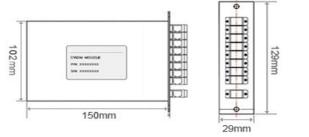
## Mechanical Drawing: (only for reference)

### <u>19" 1RU Rack chassis or 23" 1RU Rack chassis</u>



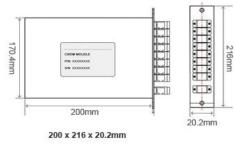
### LGX Metal Box

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

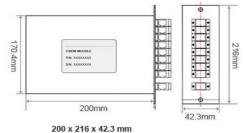


150 x 129 x 29 mm

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



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





1RU rackmount holding 2pcs LGX-One



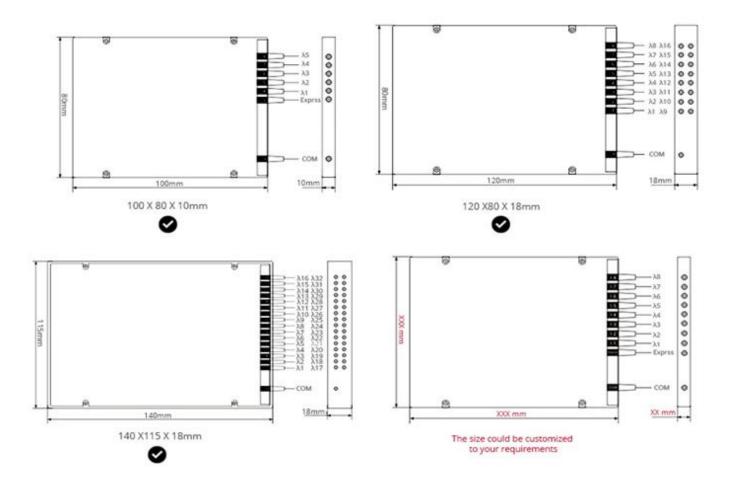
4RU rackomunt holding 12pcs LGX-Three



1RU rackmount holding 4pcs LGX-Two

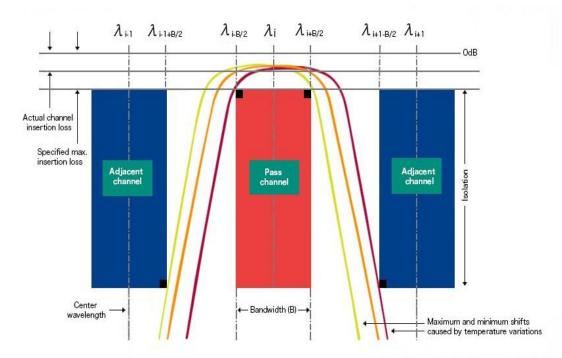


### ABS Box



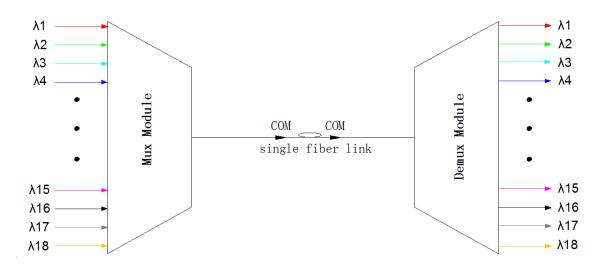
Please note that the drawings shown here only refer to the dimensions and don't not show the specific configuration of the module.

### **Typical Spectral Diagram:**





## Inter-connect Diagram:



# Ordering Information: (e.g.ADM-1D080020PS1-1010-55)

ADM-	х	х	xx	XX(X)	xx	xx	х	-	xx	xx	-	х	х
	WDM Type	Module Type	Port Configuration	Special Ports	Initial Wavelength	Package Type	Fiber Jacket	-	Fiber Length			Connector	
	WDM Type	Module Type							Input	Output		Input	Output
	1=100GHz	M=Mux	01=1-CH	00=None	15=C15	P0=80*60*8	0=250um Bare fiber		10=1.0m	10=1.0m		0=None	0=None
	2=200GHz	D=Demux	02=2-CH	01=1310nm Port	16=C16	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
			есн	03=Express Port	72=C72	PS=100*80*10	3=3.0mm Cable		15=1.5m	15=1.5m		3=\$C/UPC	3=SC/UPC
				04=UPG with Skipper		PM=120*80*18	N=NA		NA=N/A	NA=N/A		4=\$C/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							