

# **Simplex Bi-directional CWDM OADM Module**

Auxora's Simplex BiDi CWDM OADM is designed to add/drop CWDM signals into one/two fibers, which makes it a flexible, low-cost solution for increasing the bandwidth demand on enterprise and metro access networks. It can simultaneously support ESCON, ATM, Fiber Channel, Ethernet, without disturbing each other.

Auxora also provides customized design to suit situations in which your existing network has one or two fibers, redundant network, ring or linear network design etc.



#### **FEATURES**

- Low insertion loss
- 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**

Paramete	rs	1CH	2CH	3CH	4CH	5CH	6CH	7CH	8CH			
Operating Wavelength (nm)		1260~1620										
Channel Passband (nm)		ITU±6.5										
Channel Spacing (nm)		20										
IL (dB)	Add &Drop	≤0.6	≤1.0	≤1.4	≤1.7	≤1.9	≤2.1	≤2.3	≤2.5			
	Express Channel	≤0.8	≤1.4	1.4 ≤2.1 ≤2.8 ≤3		≤3.5	≤4.2	≤4.8	≤5.4			
Isolation (dB)	Adjacent Channel	≥30										
	Non-Adjacent Channel	≥45										
	Express Channel	≥25										
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 ( $^{\circ}\mathbb{C}$ )		-5∼75										
Storage Temperature ( $^{\circ}\!$		-40~85										
Fiber Type		Corning SMF-28e or G657A										
Package Dimension (mm)		ABS or LGX or 19" Rack or Customized										

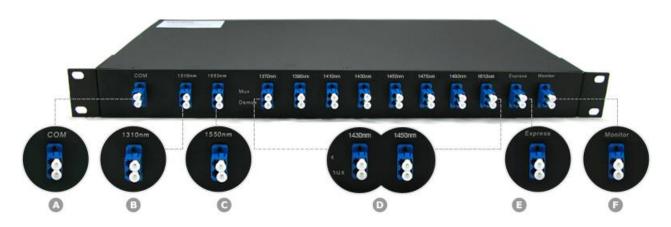
## NOTES:

- 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**

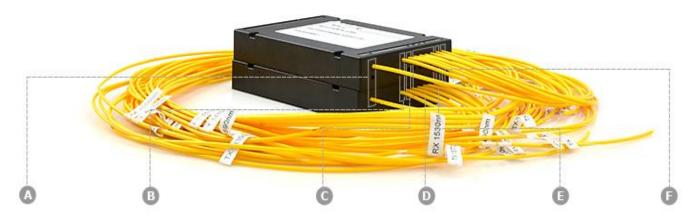
• 19" 1RU Rack chassis or 23" 1RU Rack chassis



● <u>LGX Metal Box</u>



ABS BOX:





#### A. Common port:

- Trunk input and output in both west and east traffic.
- LC, SC, ST and FC connectors available.

### B. Add/Drop port on west:

- Add and Drop on west.
- LC, SC, ST and FC connectors available.
- Compliant to ITU-T G.657A1 CWDM standard from 1271nm to 1611nm, with 20nm increase.

#### C. Add/Drop port on east:

- Add and Drop on east.
- LC, SC, ST and FC connectors available.
- Compliant to ITU-T G.657A1 CWDM standard from 1271nm to 1611nm, with 20nm increase.

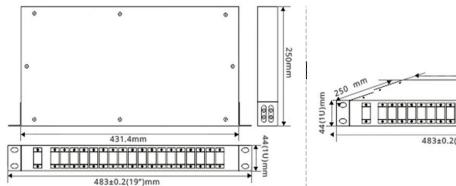
#### NOTE:

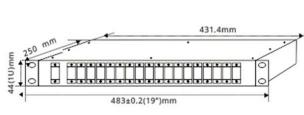
- Actual layout depends on the chosen connector type as well as other factors. However, the principal scheme stays the same.
- We provide optional port configurations such as: Express Port, Monitor Port, 1310nm passband port and 1550nm port for these multiplexers according to customer choice, need more details, please contact <a href="mailto:saleschina@auxora.cn">saleschina@auxora.cn</a>
- 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)**

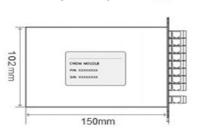
### • 19" 1RU Rack chassis or 23" 1RU Rack chassis





### LGX Metal Box

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



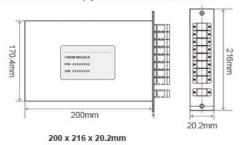
129mm



150 x 129 x 29 mm

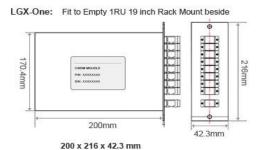
4RU rackomunt holding 12pcs LGX-Three







1RU rackmount holding 4pcs LGX-Two

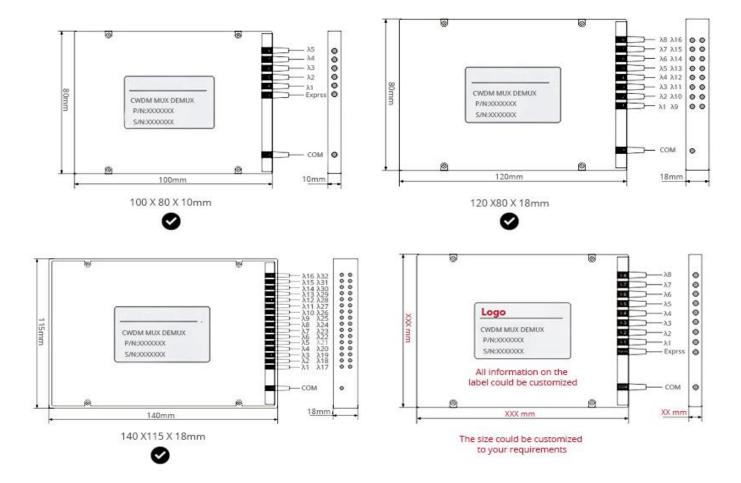




1RU rackmount holding 2pcs LGX-One

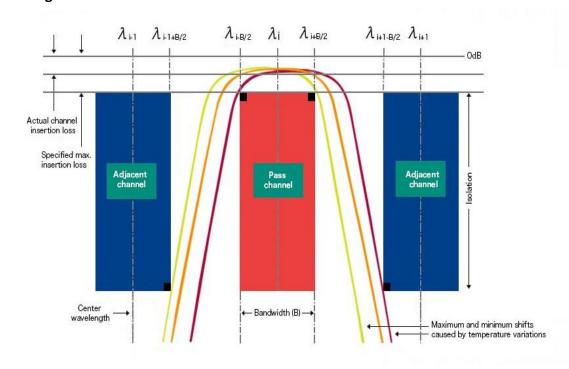


## ABS Box



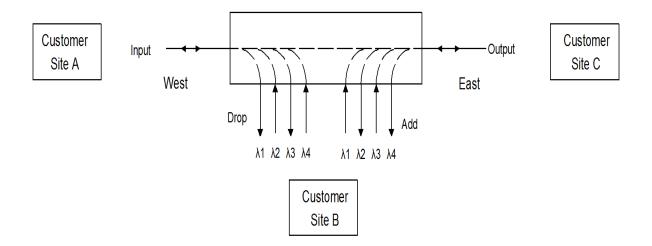
Please note that the drawings shown here only refer to the dimensions and don't not show the specific configuration of the module.

## **Typical Spectral Diagram:**





# **Inter-connect Diagram:**



# Ordering Information: (e.g.ACM-1BD040047PS1-1010-55)

ACM-	X	XX	XX	XX(X)	XX	XX	Х	XX	XX	-	Х	X
	ITU	Module Type	Port Configuration	Special Ports	Initial Wavelength	Package Type	Fiber Jacket	Fiber Length			Connector	
								Input	Output		Input	Output
	0=0 Serial	BD=Simplex BiDi OADM	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						