DATASHEET

100 GHz Athermal Arrayed Waveguide Grating DWDM Module

Auxora's athermal arrayed waveguide grating DWDM Module is based on silica-on-silicon planar technology and no electrical power and temperature control is required. A variety of commonly used configurations such as 32/40/44/48 channels can be provided, which are all available in standalone 19'' or 23'' 1RU/2RU rack mount.

Auxora can also provide 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. Combined with our DWDM transceivers or the wavelength converters, the bandwidth of the fiber can be utilized in a cost effective way.

FEATURES

- Low insertion loss & low PDL& high isolation
- No electrical power required
- 100GHz channel spacing
- Available in MUX and DEMUX configurations
- Fully transparent to all data rates and protocols
- Exceptional reliability and stability
- Telcordia GR-1221/1209-CORE compliant

APPLICATIONS

- MUX and DEMUX DWDM systems
- Long haul, metro
- Terminal applications
- Wavelength routing

PACKAGING TYPES:

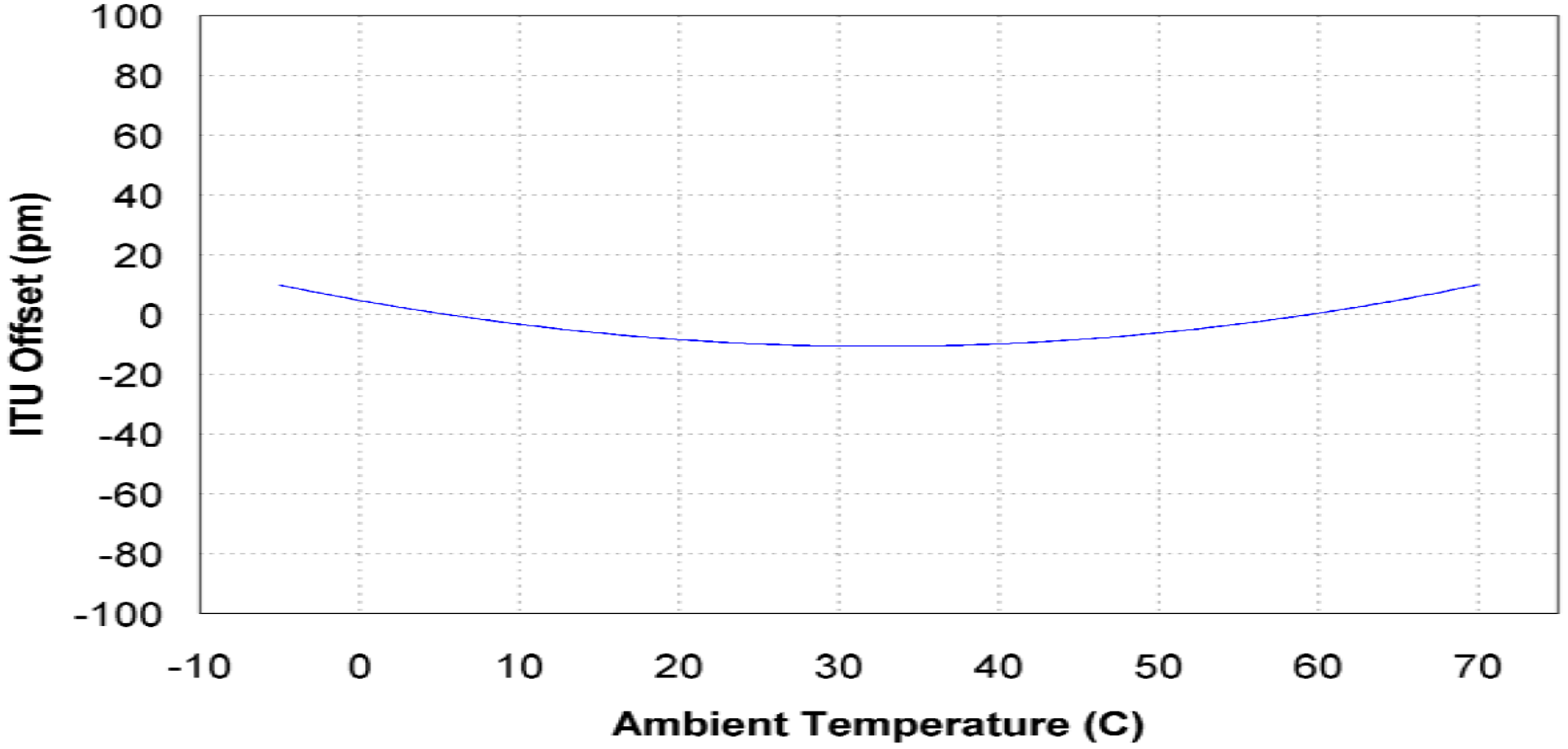
A

D

E

- Type A: 19'' 1RU Rack chassis or 23'' 1RU Rack chassis
- Type D: Empty 1RU, 2RU Rack chassis and 4RU Rack Chassis is optional
- Type F: Metal Box.(120x70x11mm)

Wavelength Shift Vs Temperature Change:



Specification

Parameters	Flat-top	Gaussian
Channel Spacing (GHz)	100	
Channel Count	32/40/44/48	
Center Wavelength Accuracy(GHz)	±0.05	
Channel Passband (GHz)	ITU±12.5	
Insertion Loss (dB)	≤ 6.0	≤ 4.5
Insertion Loss uniformity(dB)	≤ 1.5	≤ 1.5
Pass band Ripple (dB)	≤ 0.5	≤ 0.5
1dB Bandwidth (nm)	≥ 0.4	≥ 0.2
3dB Bandwidth (nm)	≥ 0.55	≥ 0.36
Adjacent Isolation (dB)	≥ 25	
Non-Adjacent Isolation (dB)	≥ 29	
Total Crosstalk(dB)	≥ 21	
Polarization Dependent Loss (dB)	≤ 0.5	
Polarization Mode Dispersion (ps)	≤ 0.5	
RL (dB)	≥ 40	
CD (ps/nm)	-15 ~ +15	
Operating Temperature (℃)	-5 ～ 65	
Storage Temperature (℃)	-40 ～ 85	
Maximum Power Handling (mW)	300	
Fiber Type	Corning SMF-28e or G657A	
Package Dimension (mm)	120x70x10 or 19” Rack or Customized	

NOTES:

1) All specifications are based on the devices without connectors, and guaranteed over wavelength, polarization and temperature.

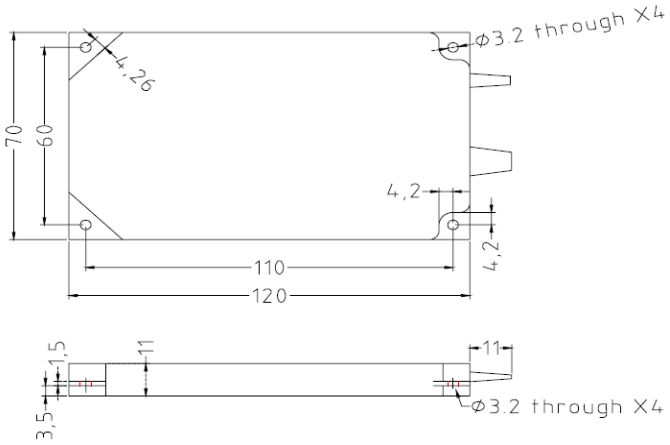
2) PMD and chromatic dispersion values are guaranteed by design.

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

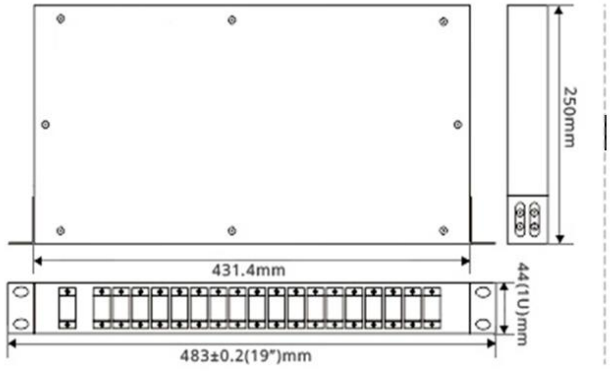
4) MUX/DEMUX with 1310nm Port and/or Monitoring port is available for expansion. 5) Specifications are subject to change without notice

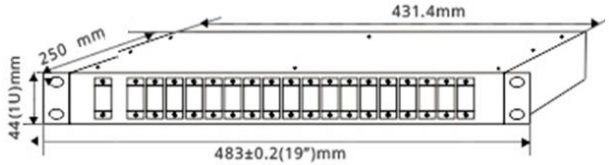
Mechanical Dimensions (mm)

Standard metal box:



19” 1RU Rack:





Ordering Information (e.g. AAWG-1F40M00C20A1N-NANA-55)

AAWG-	X	X	XX	X(X)	XX(X)	XXX	XX	X	-	XX	XX	-	X	X
	Channel Spacing	Specturm Shape	Port Configuration	WDM Type	Special Ports	Initial Wavelength	Package Type	Fiber Jacket		Fiber Length			Connector	
										Input	Output		Input	Output
	1=100GHz	F=Flat-top	24=24CH	M=MUX	00=None	C13=C13	A1=19" 1U Rack	0=250um Bare fiber		10=1.0m	10=1.0m		0=None	0=None
		G=Gaussian	32=32CH	D=DEMUX	01=1310nm Port	H13=H13	A2=23" 1U Rack	1=900um tube		12=1.2m	12=1.2m		1=FC/UPC	1=FC/UPC
			40=40CH	MD=MUX=DEMUX	02=Monitor Port	C14=C14	ST=Standard Metal Box	2=2.0mm Cable		……	……		2=FC/APC	2=FC/APC
			48=48CH		03=Express Port	H14=H14	B1=19" 2U Rack	3=3.0mm Cable		15=1.5m	15=1.5m		3=SC/UPC	3=SC/UPC
					04=UPG with Skipper	……	XX= customized	N=NA		NA=N/A	NA=N/A		4=SC/APC	4=SC/APC
					12=1310nm+Mon.	C65=C65		X=Customized		XX=customized	XX=customized		5=LC/UPC	5=LC/UPC
					13=1310nm+EXP.	H65=H65							6=LC/APC	6=LC/APC
					42=UPG+Monitor								X=Customized	X=Customized
					……									
					123=Express+Monitor +EXP									