

AAWG DWDM MUX/DEMUX

Standard Metal Box & Rack Mount

Description

The GigaLight AAWG (Athermal Arrayed Waveguide Grating) DWDM (Dense Wavelength Division Multiplexing) MUX/DEMUX (Multiplexer/Demultiplexer) device, based on silica on silicon technology, is designed for ITU channel spacing applications where no electrical power is required. It operates at 50GHz or 100GHz channel spacing ITU Grid DWDM wavelengths from 1526nm to 1565nm. The AAWG DWDM MUX/DEMUX can be used to replace the filter-type DWDM MUX/DEMUX for cases where no power is available. The low cost and high performance make it the ideal solution for metro and long-haul DWDM applications. GigaLight provides a series of customized AAWG DWDM MUX/DEMUX devices packaged in standard metal box or rack mount to meet different requirements on port configuration (32 to 96 channels, 1310nm/monitoring ports available), operating wavelength, fiber type, fiber length, input connector, and output connector.

Features

- ✓ Low Insertion Loss (IL)
- ✓ High isolation
- ✓ Low Polarization Dependent Loss (PDL)
- ✓ Available up to 96 channels with compact design
- ✓ High reliability and high stability
- ✓ Telcordia GR-1209-CORE-2001 compliant
- ✓ Telcordia GR-1221-CORE-1999 compliant
- ✓ ITU-T G.694.1 compliant
- ✓ RoHS-6 compliant (lead free)

Standard Metal Box



Rack Mount



Applications

- ✓ Broadband Systems
- ✓ Telecommunications Networks
- ✓ Metro Networks
- ✓ Long-haul DWDM Networks

Specifications

Parameters	AAWG DWDM MUX/DEMUX					
Channel Space (GHz)	50GHz			100GHz		
Pass Band Type	Flat-top			Gaussian		Flat-top
Grade	Typ	Min	Typ	Min	Typ	Min
Channel Number	80/96			32/40/48		
Wavelength Accuracy (nm)	±0.04			±0.05		
Pass Band @1dB (nm)	>0.2			>0.2		>0.38
Pass Band @3dB (nm)	>0.4			>0.4		>0.58
Insertion Loss ¹ (dB)	<7.0	<6.0	<4.0	<3.5	<6.5	<5.0
Adjacent Crosstalk (dB)	>26			>26		>23
Non-Adjacent Crosstalk (dB)	>26					
Total Crosstalk (dB)	>20			>21		
Return Loss (dB)	>40					
Ripple (dB)	<1.5				<0.5	
Uniformity (dB)	<1.5					
PDL (dB)	<0.7			<0.6	<0.5	<0.4
PMD ² (ps)	<0.5					
Chromatic Dispersion ² (ps/nm)	±30			±20		
Operating Temperature (°C)	-5 ~ 75					
Storage Temperature (°C)	-40 ~ 85					
Package L×W×H (mm)	Rack Mount: 484×245×44 (1U, 2U) (interleaved)			Standard Metal Box: 120×70×11 Rack Mount: 484×245×44 (1U, 2U)		

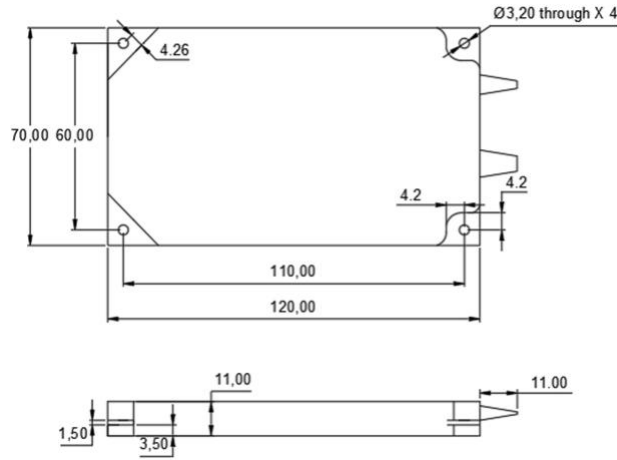
Note:

1) All specifications are based 19-inch rack mount with adapters, and guaranteed over wavelength, polarization and temperature; fiber type is G657A1.

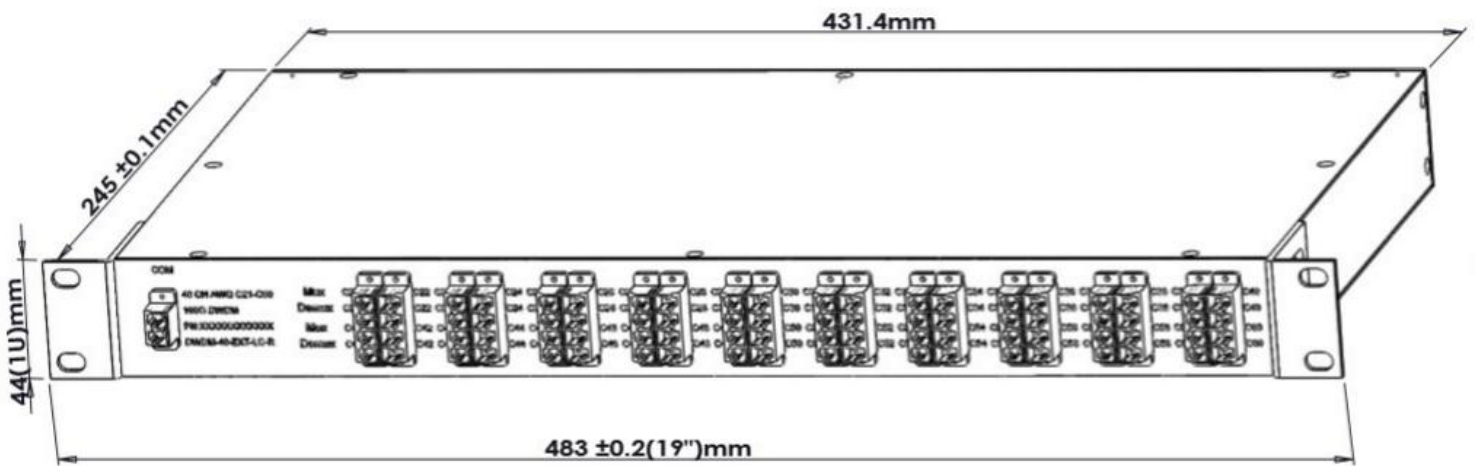
2) PMD and chromatic dispersion values are guaranteed by design.

Mechanical Dimensions

Standard Metal Box:



19-inch 1U Rack Mount:



Ordering Information

GAAWG-	xx	x	xx	xx	xx	x	xx	xx-	x	x	
	Channel Space Spectrum Shape	MUX/DEMUX Type	Port Configuration	Initial Wavelength	Package Type	Fiber Type	Input Fiber Length	Output Fiber Length	Input Connector	Output Connector	
AAWG DWDM MUX/DEMUX	1G=100GHz Gaussian	M=MUX	32=32CH	C15=C15	ST=Standard Metal Box	N=N/A	10=1.0m	10=1.0m	0=None	0=None	
	1F=100GHz Flat-top	D=DEMUX	40=40CH	H15=H15	1U=19-inch 1U Rack Mount	2=0.9mm loose tube	15=1.5m	15=1.5m	1=FC/UPC	1=FC/UPC	
	2=50GHz Flat-top	MD=MUX & DEMUX	48=48CH	C16=C16	2U=19-inch 2U Rack Mount		20=2.0m	20=2.0m	2=FC/APC	2=FC/APC	
		3=MUX with 1310nm port	...		H16=H16			25=2.5m	25=2.5m	3=SC/UPC	3=SC/UPC
		4=DEMUX with 1310nm port	80=80CH	4=SC/APC	4=SC/APC	
		34=MUX & DEMUX with 1310nm port	96=96CH		C63=C63				5=LC/UPC	5=LC/UPC	
		7=MUX with 1310nm & MON ports			H63=H63				6=LC/APC	6=LC/APC	
		8=DEMUX with 1310nm & MON ports			C64=C64						
		78=MUX & DEMUX with 1310nm & MON ports			H64=H64						

Note :

- 1) The 100GHz AAWG is available with 32/40/48 channels, and the 50GHz AAWG is available with 80/96 channels.
- 2) The 50GHz AAWG is designed based on the interleaved technology and only available with rack mount package.
- 2) If there is a demand for orders that are different from those described above, please contact Gigalight sales.

E-mail: sales@gigalight.com

Official Site: www.gigalight.com