

100GHz 48CH AAWG Module



Array wave guide grating wave division multiplexers can transmit up to 48 wavelengths of photosynthesis waves or the combined light waves into independent light waves. Widely used in dense wave-splitting multiplexing systems. The product has a Gaussian type and flat top type two options, with narrow channel frequency (100GHz), high isolation and so on.



Features

- ❖ Low Insertion Loss
- ❖ High Integration
- ❖ Excellent Uniformity
- ❖ Low PMD
- ❖ High stability and reliability

Application

- ❖ Telecom 4G/5G
- ❖ Metro Network
- ❖ Backbone Network
- ❖ Data Center

Performance Specifications

Parameters	Specifications	
	Gaussian	flat top
Operating Wavelength(nm)	1525-1570 (C-band)	
Channel	16 ~ 48	
Channel Wavelength(nm)	1529.55~1567.13 (ITU C13~C60)	
Channel Frequency Interval(GHz)	100	
Center Wavelength Bandwidth(nm)	±0.1	
Center Wavelength Accuracy(nm)	±0.05	
-1dB Bandwidth(nm)	≥0.22	≥0.4
-3dB Bandwidth(nm)	≥0.42	≥0.55
-20dB Bandwidth(nm)	≤1.2	≤1.2
Pass band Insertion Loss (dB)	≤4.0	≤5.5
Adjacent Isolation(dB)	≥25	
Non-Adjacent Isolation(dB)	≥30	
Total Cross Talk	≥22	
Insertion Loss Uniformity at ITU	≤1.5	
Passband Ripple @ ± 0.1nm(dB)	≤1.5	≤0.5
Polarization-related losses(dB)	≤0.5	
Polarization Mode Dispersion(ps)	≤0.5	
Return Loss(dB)	≥45	
Directivity(dB)	≥50	
Chromatic Dispersion(ps/nm)	-20~+20	
Max Optical Power(mW)	250	
Operating Temperature(°C)	-40~+85	
Storage Temperature(°C)	-40~+85	

*Notes: 1.Insertion Loss tested without connector.

Package Information

Fiber Length	1m , or others on request
Fiber Type	G657A /customize
Pigtail Type	Ribbon fiber with 900um loose tube fan-out

Hirundo Optics Inc

Factory:2nd Floor, Building 6, #16 Xinfu Road, Southern Cable Industrial Park, Rongli Ronggui Street, Shunde District, Foshan city, Guangdong 528305 China
Tel: 0757-26619220

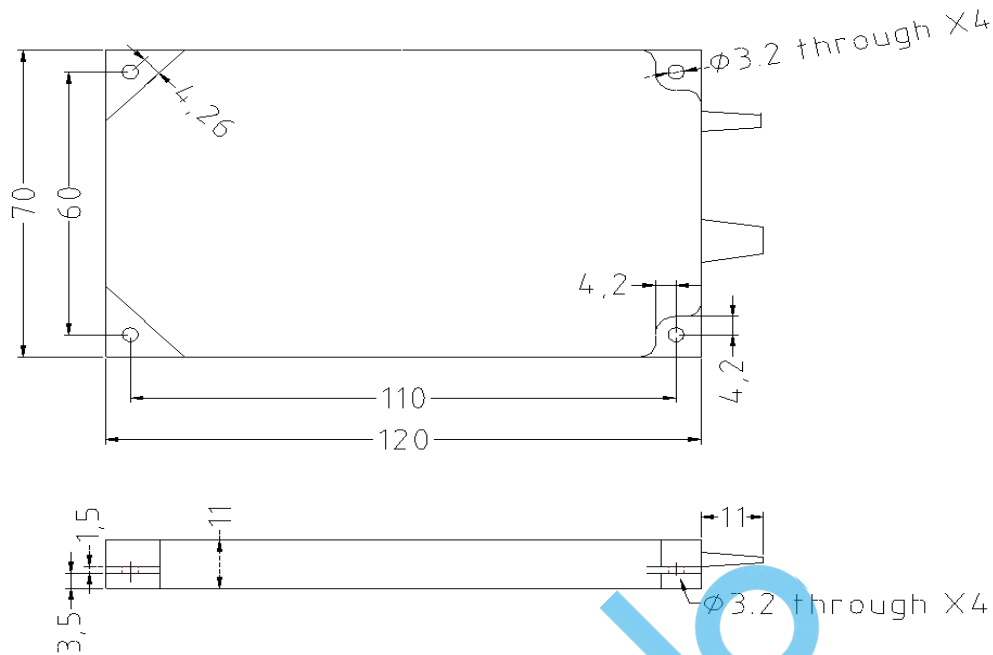
Email: info@hirundo-link.com

Website: <https://www.hirundo-link.com>

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Dimensions(mm)	Metal box L120xW70xH11
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Dimensions(Unit:mm)



Channel Plan Port AWG - On grid

The AWG operate in C-band. The C-band channel allocation is based on ITU-T Grid. The channels are as follows:

Channel No.	ITU Channel	Frequenc THz	Wavelength nm	Channel No.	ITU Channel	Frequenc THz	Wavelength nm
1	60	196	1529.553	25	36	193.6	1548.515
2	59	195.9	1530.334	26	35	193.5	1549.315
3	58	195.8	1531.116	27	34	193.4	1550.116
4	57	195.7	1531.898	28	33	193.3	1550.918
5	56	195.6	1532.681	29	32	193.2	1551.721
6	55	195.5	1533.465	30	31	193.1	1552.524
7	54	195.4	1534.250	31	30	193	1553.329
8	53	195.3	1535.036	32	29	192.9	1554.134
9	52	195.2	1535.822	33	28	192.8	1554.940
10	51	195.1	1536.609	34	27	192.7	1555.747
11	50	195	1537.397	35	26	192.6	1556.555
12	49	194.9	1538.186	36	25	192.5	1557.363
13	48	194.8	1538.976	37	24	192.4	1558.173
14	47	194.7	1539.766	38	23	192.3	1558.983
15	46	194.6	1540.557	39	22	192.2	1559.794
16	45	194.5	1541.349	40	21	192.1	1560.606
17	44	194.4	1542.142	41	20	192	1561.419
18	43	194.3	1542.936	42	19	191.9	1562.233
19	42	194.2	1543.730	43	18	191.8	1563.047
20	41	194.1	1544.526	44	17	191.7	1563.863
21	40	194	1545.322	45	16	191.6	1564.679
22	39	193.9	1546.119	46	15	191.5	1565.496
23	38	193.8	1546.917	47	14	191.4	1566.314
24	37	193.7	1547.715	48	13	191.3	1567.133

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Order information:

AAWG (Athermal AWG) PN: AAWG-XXXXXXXXXX-XX (AAWG+10 Code+2 Serial Number)

AAWG	XX	XX	X	X	X	X	X	X	X	XX
	Channel	Start Channel	Package Type	Chip Type	Fiber Length	Connector	Band	Spacing		
16	16CH	20	C20	A Metal box	F Flat Top	0 0.5m	0 none	C C-band	1 100G	SN
24	24CH	21	C21	K Rackmount	G Gaussian	1 1.0m	1 SC/UPC	L L-band	2 200G	
32	32CH	60	C60	S Special	B Broad Gaussian	2 1.5m	2 SC/APC	D C+L band	3 50G	
40	40CH	-	...			3 2.0m	3 FC/UPC	O O-band	4 75G	
48	48CH		ITUChannel			4 2.5m	4 FC/APC	S Special	5 150G	
64	64CH					5 3.0m	5 LC/UPC			
80	80CH					6 3.5m	6 LC/APC			
96	96CH					7 0.7m	7 ST/UPC			
0S	Special					8 1.2m	8 E2000			
						9 2.7m	9 MPO			
						S Special	S Special			

