

## Flyin 80-CH 50G Athermal AWG

This document presents the generic specification for the 80-channel 50GHz Athermal AWG MUX/DEMUX Rackmount supplied for use in DWDM system.

Athermal AWG(AAWG) have equivalent performance to standard Thermal AWG(TAWG) but require no electrical power for stabilization. They can be used as direct replacements for Thin Film Filters(Filter type DWDM module) for cases where no power is available, also suitable for outdoor applications over -30 to +70 degree in access networks. Flyin's Athermal AWG(AAWG) provide excellent optical performance, high reliability, ease of fiber handling and power saving solution in a compact package. Different input and output fibers, such as SM fibers, MM fibers and PM fiber can be selected to meet different applications. We can just offer 19" 1U rackmount package for 50G AWG products.

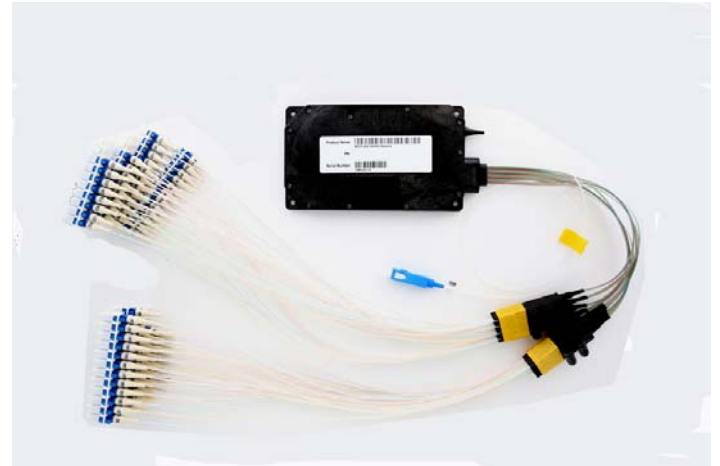
The planar DWDM components(Thermal/Athermal AWG) from Flyin Optronics are fully qualified according to Telcordia reliability assurance requirements for fiber optic and opto-electronic components (GR-1221-CORE/UNC, Generic Reliability Assurance Requirements for Fiber Optic Branching Components, and Telcordia TR-NWT-000468, Reliability Assurance Practices for Opto-electronic Devices).

### Features

- Low Insertion Loss
- Established silica-on-silicon
- Low PDL
- Low chromatic dispersion
- Telcordia GR-1221-CORE qualified

### Applications

- DWDM transmission
- Wavelength Routing
- Optical add/drop multiplexing



### Optical Specification (Flat Top Athermal AWG)

Parameters	Specs			Units
	Min	Typ	Max	
Number of Channels	80			
Number Channel Spacing	50			GHz
Cha. Center Wavelength	C-band			nm
Clear Channel Passband	±6.5			nm
Wavelength Stability	±0.05			nm
-1 dB Channel Bandwidth	0.2			nm
-3 dB Channel Bandwidth	0.3			nm
Optical Insertion Loss at ITU grid		6.0	7.0	dB
Adjacent Channel Isolation	25			dB

Non-Adjacent, Channel Isolation	30			dB
Total Channel Isolation	20			dB
Insertion Loss Uniformity			2.0	dB
Directivity(Mux Only)	40			dB
Insertion Loss Ripple			1.5	dB
Optical Return loss	40			dB
PDL/Polarization Dependent Loss in Clear Channel Band		0.3	0.5	dB
Polarization Mode Dispersion			0.5	ps
Maximum Optical Power			23	dBm
MUX/DEMUX input/ output Monitoring range	-35		+23	dBm
Operating Temperature	-5	+25	+65	°C
Operating Humidity	5		95	%RH
Storage Temperature	-40		+85	
Storage Humidity	5		95	
Package Size	L150xW65xH16			mm

IL Represents the worst case over a +/-0.01nm window around the ITU wavelength;

PDL was measured on average polarization over a +/- 0.01nm window around the ITU wavelength.

### Ordering Information

AWG	X	XX	X	XXX	X	X	X	XX
	Band	Number of Channels	Spacing	1st Channel	Filter Shape	Package	Fiber Length	In/Out Connector
	C=C-Band	16=16-CH	1=100G	C60=C60	G=Gaussian	M=Module	1=0.5m	0=None
	L=L-Band	32=32-CH	2=200G	H59=H59	B=Broad	R=Rack	2=1m	1=FC/APC
	D=C+L-Band	40=40-CH	5=50G	C59=C59	Gaussian	X=Special	3=1.5m	2=FC/PC
	X=Special	48=48-CH	X=Special	H58=H58	F=Flat Top		4=2m	3=SC/APC
		XX=Special		XXX=special			5=2.5m	4=SC/PC
							6=3m	5=LC/APC
							S=Specify	6=LC/PC
								7=ST/UPC
								S=Specify