

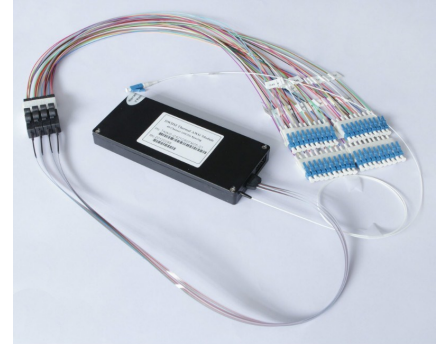
## 16~96CH 50GHz DWDM Athermal Arrayed Waveguide Grating Module

### Key Features

- 50GHz ITU channel spacing
- Low insertion loss
- Multi-channel number
- High channel isolation
- High stability and reliability

DK Photonics Athermal AWG DWDM (Arrayed Wave-guide Grating Dense Wavelength Division Mux/Demultiplexer) Modules are part of a series of high-performance products based on silica-on-silicon planar technology and a unique athermal packaging design requiring no electrical power, software or temperature control for a completely passive DWDM solution. This product range offers a combination of very low loss and high channel isolation along with long term reliability. Each module can perform Mux and Demux functions. C-Band device are available with Gaussian or Flat top spectral response. Custom frequency grids, fiber types and connector insertion options are also available.

We can offer different package for different products, including compact box package and 19" 1U rack-mount.

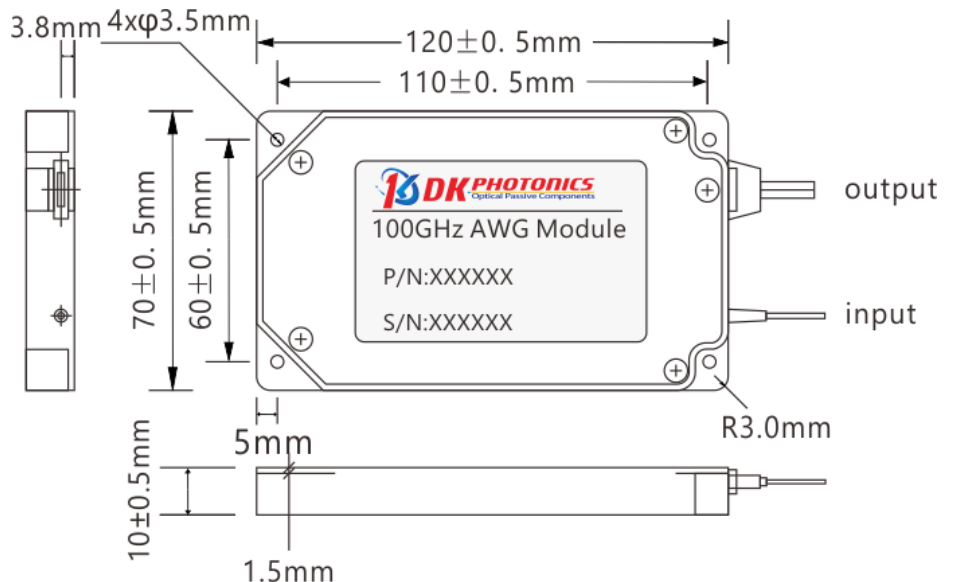


### Applications

- WDM transmission
- WDM based ADM
- Metro and long-haul net works
- Wavelength selective routing
- Optical signal processing



### Package Dimension:



\*Due to ongoing design improvements, the package size is subject to change. Please contact DK Photonics for confirmation if you have special requirements.

## For more Info

Please contact us at:

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## 16~96CH 50GHz DWDM Athermal Arrayed Waveguide Grating Module

### Performance Specifications

Parameter	Unit	Gaussian
Channel Wavelength	nm	ITU 50 GHz Grid, C-band
Number of channels	-	40,80,96 or other
Wavelength Accuracy	nm	± 0.05
Min. Channel Pass-band (@-1dB bandwidth)	nm	0.4
Insertion Loss	dB	< 7.0
Channel Passband (@-1dB bandwidth)	dB	> 0.2
Channel Passband (@-3dB bandwidth)	dB	> 0.3
Total Crosstalk	dB	> 20
Channel Ripple	dB	< 0.70
Isolation	Adjacent	> 22
	Non-adjacent	> 27
Max. Uniformity	dB	1.2
Chromatic Dispersion	ps/nm	-20~+20
Max. Polarization Dependent Loss	dB	0.5
Max. Polarization Mode Dispersion	ps	0.5
Min. Directivity	dB	> 50
Min. Return Loss	dB	> 45
Maximum Power Handling	mW	300
Fiber type	-	SMF-28e or other
Operating Temperature	°C	-5 ~+70
Storage Temperature	°C	-40 ~+85
Dimension	mm	L120 x W70 x H12, 19" 1U Rack mount:431.5*250*44

1. IL Represents the worst case over a +/-0.01nm window around the ITU wavelength:
2. PDL was measured on average polarization over a +/- 0.01nm window around the ITU wavelength.,
3. The above specification is without connector.
4. IL is 0.3 dB higher and RL is 5 dB lower for each connector and adapter added.

### Order information P/N: AAWG-05-①-②-③-④-⑤-⑥-⑦

When you inquire, please provide the correct P/N number according to our ordering information, and attach the appropriate description would be better. If need any connector, we do not recommend choosing a 250µm bare fiber pigtail.

05	①	②	③	④	⑤	⑥	⑦
Spacing	Channel	Filter Shape	Package Type	1st Channel	Pigtails Diameter	Fiber Length	Connector
05:50GHz	32:32 Channel 40:40 Channel 48:48 Channel 80:80 Channel 96:96 Channel	G: Gaussian	C: 120x70x12 R:19" Rack	645:196.45T Hz	25:250µm 90:900µm XX: Others	05:0.5m 10:1.0m 15:1.5m XX: Others	00: None FP: FC/PC FA: FC/APC SP: SC/PC SA: SC/APC LP: LC/PC LA: LC/APC XX: Others

**Part Number Example:** AAWG-05-96-C-645-90-10-LC

**Description:** 50GHz 96 Channel DWDM Athermal Arrayed Wave-guide Grating Module, 196.45~191.70, packed in 120x70x12, with LC/PC connectors at all ports.

### Ordering Information for Custom Parts

If you need to customize other specifications, please provide detailed description for your requirement.