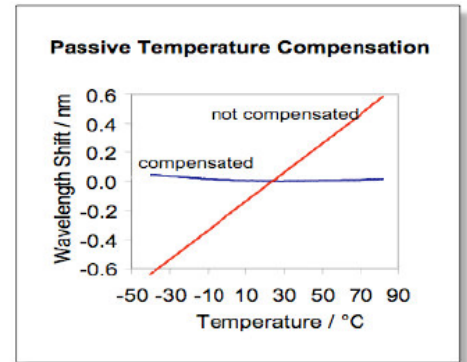




DWDM Athermal Arrayed Waveguide Grating Module

DK Photonics Athermal AWG DWDM (Arrayed Waveguide 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. Both C- and L-band devices are available with Flat top spectral response. Custom frequency grids, fiber types and connectorisation options are also available.

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



Features

- ◆ 100GHz ITU channel spacing
- ◆ Low insertion loss
- ◆ Multi-channel number
- ◆ High channel isolation
- ◆ High stability and reliability

Applications

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

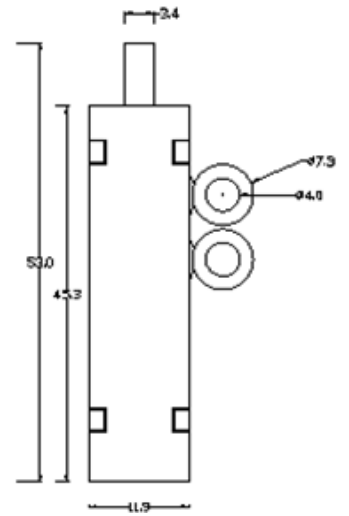
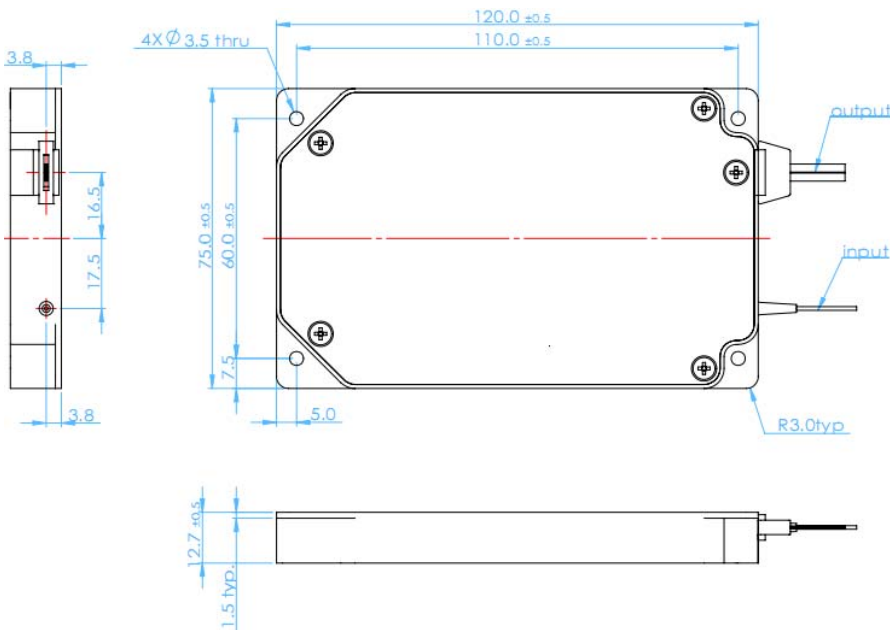
Performance Specifications

Parameter		MUX	DEMUX
Channel Wavelength (nm)		ITU 100 GHz Grid	
Number of channels		16,32,40,48 or other	
Wavelength Accuracy (nm)		± 0.05	
Insertion Loss (dB)		< 4.5	< 6.0
Channel Passband (@-1dB bandwidth) (nm)		> 0.2	> 0.3
Channel Passband (@-3dB bandwidth) (nm)		> 0.4	> 0.5
Total Crosstalk(dB)		> 20	> 23
Channel Ripple (dB)		< 0.75	
Isolation(dB)	Adjacent	> 25	
	Non-adjacent	> 30	
Insertion Loss Temperature Sensitivity (dB/°C)		<0.005	
Wavelength Temperature Shifting (nm/ °C)		<0.002	
Uniformity (dB)		< 1.5	
Polarization Dependent Loss (dB)		< 0.5	
Polarization Mode Dispersion (ps)		< 0.5	
Directivity (dB)		> 50	
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 H12.7	

**Specifications may change without notice.

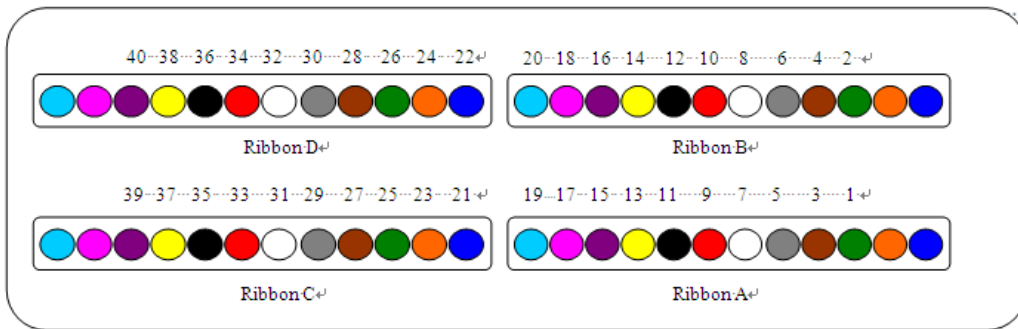


Mechanical Schematic and Dimensions



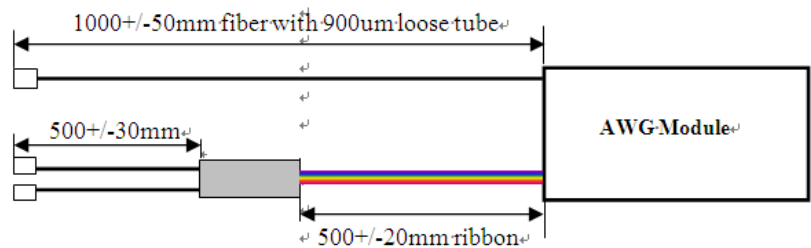
Fanout

TOP



Bottom

(see from outside of the box) →



Order information

AAWG-10-①①-②-③③③-④④-⑤⑤-⑥⑥

10	①①	②	③③③	④④	⑤⑤	⑥⑥
Channel Spacing	Channel	Code Filter Shape	1st Channel	Fiber Di- ameter	Fiber Length	Connector
05:50GHz 10:100G Hz 20:200G Hz	16:16 Channel 32:32 Channel 40:40 Channel 48:48 Channel	G: Gaussian B:Broad Gaus- sian F:Flat-Top	C60:C60 H59:H59 C59:C59 H58:H58	25:250um 90:900um 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 ST: ST/PC LP: LC/PC LA: LC/APC XX: Others