

Avanex's 100 GHz DWDM Modules are designed for use in advanced optical communications networks. They are available in various channel counts, including 4, 8, 16, and 40 channels at 100 GHz spacing. Based on dielectric thin-film filter technology and metal encapsulated micro-optics, these devices offer low insertion loss, high isolation and excellent temperature stability in a totally passive device. There is no epoxy in the optical path, and they can be interleaved to support 50 GHz bi-directional systems. They are available using standard micro-optic technology or with MultiPort technology.¹

1. Patents pending.

FEATURES

- Totally Passive
- No Epoxy in the Optical Path
- Low Insertion Loss and High Isolation
- Transport-Protocol-Independent
- Telcordia Qualified
- Available Over C-Band and L-Band Wavelength Ranges

APPLICATIONS

- Bi-Directional and Uni-Directional Networks
- Long Haul and Metropolitan Networks



MULTI-PORT TECHNOLOGY

MultiPort technology uses innovative, submicron precision alignment to enable multiple, independent optical paths to pass through the same filter simultaneously. MultiPort technology dramatically reduces the overall installation costs of DWDM communications systems, while offering improved performance in the network.

KEY OPTICAL PARAMETERS

Parameter	Conditions			
	4100 Module	8100 Module	16100 Module	40100 Module
Wavelength Range		Available over C-Band and L-Band		
Channel Spacing		100 GHz		
Channel Passband		> ± 0.11 nm (> ± 13.75 GHz)		
Insertion Loss	< 3.0 dB	< 4.5 dB	< 5.5 dB	< 6.5 dB
Uniformity	< 1.0 dB	< 1.0 dB	< 1.50 dB	< 1.50 dB
Ripple		< 0.5 dB		
Adjacent Channel Isolation		> 25 dB		
Non-Adjacent Channel Isolation		> 40 dB		
Directivity		> 55 dB		
Return Loss		> 45 dB		
Polarization Dependent Loss		< 0.2 dB		
Polarization Mode Dispersion		< 0.15 ps		
Optical Power		< 25 dBm		
Thermal Drift		< 1.2 pm/°C		

KEY ENVIRONMENTAL PARAMETERS

Operating Temperature Range	-5 °C to 65 °C
Storage Temperature Range	-40 °C to 85 °C

DESIGN

Avanex's DWDM Modules are available in a variety of sizes. Please contact us for details.

Fiber Type: Corning SMF-28™ fiber

Connectors: SC/UPC

Fiber Pigtail Length: 1.0 m ± 0.1 m from fiber exit to connector end.