

4-Port Reconfigurable Optical Add-Drop Multiplexer (ROADM)

(patents pending)

Product Description

Agiltron 4-port Reconfigurable Optical Add-Drop Multiplexer (ROADM) is based on sophisticated free space and micro-integrated optical design. This 4-port device can selectively drop any one wavelength channel among the transmission optical signals at the IN-port to the DROP-port and direct the rest of channels to the EXP-port. Simultaneously, its ADD-port is able to add an optical signal with the identical spectral ingredients as that in the DROP-port into the EXP-port. Each single device can operate over C- or L-band with 50GHz or 100GHz channel spacing. The design is scalable. By cascading these devices in a network, a multi-channel ROADM can be realized.

The 4-port ROADM products offer unprecedented features of low cost, uniform loss, high reliability and spectral stability, as well as low PDL, low PMD, and high channel isolation.

Typical Specifications

Parameter	Unit	Specification
Wavelength Range	nm	C-band or L-band
Wavelength Spacing	nm	50 GHz or 100 GHz
Passband Width @ -0.5 dB	nm	ITU-grid ± 0.11
Insertion Loss	dB	5.0
Insertion Loss Uniformity (channels)	dB	1.0
Polarization Dependent Loss	dB	0.35
Adjacent Channel Isolation	dB	>30
Non-Adjacent Channel Isolation	dB	>35
Polarization Mode Dispersion	ps	0.2
Return Loss	dB	>40
Directivity	dB	>55
Max. Input Optical Power	dBm	23
Operating Temperature	° C	0~70
Storage Temperature	° C	-5~80
Tuning Speed	ms	~20
Electric Power Consumption	W	~2.5
Mechanical Dimensions (L x W x H)	mm	170x80x28

15 Cabot Road, Woburn MA 01801 Tel: (781) 935-1200 Fax: (781) 935-2040

www.agiltron.com



Features

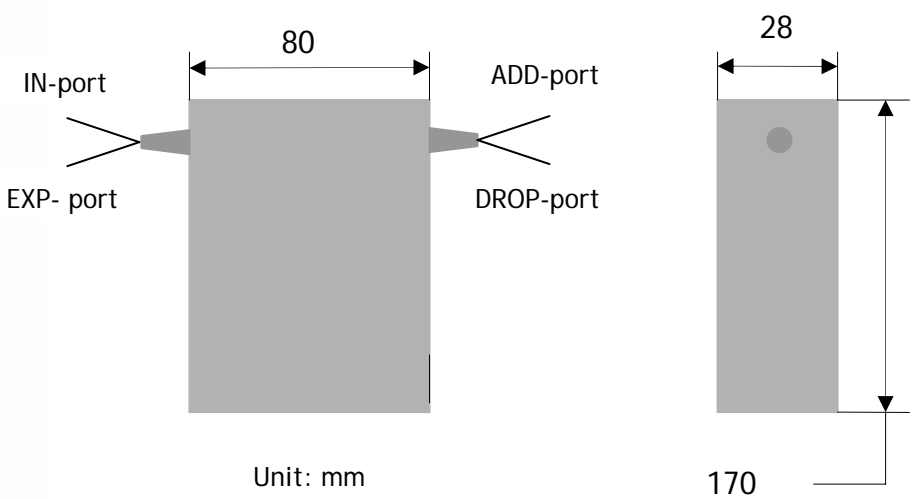
- Wide Bandwidth
- Low/Uniform Insertion Loss
- High Reliability
- Low PDL and PMD
- High Channel Isolation
- Excellent Thermal Stability

Applications

- Reconfigurable Add/Drop
- Dynamic Wavelength Management
- Dynamic Capacity Provision
- Wavelength switching nodes

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Mechanical Footprint Dimensions (mm)



Ordering Information

ROAD -	Type	Wavelength	Channel spacing	Package Type	Fiber Type	Fiber Length	Connector	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Add or Drop=12 Add and Drop=22	C band=1 L band=2 Special=0	50 GHz=5 100GHz=1 200GHz=2 Special=0	Standard=1 Special=0	SMF-28=1 Special=0	Bare Fiber=1 900um Loose tube=3 Special=0	0.25m=1 0.5m =2 1.0 m=3 Special=0	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC=7 Special=0

