

# Dynamically Reconfigurable Optical Add-Drop Multiplexer

## Product Description

The Agiltron reconfigurable Add/Drop Multiplexer (ROADM) is designed for switching and routing applications in next generation optical communications networks. Based on a proprietary micro-integrated-optical breakthrough, Agiltron's ROADMs offer unprecedented dynamic channel reconfiguration performance of high speed, low loss, high reliability, ultra compactness, and low cost. The multi-port ROADM selectively adds and drops any or all of the wavelength channels from a DWDM multi-channel stream to a set of designated fiber ports, simultaneously. The module can also be integrated with EVOAs to individually attenuate optical power at any wavelength channels. The modules cover C and L bands and handle up to 32 channels at both 50 GHz and 100 GHz spacings.

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## Features

- Solid-State High Speed
- Non-Mechanical
- Ultra-High Reliability
- Fail-Safe Latching
- Low Insertion Loss
- Wide Bandwidth
- Flat-Topped Profiles
- Low PDL, Ripple
- Ultra-Compact
- Low Cost
- Low Drive Power

## Performance Specifications

| WB Series                      | Min                                  | Typical | Max  | Unit |
|--------------------------------|--------------------------------------|---------|------|------|
| Operation Wavelength           | C Band and L Band                    |         |      |      |
| Channel Spacing                | 50                                   |         | 400  | GHz  |
| Insertion Loss/Channel         | 0.2                                  | 0.3     | 0.32 | dB   |
| Add/Drop Insertion Loss        | 0.6                                  | 0.7     | 1.2  | dB   |
| Polarization Dependent Loss    |                                      | 0.2     | 0.3  | dB   |
| Extinction                     | 20                                   | 25      | 50   | dB   |
| Polarization Mode Dispersion   |                                      |         | 0.2  | ps   |
| Return Loss                    | 50                                   |         |      | dB   |
| Switching Time                 |                                      | 50      | 100  | μs   |
| Operating Temperature          | -5                                   |         | 70   | °C   |
| Optical Power                  |                                      | 400     |      | mW   |
| Storage Temperature            | -40                                  |         | 85   | °C   |
| Driving Voltage                | 0                                    |         | 5    | V    |
| Switch/VOA type                | Solid-State Latching                 |         |      |      |
| Electrical Connector type      | Male MiniTek 57102-G02-14 compatible |         |      |      |
| Fiber Type                     | Corning SMF28                        |         |      |      |
| Package Dimension (4 channels) | (L)120x(W)90x(H)11                   |         |      | mm   |

## Applications

- Configurable Add/Drop
- Dynamic Wavelength Management
- Dynamic Capacity provision

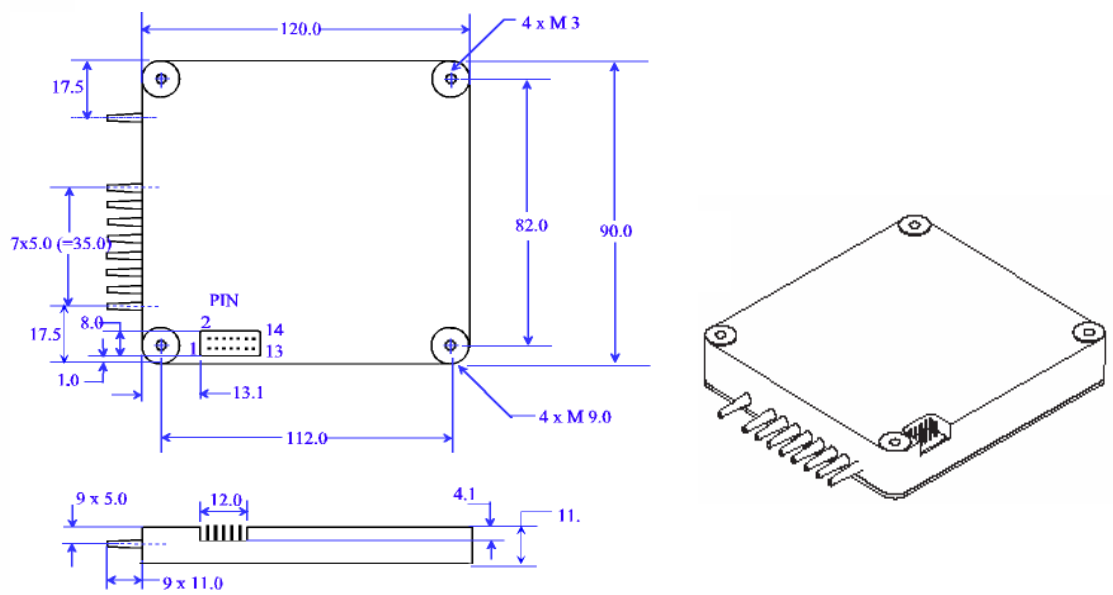


# Dynamically Reconfigurable Optical Add-Drop Multiplexer/ Filter

## Electrical Driving Requirements

Evaluation kit with TTL and RS-232 interface and Windows™ GUI is available

## Mechanical Footprint Dimensions (mm)



## Ordering Information

| RO-                      | <input type="checkbox"/>                | <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>                        | <input type="checkbox"/>                      | <input type="checkbox"/>   | <input type="checkbox"/> |
|--------------------------|---|---|---------------------------|---|---|--|--------------------------|
| Type                     | Wavelength                              | Spacing   | Config                    | Fiber Type                                      | Fiber Length                                  | Connector Type   |                          |
| Channels =<br>Special=00 | C band = 1<br>L band = 2<br>Special = 0 | 50 G=5<br>100G =1<br>200G =2<br>300G =3<br>400G =4<br>Special = 0 | Standard= 1<br>Special =0 | SMF-28 250um=1<br>SMF-28 900um=2<br>Special = 0 | 0.25m= 1<br>0.5m = 2<br>1.0 m= 3<br>Special=0 | None = 1<br>FC/PC = 2<br>FC/APC = 3<br>SC/PC = 4<br>SC/APC = 5<br>ST/PC = 6<br>LC = 7<br>Special = 0 |                          |

