

# 100GHz 40 Channel DWDM Mux + Demux Module

(patent pending)

## Product Description

Agiltron's Wavelength Division Multiplexer (WDM) is based on thin film filter technology. This proven technology offers wide channel bandwidth, flexible channel configuration, low insertion loss, and high isolation. The DWDM series modules are used to add or drop particular wavelengths and are ideal for telecommunications and networking. Agiltron's DWDM modules are Bellcore GR -1221 qualification tested and are epoxy-free in the optical path.



## Features

- 100 GHz Channel Spacing
- High Channel Isolation
- Low Insertion Loss
- Highly Stable & Reliable
- Epoxy-Free Optical Path
- Low Profile Packaging

## Performance Specifications

| Parameter                                         |              | Value             |
|---------------------------------------------------|--------------|-------------------|
| Channel Wavelength (nm)                           |              | ITU 100 GHz Grid  |
| Center Wavelength Accuracy (nm)                   |              | $\pm 0.05$        |
| Minimum Channel Spacing (GHz)                     |              | 100(0.8nm)        |
| Channel Passband (@-0.5dB bandwidth) (nm)         |              | $\geq 0.2$        |
| Channel Passband (@-1dB bandwidth) (nm)           |              | $\geq 0.4$        |
| Channel Passband (@-3dB bandwidth) (nm)           |              | $\geq 0.6$        |
| Insertion Loss - passband (dB)                    |              | $\leq 5.5$        |
| Insertion Loss - 1310nm port (dB)                 |              | $\leq 1.5$        |
| Uniformity(dB)                                    |              | $\leq 1.0$        |
| Channel Ripple (dB)                               |              | $\leq 0.5$        |
| Isolation @Add/Drop Channel (dB)                  | Adjacent     | $\geq 25$         |
|                                                   | Non-adjacent | $\geq 30$         |
| Insertion Loss Temperature Sensitivity (dB/ ° C ) |              | $\leq 0.005$      |
| Wavelength Temperature Shifting (nm/ ° C )        |              | $\leq 0.002$      |
| Polarization Dependent Loss (dB)                  |              | $\leq 0.5$        |
| Polarization Mode Dispersion (ps)                 |              | $\leq 0.5$        |
| Directivity (dB)                                  |              | $\geq 50$         |
| Return Loss (dB)                                  |              | $\geq 45$         |
| Power Handling (mW)                               |              | 300               |
| Operating Temperature ( ° C )                     |              | 0 ~ +70           |
| Storage Temperature ( ° C )                       |              | -40 ~ +85         |
| Dimension (mm)                                    |              | W481.8xD261.2xH44 |

## Applications

- Add/Drop Channels
- Dense WDM Systems
- CATV Fiberoptic Links

# 100GHz 40 Channel DWDM Mux + Demux Module

## Ordering Information

| DWDM- | 1           | 4 0                | <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 1                                    | 1                                    | 8                           |
|-------|-------------|--------------------|--------------------------|----------------------------------------------------------------------------|--------------------------------------|--------------------------------------|-----------------------------|
|       | Ch. Spacing | Number of Channels | Configuration            | 1st ITU Channel Number                                                     | Package                              | Monitor                              | Connector                   |
|       | 100G=1      | 40 Channel=40      | With 1310 port = 1       | Refer ITU Channel Table<br>For example,<br>1560.61nm=C21<br>1588.98nm=C23  | 1RU 19' rack<br>box = 1<br>Special=0 | With tap<br>monitor = 1<br>Special=0 | Duplex<br>LC=8<br>Special=0 |

\*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

15 Presidential Way , Woburn, MA 01801 Tel: (781) 935-1200 Fax: (781) 935-2040

[www.agiltron.com](http://www.agiltron.com)