

# 100GHz 8 Channel Dense Wavelength Division Multiplexer

(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 a particular wavelength 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.



## Performance Specifications

| Parameter                                      |              | Mux               | Demux     |
|------------------------------------------------|--------------|-------------------|-----------|
| 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)      |              | $\geq 0.22$       |           |
| Insertion Loss (dB)                            |              | $\leq 3.2$        |           |
| Channel Uniformity (dB)                        |              | $\leq 1.0$        |           |
| Channel Ripple (dB)                            |              | $\leq 0.3$        |           |
| Isolation @Add/Drop Channel (dB)               | Adjacent     | N/A               | $\geq 25$ |
|                                                | Non-adjacent | N/A               | $\geq 35$ |
| Insertion Loss Temperature Sensitivity (dB/°C) |              | $\leq 0.003$      |           |
| Wavelength Temperature Shifting (nm/°C)        |              | $\leq 0.002$      |           |
| Polarization Dependent Loss (dB)               |              | $\leq 0.10$       |           |
| Polarization Mode Dispersion (ps)              |              | $\leq 0.1$        |           |
| Directivity (dB)                               |              | $\geq 50$         |           |
| Return Loss (dB)                               |              | $\geq 45$         |           |
| Power Handling (mW)                            |              | 300               |           |
| Operating Temperature (°C)                     |              | 0 ~ +70           |           |
| Storage Temperature (°C)                       |              | -40 ~ +85         |           |
| Dimensions (mm)                                |              | L110 x W95 x H7.5 |           |

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

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## Features

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

## Applications

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

# 100GHz 8 Channel Dense Wavelength Division Multiplexer

## Ordering Information

| DWDM- | 1           | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/>                    | <input type="checkbox"/>                 | <input type="checkbox"/>                                                             |
|-------|-------------|---------------------------------------------------|--------------------------|----------------------------------------------------------------------------|---------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------|
|       | Ch. Spacing | Number of Channels                                | Configuration            | 1st ITU Channel Number                                                     | Pigtail Style                               | Fiber Length                             | Connector                                                                            |
|       | 100G=1      | 8 Channel=08                                      | Mux=M<br>Demux=D         | Refer ITU Channel Table<br>For example,<br>1560.61nm=C21<br>1588.98nm=C23  | Bare Fiber=1<br>900um Jacket=2<br>Special=0 | 0.25M=1<br>0.5M=2<br>1.0M=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 |

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