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# 200GHz 16-Channel Dense Wavelength Division Multiplexer



ACP's Dense Wavelength Division Multiplexer (DWDM) utilizes thin film coating technology and proprietary design of non-flux metal bonding micro optics packaging to achieve optical add and drop at the ITU wavelength. It provides ITU channel center wavelength, low insertion loss, high channel isolation, wide pass band, low temperature sensitivity and epoxy free optical path . It can be used for wavelength add/drop in telecommunication network system. All AC Photonics' products are Telcordia qualification tested.

#### **Key Features**

- 200GHz ITU Channel Spacing
- Low Insertion Loss
- Wide Pass Band
- High Channel Isolation
- High Stability and Reliability
- Epoxy Free Optical Path

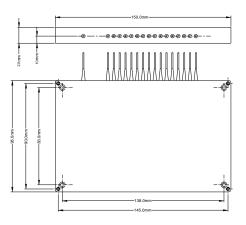
### **Applications**

- Channel Add / Drop
- DWDM Network
- Wavelength Routing
- Fiber Optical Amplifier
- CATV Fiberoptic System

### **Performance Specifications**

| Parameter                              |              | Specifications         |         |  |  |
|--|--------------|------------------------|---------|--|--|
|  |              | Mux                    | Demux   |  |  |
| Channel Wavelength                     |              | ITU 100 GHz Grid       |         |  |  |
| Center Wavelength Accuracy             |              | ± 0.1nm                |         |  |  |
| Minimum Channel Spacing                |              | 200GHz                 |         |  |  |
| Channel Passband (@-0.5dB bandwidth)   |              | ≥ 0.5nm                |         |  |  |
| Insertion Loss                         |              | <u>≤</u> 3.8dB         | ≤ 3.8dB |  |  |
| Channel Uniformity                     |              | <u>≤</u> 1.5dB         | ≤ 1.5dB |  |  |
| Channel Ripple                         |              | <u>≤</u> 0.4dB         | ≤ 0.4dB |  |  |
| Channel Isolation                      | Adjacent     | N/A                    | ≥ 30dB  |  |  |
|  | Non-adjacent | N/A                    | ≥ 40dB  |  |  |
| Insertion Loss Temperature Sensitivity |              | ≤ 0.003dB/°C           |         |  |  |
| Wavelength Temperature Shifting        |              | <u>&lt;</u> 0.002nm/°C |         |  |  |
| Polarization Dependent Loss            |              | ≤ 0.10dB               |         |  |  |
| Polarization Mode Dispersion           |              | <u>≤</u> 0.10ps        |         |  |  |
| Directivity                            |              | ≥ 50dB                 |         |  |  |
| Return Loss                            |              | ≥ 45dB                 |         |  |  |
| Optical Power                          |              | ≤ 300mW                |         |  |  |
| Operating Temperature                  |              | 0 to +70°C             |         |  |  |
| Storage Temperature                    |              | -40 to +85°C           |         |  |  |
| Package Dimensions                     |              | L150mm x W95mm x H20mm |         |  |  |

### **Mechanical Dimensions**



## **Spectral Chart**

200Ghz 16-Channel DeMux

## **Ordering Information**

| DWDM |                 |                      |                      |                     |   |                      |  |
|------|-----------------|----------------------|----------------------|---------------------|---|----------------------|--|
|      | Channel Spacing | Number of<br>Channel | Configuration        | 1 st ITU<br>Channel | Pigtail Style                                       | Fiber Length         | In/Out<br>Connector  |
|      | 2 = 200GHz      | 16 = 16 Channel      | M = Mux<br>D = Demux |                     | 1 = Bare Fiber<br>2 = 900um Jacket<br>3 = 3mm Cable | 1 = 1.0m<br>2 = 2.0m | 0 = None<br>1 = FC/APC<br>2 = FC/PC<br>3 = SC/APC<br>4 = SC/PC<br>5 = ST<br>6 = LC/UPC<br>7 = LC/APC |