Radiant Communications Corporation offers a fine line of high quality Coarse Wavelength Division Multiplexing Devices for the multiplexing & demultiplexing of singlemode CWDM wavelengths.

**DESCRIPTION**

- Low Insertion Loss
- High Port Isolation Values
- Many Customized Packaging Options For Your Application

**FEATURES**

- Environmentally stable
- Easy installation
- Low Insertion, Return Loss Values
- Optional Test & Express Ports

**PACKAGING OPTIONS:**
- Standard cartridge
- Mini cartridge
- LGX style cartridge (single width)
- 1RU rack mount
- Outdoor dome splice enclosures

*Other options are available*

**CONNECTORS**

All popular adaptor styles are available

**OPTIONAL PORTS**

- Optical TX & RX Test Ports
- Express Port (1260-1635nm)

**BENEFITS**

- Environmentally stable
- Easy installation
- Low Insertion, Return Loss Values
- Optional Test & Express Ports

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**Radiant Communications Corp**

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Phone: 908-757-7444 or 800-969-3427
Fax: 908-757-8666
Email: sales@rccfiber.com

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Fiber Optic CWDM

**DIMENSIONS**

Standard Cartridge **

**OPTIC AND/OR ELECTRIC SPECIFICATION**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Unit</th>
<th>Value</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Channel Wavelength</td>
<td>nm</td>
<td>1271~1611</td>
<td></td>
</tr>
<tr>
<td>Express Port Wavelengths</td>
<td>nm</td>
<td>1260-1635</td>
<td></td>
</tr>
<tr>
<td>Channel Number</td>
<td>NA</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Channel Spacing</td>
<td>mm</td>
<td>20</td>
<td></td>
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<tr>
<td>Center Wavelength (Channel)</td>
<td>nm</td>
<td>ITU-T Grid</td>
<td>CWDM</td>
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<tr>
<td>Pass <a href="mailto:Band@-0.5dB">Band@-0.5dB</a></td>
<td>nm</td>
<td>cw+/-6.5</td>
<td></td>
</tr>
<tr>
<td>CWDM 8 Channel Insertion Loss</td>
<td>dB</td>
<td>≤3.5</td>
<td></td>
</tr>
<tr>
<td>Express to Com Insertion loss</td>
<td>dB</td>
<td>≤2.9</td>
<td></td>
</tr>
<tr>
<td>CWDM Adjacent Channel</td>
<td>dB</td>
<td>≥30</td>
<td>Only for Demux</td>
</tr>
<tr>
<td>CWDM Non-Adjacent Channel</td>
<td>dB</td>
<td>≥45</td>
<td></td>
</tr>
<tr>
<td>1310nm Upgrade Channel Isolation</td>
<td>dB</td>
<td>≥40</td>
<td></td>
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<tr>
<td>Com to TSP port Insertion Loss</td>
<td>dB</td>
<td>≤20.4</td>
<td>Only for Mux</td>
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<tr>
<td>Return loss</td>
<td>dB</td>
<td>≥45</td>
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</tr>
<tr>
<td>Directivity</td>
<td>dB*</td>
<td>≥50</td>
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<tr>
<td>PDL</td>
<td>dB</td>
<td>≤0.15</td>
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</tr>
<tr>
<td>PMD</td>
<td>PS</td>
<td>≤0.15</td>
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</tr>
<tr>
<td>Power Handling</td>
<td>mW</td>
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</table>

All values include connector

**Absolute Maximum Ratings**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation Temperature</td>
<td>-40 ~ 85</td>
<td>°C</td>
</tr>
<tr>
<td>Operation Humidity</td>
<td>5 ~ 95</td>
<td>%RH</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>&gt;5</td>
<td>N</td>
</tr>
</tbody>
</table>

**CWDM PART NUMBER BUILD LIST**

**CWDM ITEM IDENTIFIER**

- **MUX/DEMUX**: Select **M** for Mux, **D** for Demux, **MD** for Mux and Demux unit.

**SEPARATE WAVELENGTH TOTAL**: Select **1** for 1 wavelength, **4** for 4 wavelengths, etc

**OPTIONAL PORTS**: Select **M2** for dual test ports (-20dB TX & RX)

- **EX** for DWDM express port (1260-1635nm)
- **M2EX** for dual test & express ports (1260-1635nm)

**PACKAGING OPTIONS**

Select a following:

- **SE** – Outdoor dome enclosure mounted w/ one mini CWDM passive filter
- **SE2** – Outdoor dome enclosure mounted w/ two mini CWDM passive filters
- **1U** – 1RU Rack mount
- **LG** – LGX Style package option
- **MRC** – Mini standard package option
- **RC** – Standard package (2mm or 900 micron diameter leads)

**CONNECTOR / ADAPTOR OPTIONS**

Select a following:

- **A** – SCAPC
- **E** – SCUPC
- **F** – LCUPC
- **G** – LCAPC

Please state all wavelengths needed and any additional ordering information to your RCC Sales Representative.