

Cisco ONS 15216 48-Channel 50-GHz De-Interleaver with Coupler

Product Overview

The Cisco® ONS 15216 48-Channel 50-GHz De-Interleaver with Coupler plugs into either the Cisco ONS 15216 Exposed Faceplate Mux/Demux 40-Channel Patch Panel or the Cisco ONS 15216 Exposed Faceplate Mux/Demux 48-Channel Patch Panel for an in-service capacity upgrade from 40 to 80 channels or from 48 to 96 channels.

Figure 1. Cisco ONS 15216 48-Channel 50-GHz De-Interleaver with Coupler



The de-interleaver with coupler is also compatible with the existing Cisco ONS 15216 Mux/Demux 40-Channel Patch Panel. The previous interleaver de-interleaver module, Cisco ONS 15216 Mux/Demux 40-Channel Patch Panel and Cisco ONS 15216 Mux/Demux Patch Panel 50-GHz Interleaver De-Interleaver (15216-MD-ID-50) is compatible with all 40-channel muxponder/demuxponder units, but not with the Cisco ONS 15216 Exposed Faceplate Mux/Demux 48-Channel Patch Panel. The Cisco ONS 15216 48-Channel 50-GHz De-Interleaver with Coupler is recommended for systems transporting 100-Gbps wavelengths, as its use of a coupler instead of an interleaver on the transmit stage reduces filtering penalties.

Figures 2 and 3 illustrate the different application configurations in which the Cisco ONS 15216 48-Channel 50-GHz De-Interleaver with Coupler can be deployed.

Figure 2. 40- or 48-Channel In-Service Upgrade to 80- or 96-Channel Standalone Configuration

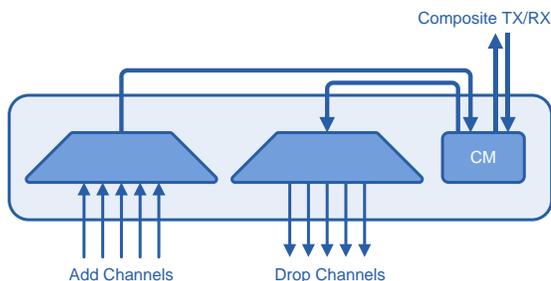
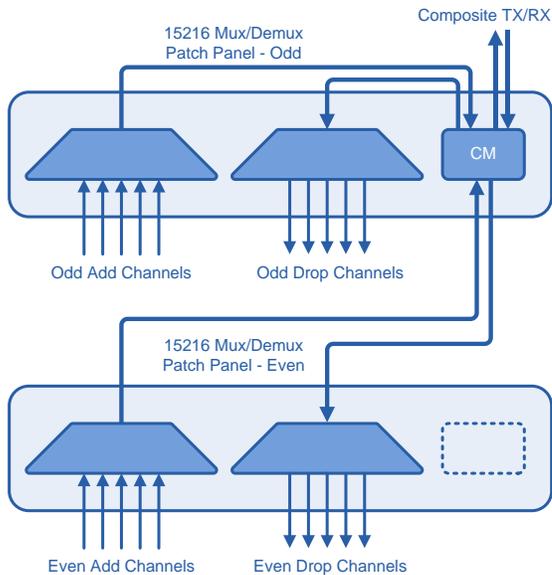


Figure 3. 80- or 96-Channel Standalone Configuration



Product Specifications

Tables 1 through 4 provide optical, environmental, mechanical, compatibility and compliance specifications for the Cisco ONS 15216 48-Channel 50-GHz De-Interleaver with Coupler.

Table 1. Optical Specifications

| Parameter | Minimum | Typical | Maximum |
|-------------------------------------|---------|-------------|-------------|
| Input optical power | 500 mW | | |
| De-Interleaver Specification | | | |
| Insertion loss | 1.5 dB | ± 1.8 dB | 2.5 dB |
| Insertion loss uniformity | | 0.35 dB | 0.5 dB |
| Channel band ripple | | | 0.3 dB |
| Group delay ripple (GDR) | | 1.8 dB | ±2.5 dB |
| Chromatic dispersion (CD) | | ±15.0 ps/nm | ±20.0 ps/nm |
| Optical return loss | 40 dB | 45 dB | |
| Polarization dependent loss (PDL) | | 0.3 dB | 0.4 dB |
| Polarization mode dispersion (PMD) | | 0.25 ps | 0.3 ps |
| Operating bandwidth | ±10 GHz | | |
| Adjacent channel isolation | 25 dB | 28 dB | |
| Directivity | 40 dB | | |
| Coupler Specification | | | |
| Insertion loss | 2.5 dB | | 3.5 dB |
| Insertion loss uniformity | | | 0.5 dB |
| Insertion Loss ripple | | | 0.2 dB |
| Chromatic dispersion | | | ±5.0 ps/nm |

| Parameter | Minimum | Typical | Maximum |
|------------------------------|---------|---------|---------|
| Optical return loss | 40 dB | | |
| Polarization dependent loss | | | 0.1 dB |
| Polarization mode dispersion | | | 0.1 ps |
| Directivity | 50 dB | | |

Table 2. Environmental and Mechanical Specifications

| Parameter | Minimum | Maximum |
|-----------------------------|---------------|--------------------|
| Operating temperature range | 23°F (-5°C) | 149°F (65°C) |
| Storage temperature range | -40°F (-40°C) | 185°F (85°C) |
| Height | | 2.44 in. (62.2 mm) |
| Width | | 2.65 in. (67.2 mm) |
| Depth | | 9.9 in. (251.7 mm) |
| Weight | | 1.1 lbs. (0.5 kg) |
| Humidity | 5% | 95% |
| USB port power | 400 mW | 600 mW |

Table 3. Coupler and De-Interleaver Compatibility

| Muxponder/Demuxponder Product Number | 48-Channel 50-GHz/100-GHz Optical De-interleaver with Coupler Module (15216-MD-48-CM) | 50-GHz/100-GHz Optical Interleaver and De-interleaver Module (15216-MD-ID-50) |
|--------------------------------------|---|---|
| 15216-EF-40-ODD | Yes | Yes |
| 15216-EF-40-EVEN | Yes | Yes |
| 15216-MD-48-ODD | Yes | No |
| 15216-MD-48-EVEN | Yes | No |
| 15216-MD-40-ODD | Yes | Yes |
| 15216-MD-40-EVEN | Yes | Yes |

Table 4. Regulatory Compliance

| Safety | Environmental |
|--|--------------------|
| GR-1089-Issue 6 UL60950-1 IEC 60950-1 Ed.2 | GR-63-CORE Issue 3 |

Ordering Information

Table 5 provides ordering information.

Table 5. Ordering Information

| Part Number | Description |
|-----------------|---|
| 15216-MD-48-CM= | Cisco ONS 15216 48-Channel 50-GHz De-Interleaver with Coupler |

For More Information

For more information, visit [Cisco ONS 15216 DWDM System](#), or contact your local account representative. Also visit [Cisco End-of-Life Policy](#) and [Subscribe](#) to receive end-of-life and end-of-sale information.



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