

# 40CH Odd 190.7875-196.6375THz DWDM Mux Demux + Monitor Port

DATA CENTER & CLOUD COMPUTING INFRASTRUCTURE SOLUTIONS



## Overview

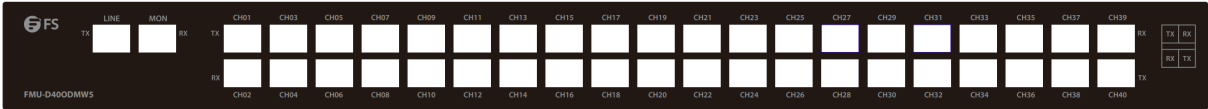
This Odd Channels DWDM Mux Demux has 150GHz channel spacing and performs 40 channel multiplexing or demultiplexing at the ITU wavelengths in Super C-band, greatly expanding the effective working spectrum compared with the traditional C band and extended C band. It offers a combination of low optical insertion loss and high channel isolation along with long term reliability and low cost per channel.

## Highlights

- Multiplexing of up to 40 Channels on Fiber Pair to Maximize the Usefulness of Existing Fiber
- Low Insertion Loss: Typical 5.5dB, Max 6.2dB
- Wide Pass Band Flattop Profile
- Super C-band Can Improve the System Transmission Capacity
- Passive Transparent Any Rate, Any Service Multiplexing
- Compliant with All Optical Networking Products (ITU Grid)
- Monitor Port Taps off 1% of the Signal to Monitor the Channel Power Levels

Front View and Port Description

| LINE Port |         | Special Service |        | Channel Port |         |     |         |         |
|-----------|---------|-----------------|--------|--------------|---------|-----|---------|---------|
| LINE TX   | LINE RX | Mon TX          | Mon RX | CH01 TX      | CH03 TX | ... | CH37 TX | CH39 TX |
|           |         |                 |        | CH02 RX      | CH04 RX | ... | CH38 RX | CH40 RX |



Technical Data

| Parameter                      | Value                                |
|--------------------------------|--------------------------------------|
| ITU Channel                    | 40 Odd Channels 190.7875-196.6375THz |
| Channel Spacing                | 150GHz                               |
| Channel Passband Insertion     | ±16.25GHz                            |
| Insertion Loss                 | ≤6.2dB, 5.5dB Typical                |
| Insertion Loss @ 1% Mon TX     | ≤26dB                                |
| Insertion Loss @ 1% Mon RX     | ≤22dB                                |
| Insertion Loss Uniformity      | 1.5dB                                |
| Wavelength Accuracy            | ±50pm                                |
| Adjacent Channel Isolation     | ≥25dB                                |
| Non-adjacent Channel Isolation | ≥30dB                                |
| Ripple                         | ≤0.5dB                               |
| Technology                     | AAWG (Flat-top)                      |

| Parameter                    | Value                      |
|------------------------------|----------------------------|
| Polarization Dependent Loss  | 0.5dB                      |
| Polarization Mode Dispersion | 1.0ps                      |
| Operating Temperature        | -5 to 65 ℃ (23 to 149°F)   |
| Storage Temperature          | -40 to 85 ℃ (-40 to 185°F) |

Notes:

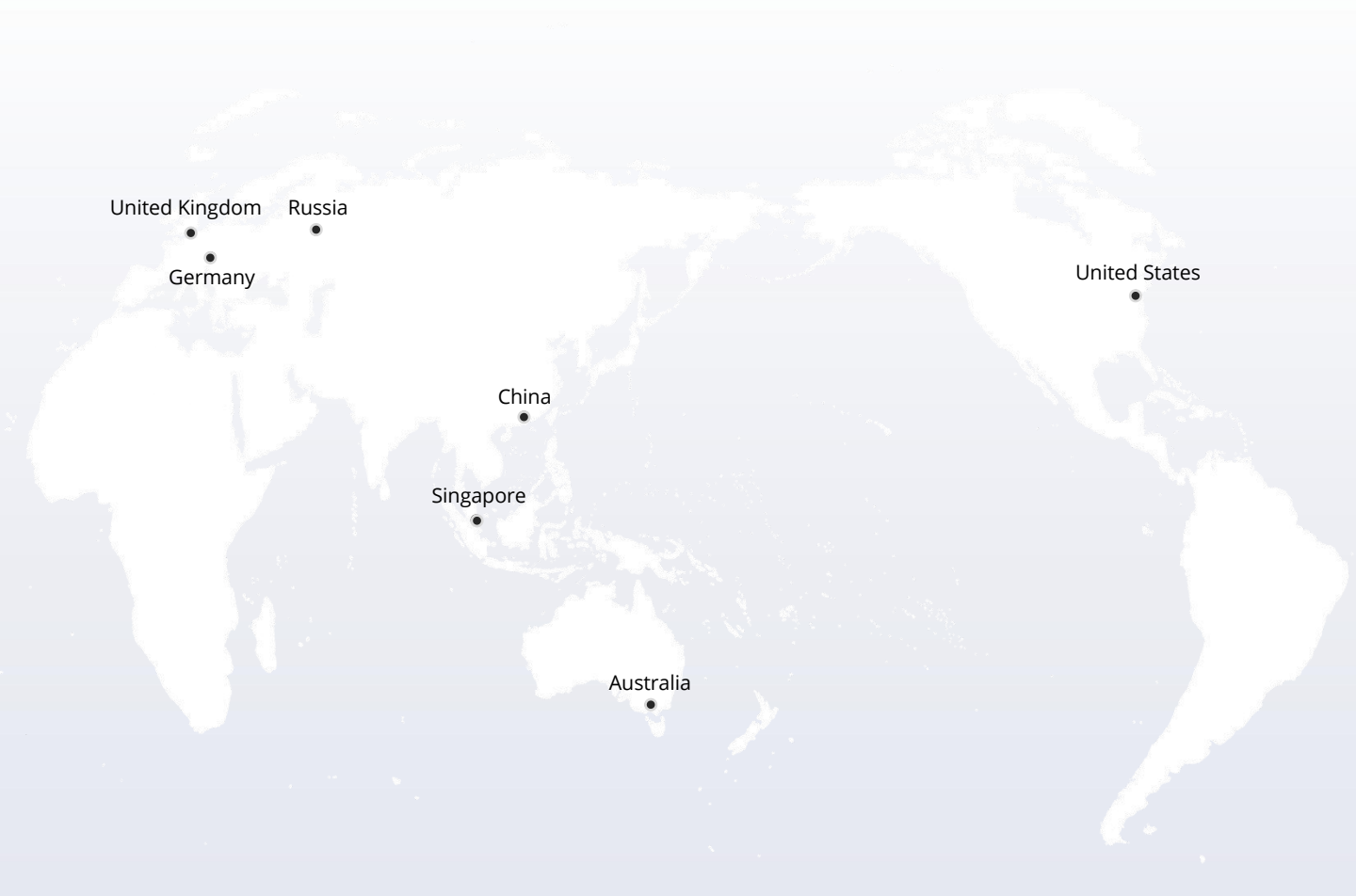
1. Specified with connectors and adapters.

Channel Plan

| Part Number | First Channel Frequency (THz) | Last Channel Frequency (THz) |
|-------------|-------------------------------|------------------------------|
| Odd         | 190.7875                      | 196.6375                     |
| Even        | 190.7125                      | 196.5625                     |

| Channel | Odd      |          | Even     |          |
|---------|----------|----------|----------|----------|
|         | f(THz)   | λ(nm)    | f(THz)   | λ(nm)    |
| 1       | 196.6375 | 1524.595 | 196.5625 | 1525.176 |
| 2       | 196.4875 | 1525.758 | 196.4125 | 1526.341 |
| 3       | 196.3375 | 1526.924 | 196.2625 | 1527.508 |
| 4       | 196.1875 | 1528.092 | 196.1125 | 1528.676 |
| 5       | 196.0375 | 1529.261 | 195.9625 | 1529.846 |
| 6       | 195.8875 | 1530.432 | 195.8125 | 1531.018 |
| 7       | 195.7375 | 1531.605 | 195.6625 | 1532.192 |
| 8       | 195.5875 | 1532.779 | 195.5125 | 1533.367 |
| 9       | 195.4375 | 1533.956 | 195.3625 | 1534.545 |
| 10      | 195.2875 | 1535.134 | 195.2125 | 1535.724 |
| 11      | 195.1375 | 1536.314 | 195.0625 | 1536.905 |
| 12      | 194.9875 | 1537.496 | 194.9125 | 1538.087 |
| 13      | 194.8375 | 1538.679 | 194.7625 | 1539.272 |
| 14      | 194.6875 | 1539.865 | 194.6125 | 1540.458 |
| 15      | 194.5375 | 1541.052 | 194.4625 | 1541.647 |
| 16      | 194.3875 | 1542.241 | 194.3125 | 1542.837 |
| 17      | 194.2375 | 1543.432 | 194.1625 | 1544.029 |
| 18      | 194.0875 | 1544.625 | 194.0125 | 1545.222 |

| Channel | ODD      |          | Even     |          |
|---------|----------|----------|----------|----------|
|         | f(THz)   | λ(nm)    | f(THz)   | λ(nm)    |
| 19      | 193.9375 | 1545.82  | 193.8625 | 1546.418 |
| 20      | 193.7875 | 1547.016 | 193.7125 | 1547.615 |
| 21      | 193.6375 | 1548.215 | 193.5625 | 1548.815 |
| 22      | 193.4875 | 1549.415 | 193.4125 | 1550.016 |
| 23      | 193.3375 | 1550.617 | 193.2625 | 1551.219 |
| 24      | 193.1875 | 1551.821 | 193.1125 | 1552.424 |
| 25      | 193.0375 | 1553.027 | 192.9625 | 1553.631 |
| 26      | 192.8875 | 1554.235 | 192.8125 | 1554.839 |
| 27      | 192.7375 | 1555.444 | 192.6625 | 1556.05  |
| 28      | 192.5875 | 1556.656 | 192.5125 | 1557.262 |
| 29      | 192.4375 | 1557.869 | 192.3625 | 1558.477 |
| 30      | 192.2875 | 1559.084 | 192.2125 | 1559.693 |
| 31      | 192.1375 | 1560.302 | 192.0625 | 1560.911 |
| 32      | 191.9875 | 1561.521 | 191.9125 | 1562.131 |
| 33      | 191.8375 | 1562.742 | 191.7625 | 1563.353 |
| 34      | 191.6875 | 1563.965 | 191.6125 | 1564.577 |
| 35      | 191.5375 | 1565.189 | 191.4625 | 1565.802 |
| 36      | 191.3875 | 1566.416 | 191.3125 | 1567.03  |
| 37      | 191.2375 | 1567.645 | 191.1625 | 1568.26  |
| 38      | 191.0875 | 1568.875 | 191.0125 | 1569.491 |
| 39      | 190.9375 | 1570.108 | 190.8625 | 1570.725 |
| 40      | 190.7875 | 1571.342 | 190.7125 | 1571.96  |



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