

Wavelength Mux (WM1)

Next Generation PON | NG-PON2

Description

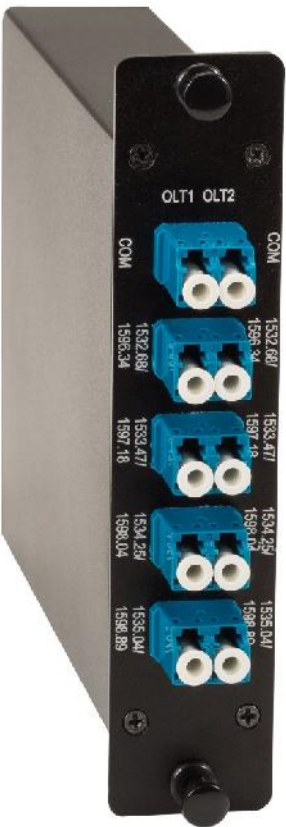
The Wavelength Mux (WM1) is a passive device used to support Next Generation PON (NG-PON2) with up to 40 Gigabit capacity via 4 wavelengths (4x10G per port) and advancing to 80 Gigabit capacity via 8 wavelengths (8x10G per port) in the future. The Wavelength Mux combines and separates the 4 downstream (L-Band) and upstream (C-Band) wavelengths over a single fiber.

Premium optical components and high-quality connectivity ensure superior performance, the lowest loss, and robust network reliability.

WMs are available in several housing options: LGX[®] module, ruggedized cassette, rack-mount, and customized housings.

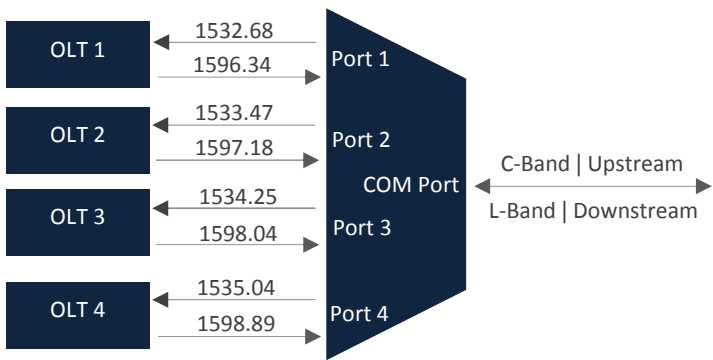
Features

- Low insertion loss
- High isolation
- Excellent environmental & mechanical stability
- Premium grade components & connectivity
- Available with Monitoring ports
- GR-63-CORE, ITU-T G989, RoHS compliant



2x WM1 LC High-Density LGX[®] Module
(note: 2 WM1's in a single LGX[®] Module with LC adapters)

Wavelength Mux 4 Channel diagram



C-Band wavelengths: 1532.68 | 1533.47 | 1534.25 | 1535.04
L-Band wavelengths: 1596.34 | 1597.18 | 1598.04 | 1598.89

| Common | Common |
|-------------------|-------------------|
| 1532.68 / 1596.34 | 1532.68 / 1596.34 |
| 1533.47 / 1597.18 | 1533.47 / 1597.18 |
| 1534.25 / 1598.04 | 1534.25 / 1598.04 |
| 1535.04 / 1598.89 | 1535.04 / 1598.89 |

2x WM1 wavelength port designation

2x WM1 LC High-Density LGX Module

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Optical specifications

| Parameter | Value |
|---|--|
| Central wavelength (nm) | 1532.68 / 1596.34 Port 1 1533.47 / 1597.18 Port 2 1534.25 / 1598.04 Port 3 1535.04 / 1598.89 Port 4 Common port Port 5 |
| Passband Channel ports 1 – 4 (nm) | ± 0.12 |
| Insertion loss (includes connectors) (dB) | 2.0 C-Band Upstream 2.0 L-Band Downstream |
| Passband ripple (dB) | 0.40 |
| Isolation (dB) | 32 Adjacent channel 36 Non-Adjacent Channel 11 O-Band, GPON/XG-PON, RF, L-Band |
| Directivity (dB) | 55 |
| Return loss all ports | 50 |
| Polarization dependent loss (dB) | 0.30 |
| Polarization mode dispersion (ps) | 0.20 |
| Maximum optical power (mW) | 300 |
| Operating temperature (°C) | -5 to +75 |
| Storage temperature (°C) | -40 to +85 |
| Reliability | GR-63-CORE, ITU-T G989 |

Housing dimensions

| | |
|---|----------------|
| LGX [®] single slot wide module (mm) | 129 x 125 x 28 |
| Connector/Adapter type for all ports | LC/UPC |

Premium-Grade connectors and adapters

Ordering information

Part number: MFT-M/NGP2-WM-LCU/LCU(2)

Description: 2x Wavelength Mux WM1 LC High-Density LGX Module

Available in all the following adapters (connectors): LC/APC, LC/UPC, SC/APC, SC/UPC

Note: Other housing options available in ruggedized cassette, rack-mount, and custom

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