

Introduction:

Wavelength Division Multiplexing (WDM) modules combine (i.e. "mux") and separate (i.e. "dmux") fiber-optic signals.

Three basic schemes exist: 1310/1550 **WDM**, **Coarse WDM (CWDM)** and **Dense WDM (DWDM)**. **DWDM** provides the greatest capacity per fiber -- potentially hundreds of individual fiber-optic signals (i.e. channels) can be combined on a single fiber.

Fiberdyne Labs offers **DWDM modules** in a wide variety of formats. While Fiberdyne offers some models as "standard," we will also produce customized **DWDM modules**. Customization can include the number and selection of **DWDM channels**. Additionally, modules may include tap/monitoring capability and variable attenuation. These modules may be a number of standard form factors, such as LGX, rackmount, wallmount, standalone filters, and EIA-standard 19/23-inch rackmount.

DWDM is a proven technology, which offers flat channel bandwidth, flexible channel configuration, low insertion loss and high isolation. Fiberdyne Labs modules can be optically daisy-chained, to provide additional channels as bandwidth needs grow. Modules are available on the C & L bands, ITU 100GHz grid at channel spacing of 100GHz or 200GHz.

Features:

- Epoxy-Free Optical Path
- Low Insertion Loss
- High Return Loss
- ITU Standard Channels

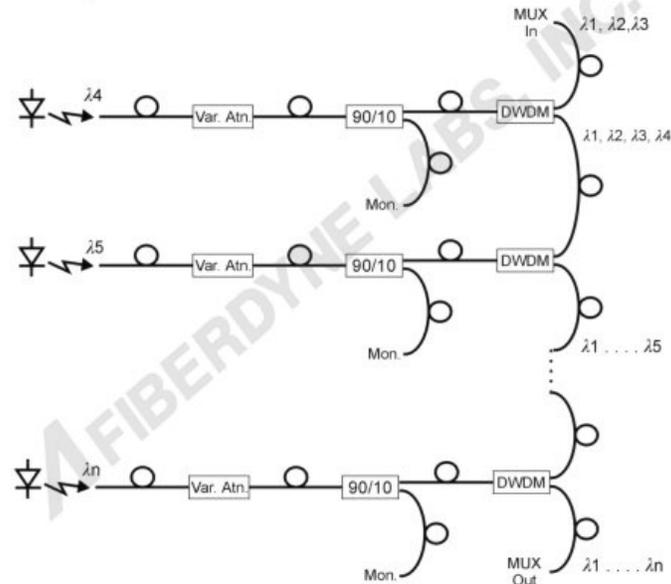
Applications:

- Telecommunications
- Local Area Networks
- CATV Fiber Optic Links

Conceptual Usage:

The schematic below shows how a **DWDM** module, with attenuation and splitter/tap, may operate. This configuration includes an "Upgrade" port. For future expansion, the upgrade port is connected to new modules, adding new channels to an existing link. This can be done without interruption of the existing links.

Fiberdyne Labs DWDM MUX w/Monitor



Options:

- Number of channels: 1 - 40 channels in one module
- Single or multi-fiber solutions available
 - Single-fiber: transmit and receive signals on one fiber
 - Dual-fiber: transmit and receive signals on separate fibers
- 100-GHz or 200-GHz channel spacing
- Module formats compatible with LGX, 19/23-inch rackmount
- Connectors: FC, LC, SC, ST
- Customization available:
 - Additional filter options available, such as "Red/Blue" mux/demux filtering
 - Unique channel selections or spacings (i.e. skip channel numbers)
- Cisco-compatible modules - mimic the function of Cisco 15216-series modules