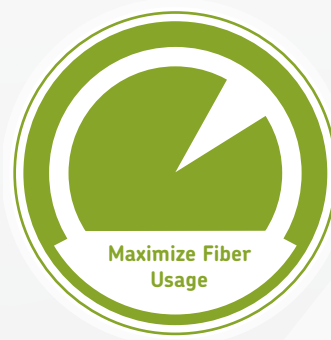


# STARMUX

**STAR**MUX

## Starview CWDM Mux/Demux



- Cost Effective
- Duplex/ Simplex WAN Fiber connection
- Metallic casing and connectors
- Passive Equipment suitable for outdoor enclosure
- Compact Enclosure
- Low insertion loss
- Maximize Fiber Usage
- Maximum 9 CH CWDM for Rack Mount Enclosure Module
- Maximum 18 CH CWDM for 19" Rack Mount able unit

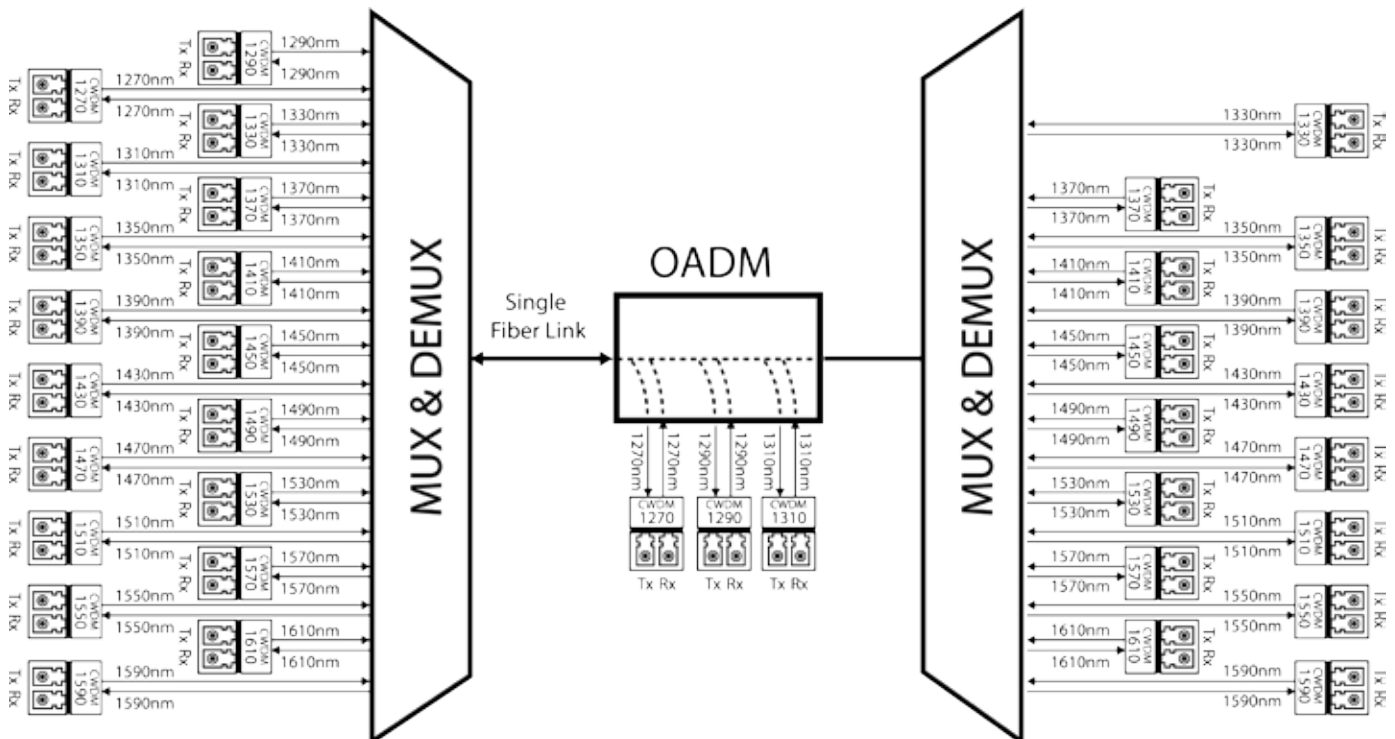
# What is WDM?

- Wavelength Division Multiplexing
- Technique where optical signals with different wavelengths are combined, transmitted together, and separated again. It is mostly used for optical fiber communications to transmit data in several (or even many) channels with slightly different wavelengths
- Widely used to increase capacity on routes with fiber exhaustion
- Inexpensive alternative to installing more fiber or leasing additional fibers



# CWDM Mux/ Demux and OADM

| CWDM           | Mux / Demux                                | OADM   |
|----------------|--|--|
| Abbreviations  | Multiplexing and Demultiplexing            | Optical Add and Drop Multiplexing                        |
| Components     | Consists of Optical combiner and splitters | Consists of Optical circulators, combiners and splitters |
| Topology       | Point to Point                             | Linear Add and Drop                                      |
| Insertion loss | 3.5dB per channel                          | 1.7dB per channel  |



# STARMUX

## CWDM OADM



### Features

- Increase bandwidth on existing fiber infrastructure
- Alleviate fiber exhaustion
- Transmit multiple protocols over an existing duplex fiber link by combining the fiber outputs of multiple media converters
- "Plug and play," no configuration of CWDM components
- Provide scalable bandwidth of up to 10Gbps per channel over existing fiber links
- Use existing standard optical ports on switches and routers

### Applications

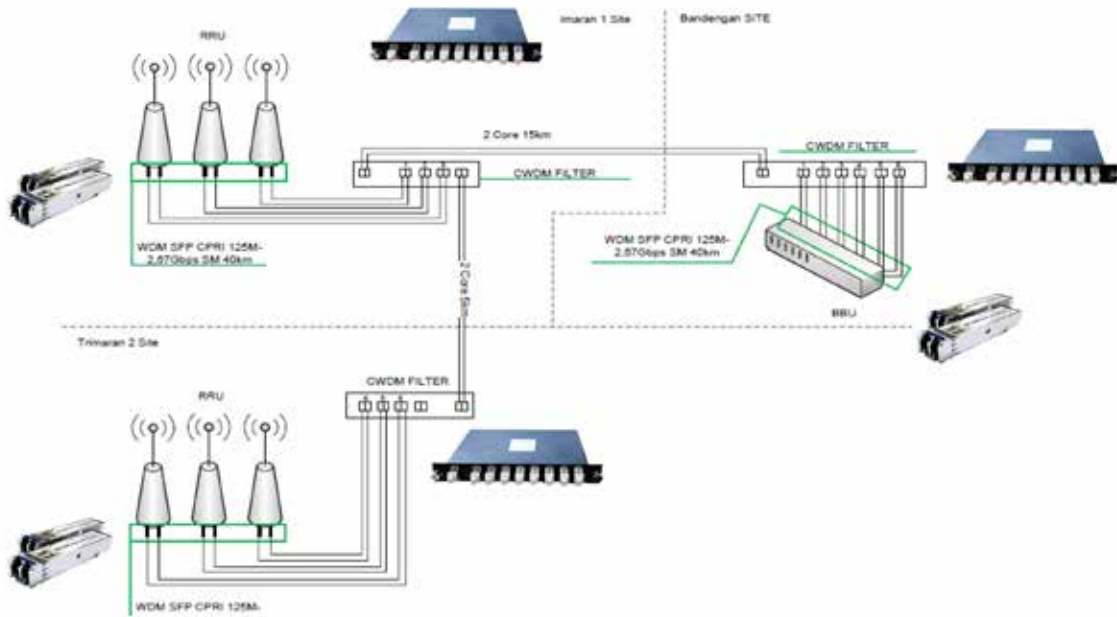
- Line Monitoring
- WDM Network
- Fiber Optical amplifier

**CWDM OADM STARMUX is a passive technology that allows for any protocol to be transported over the link, as long as it is at a specific wavelength (i.e. T1 over fiber at 1570nm transported alongside 10Gbps Ethernet at 1590nm). Because the multiplexers simply refract light at any network speed, regardless of the protocol being deployed, STARMUX can help to future proof the networking infrastructure.**

### Specifications

| Parameters                        | 4 Channel       | 5 Channel     | 8 / 9 Channel   |
|-----------------------------------|-----------------|---------------|-----------------|
| Operating Wavelength              | 1500nm - 1620nm |               | 1460nm - 1620nm |
| Center Wavelength ( $\lambda_c$ ) | 1510nm - 1610nm |               | 1470nm - 1610nm |
| Add/Drop Ch. Max Insertion Loss   | 0.7 dB          |               | 0.7 dB          |
| Pass Ch. Max Insertion Loss       | 1.0 dB          |               | 1.0 dB          |
| Insertion Loss Temp. Sensitivity  |                 | <0.005 dB/°C  |                 |
| Wavelength Temp. Shifting         |                 | <0.002 nm/°C  |                 |
| Polarization Dependent Loss       |                 | <0.1 dB       |                 |
| Polarization Mode Dispersion      |                 | <0.1 PS       |                 |
| Directivity                       |                 | >50 dB        |                 |
| Return Loss                       |                 | >45 dB        |                 |
| Maximum Power Handling            |                 | 500 mW        |                 |
| Operating Temperature             |                 | -5°C to 75°C  |                 |
| Storage Temperature               |                 | -40°C to 85°C |                 |

**Applications – CWDM with OADM fiber connection**



# Ordering Information

**Accessory:**

**SVR-STARMUX-19R**

Starview 19" Rack Mountable STARMUX chassis for up to 2 x STARMUX module

**SVR-BRACKET-23**

Starview L-Bracket - 23" RACK MOUNT EAR KIT for STARMUX and STARTAP chassis

Manufacturer: Starview International

Type: CWDM MUX/DEMUX

Channel Configuration: 3: 3 Ch. 4: 4 Ch.  
6: 6 Ch. 9: 9 Ch.

Client Ports

|               |                        |
|---------------|------------------------|
| 31: 1310 port | 31: Add/Drop 1310 port |
| 33: 1330 port | 33: Add/Drop 1330 port |
| 35: 1350 port | 35: Add/Drop 1350 port |
| 37: 1370 port | 37: Add/Drop 1370 port |
| 41: 1410 port | 41: Add/Drop 1410 port |
| 43: 1430 port | 43: Add/Drop 1430 port |
| 45: 1450 port | 45: Add/Drop 1450 port |
| 47: 1470 port | 47: Add/Drop 1470 port |
| 49: 1490 port | 49: Add/Drop 1490 port |
| 51: 1510 port | 51: Add/Drop 1510 port |
| 53: 1530 port | 53: Add/Drop 1530 port |
| 55: 1550 port | 55: Add/Drop 1550 port |
| 57: 1570 port | 57: Add/Drop 1570 port |
| 59: 1590 port | 59: Add/Drop 1590 port |
| 61: 1610 port | 61: Add/Drop 1610 port |

Line Port: S: Simplex Type D: Duplex Type

Connectors: LC: LC/PC SC: SC/PC

**Example:**

**SV-STARMUX-3AD3149-DLC**

Starview STARMUX Optical Add and Drop Module (OADM) with 3 Channel CWDM wavelengths 1310/ 1470/ 1490nm and 2 x Duplex LC/UPC COM ports

