

# OWDM MUX

## 1. GENERAL DESCRIPTION

Multiplexer products combine multiple data signals into one signal for transport over one fiber. Demultiplexers separate the signal at the other end. Wavelength division multiplexing (WDM) greatly increases capacity of systems. To manage bandwidth and expand capacity of existing fiber optic backbones, Wavelength Division Multiplexing (WDM) works by simultaneously combining and transmitting multiple signals at different wavelengths through the same fiber.

A key advantage of WDM is its protocol and bit-rate independency. WDM-based networks can transmit data in IP, ATM, SONET/SDH, and Ethernet. It can handle bitrates between 100 Mbps and 100 Gbps. Therefore, WDM-based networks can carry different types of traffic at different speeds. It creates a less costly method for quick response to customers' bandwidth demands and protocol changes.

This MUX supports 8 O-Band DWDM 400GHz spaced wavelengths, which support single fiber to remote nodes. The composite (COM) port can be used in a point-to-point and cascade configuration connecting remote node. Also, this MUX is composed of SMF (Single Mode Fiber).

## 2. AVAILABLE DEFAULT VERSIONS

PARTNAME	DESCRIPTION
<b>SO-CHASSIS-OWDM8</b>	Modular 19"Chassis with 2 slots for OWDM 8CH MUX/DEMUX, 1RU
<b>SO-MOD-OWDM-DEMUX-8CH+MON-SIMPLEX</b>	Mux Module; 8CH nWDM O-band, Demux, 1295.56-1311.43nm, Simplex, COM Port, LC/UPC connectors, 19" casing, MOD for SO-CHASSIS-OWDM8, Solid Optics
<b>SO-MOD-OWDM-MUX-8CH+MON-SIMPLEX</b>	Mux Module; 8CH nWDM O-band, Mux, 1295.56-1311.43nm, Simplex, COM Port, LC/UPC connectors, 19" casing, MOD for SO-CHASSIS-OWDM8, Solid Optics
<b>SO-MOD-OWDM-MUX-8CH+MON-SIMPLEX</b>	8CH WDM O-band, Mux/Demux, 1295.56-1311.43nm, Duplex, + MON (Monitor Port), LC/UPC connectors, 19" casing, Solid Optics

## 3. PRODUCT SPECIFICATIONS & FEATURES

- ✓ Technique: nWDM, O-Band
- ✓ Available up to 8 channels from 1295.56-1311.43nm, 400GHz Channel Spacing
- ✓ Passive: no electricity needed
- ✓ Low attenuation
- ✓ Operating Temperature: -0 – +70 °C
- ✓ Comes with LC/UPC connectors (other connectors on request)
- ✓ COM port
- ✓ Clear TX and RX prints for easy patching

#### 4. TECHNICAL SPECIFICATIONS

MUX	SYMBOLS	8CH nWDM
CHANNEL BAND	nm	1295.56(CH6 R),1297.80(CH6 T), 1300.05(CH4 R),1302.31(CH4 T), 1304.58(CH2 R),1306.85(CH2 T), 1309.14(CH0 R),1311.43(CH0 T), nm
CHANNEL SPACING	nm	400 GHz
CHANNEL PASSBAND	nm	±0.52nm
INSERTION LOSS	dB	<3dB
PASS BAND RIPPLE		<0.5
Adjacent Channel Isolation	Min dB	30
Non-Adjacent Channel Isolation	Min dB	40
OPTICAL RETURN LOSS	Min. dB	40
DIRECTIVITY	Min. dB	50
POLARIZATION DEPEND LOSS	Max dB	0.2

#### CASING

#### SYMBOLS

#### 8CH nWDM

<b>OPERATING TEMPERATURE</b>	°C	-0~+70
<b>STORAGE TEMPERATURE</b>	°C	-40~+85
<b>CONNECTOR TYPE</b>	-	LC/UPC
<b>BOX DIMENSIONS (L X W X H)</b>	cm	19" casing

## 5. WARNING & SYMBOLS



Solid Optics EN N.V. has tested the equipment based on European legislation and it is safe, doesn't intervene with other electronic devices and that it is not affected by interference from other Electronic devices.



Hazardous Goods; Our equipment complies with Directive 2011/65/EU (RoHS II) and 2002/95 EC (RoHS I)

## 6. DISCLAIMER & COPYRIGHT

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