LWDM MUX

1. GENERAL DESCRIPTION

Multiplexer products combine multiple data signals into one signal for transport over one fiber. De-multiplexers 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.

LWDM(WDM) is a WDM(WDM technology, The frequency grid of 100 GHz and above specified in the central frequency reference ITU-T G.694.1, Path spacing 200 GHz~800 GHz, Between DWDM, Usually 100 GH and 50 GHz) and CWDM (coarse wavelength multiplexing, nm,20 About three THz or so), Using 1269 nm to 1332 nm wavelengths in the O-band (1260 nm) range, Wavelength intervals are 4.5 nm.

2. AVAILABLE DEFAULT VERSIONS

PARTNAME	DESCRIPTION
SO-LWDM-MUX-9CH+MON	9CH LWDM O-band, Mux/Demux, 1273.54-1309.14nm, Duplex, + MON (Monitor Port), LC/UPC connectors, 19"casing, Solid Optics
SO-LWDM-MUX-9CH+MON+UPG	9CH LWDM O-band, Mux/Demux, 1273.54-1309.14nm , Duplex, + MON (Monitor Port), + UPG (Upgrade Port), LC/UPC connectors, 19"casing, Solid Optics

3. PRODUCT SPECIFICATIONS & FEATURES

- ✓ Technique: LWDM, O-Band
- ✓ Passive; no electricity needed
- ✓ Operating Temperature: -40 – +85 °C
- ✓ Monitor port / Additional upgrade port
- ✓ Com TX and RX
- ✓ Clear TX and RX prints for easy patching
- ✓ Available up to 9 channels from 1273.54-1309.14nm Channel Spacing (4.5nm
- ✓ Low attenuation
- ✓ Comes with LC/UPC connectors (other connectors on request)

4. TECHNICAL SPECIFICATIONS

MUX	SYMBOLS	8CH nWDM
CHANNEL BAND	nm	LWDM O-Band, CH1-CH9, CH 1 1273.54 nm, CH 2 1277.89 nm, CH 3 1282.26 nm, CH 4 1286.66 nm, CH 5 1291.10 nm, CH 6 1295.56 nm, CH 7 1300.05 nm, CH 8 1304.58 nm, CH 9 1309.14 nm
CHANNEL SPACING	nm	4.5nm
CHANNEL PASSBAND	nm	+/-1.0 nm
INSERTION LOSS	dB	DWDM 3.2 dB 1% MON 23.0 dB
PASS BAND RIPPLE		0.5
Adjacent Channel Isolation	Min dB	30
Non-Adjacent Channel Isolation	Min dB	40
OPTICAL RETURN LOSS	Min. dB	45

DIRECTIVITY	Min. dB	50
POLARIZATION DEPEND LOSS	Max dB	0.2

CASING	**SYMBOLS**	**8CH nWDM**
OPERATING TEMPERATURE	°C	-40~+85
STORAGE TEMPERATURE	°C	-40~+85
CONNECTOR TYPE	-	LC/UPC Other conn. on request
BOX DIMENSIONS (L X W X H)	cm	19" casing

5. WARNING & SYMBOLS

CE

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.

RoHS

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

6. DISCLAIMER & COPYRIGHT