

# **MUX48 (48-Channel Passive MUX DEMUX)**

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## **Details**

The 48-channel passive MUX / DEMUX (MUX48) launched by D Tech Trading is mainly used in DWDM wavelength division system to complete the multiplexing or DE multiplexing function of 48 optical wavelengths in the C-band range. It can multiplex different optical wavelengths to one optical fiber or separate multiple optical channels multiplexed in the same optical fiber by wavelength. Based on the waveguide grating technology on silicon substrate, it adopts a unique heat free packaging design, which can achieve accurate channel coupling, low insertion loss, high channel isolation and high stability. It is suitable for 48 wave high-capacity DWDM system.

Application case:

- Suitable for multiplexing and demultiplexing 48 channels of DWDM optical signals in C-band

## **PRODUCT SPECIFICATION:**

<b>Specification</b>	<b>Value</b>
Function	Support multiplexing and demultiplexing of 48 DWDM optical signals in C-band

Specification	Value
Size (HxWxD)	1U: 44 mm (Height) × 442 mm (Width) × 220 mm (Depth)
Spectral type	Flat top type
ITU passband frequency	±12.5 GHz
Channel spacing	0.8 nm (100 GHz)
Channel number	48
Wavelength accuracy	±0.04 nm
Channel insertion loss	±5.5 dB
Insertion loss uniformity	±1.5 dB
1 dB bandwidth	±0.38 nm
3 dB bandwidth	±0.56 nm

Specification	Value
20 dB bandwidth	?1.2 nm
Adjacent channels isolation	?25 dB
Non-adjacent channels isolation	?30 dB
Total crosstalk	?22 dB
Return loss	?40 dB
Polarization dependent loss	?0.5 dB
Polarization mode dispersion	?0.5 ps
Dispersion	$\pm 20$ ps
Working temperature	-5°C to +65°C

<b>Specification</b>	<b>Value</b>
Storage temperature	-40°C to +85°C
MON port splitting ratio	21 dB (splitting ratio 1%)
Management	Provide RJ-45 management interface to connect with the rear interface card of OTNS8600-DCI8 equipment, read the SN/model/PN and other information of the equipment through the network management system, and report the on/off status at the same time, with dumb resource management ability