

8 Channel 16 Channel Mux Demux DWDM Module 100GHz

Quick Details:

Place of Origin: Shenzhen, China

Brand Name: OPTICO / OEM

Model Number: DWDM

Product name: 8 Channel 16 Channel Mux Demux DWDM Module 100GHz

Channel Number: 4CH, 8CH or 16CH

Structure: Mux or Demux

Channel Spacing: 100G(0.8nm)

Channel Wavelength: ITU 100 GHz Grid

Center Wavelength Accuracy: $\pm 0.05\text{nm}$

Input/Output connector: FC, SC, LC optional

Input/Output length: 0.5m, 1m or customized

Pigtail Diameter: 0.9mm, 2.0mm, or customized

Package dimension: ABS box: 100X80X10mm

Supply Ability: 20000 Piece/Pieces per Month DWDM

Packaging Details: Individual box or according to customer's request

Port: Shenzhen



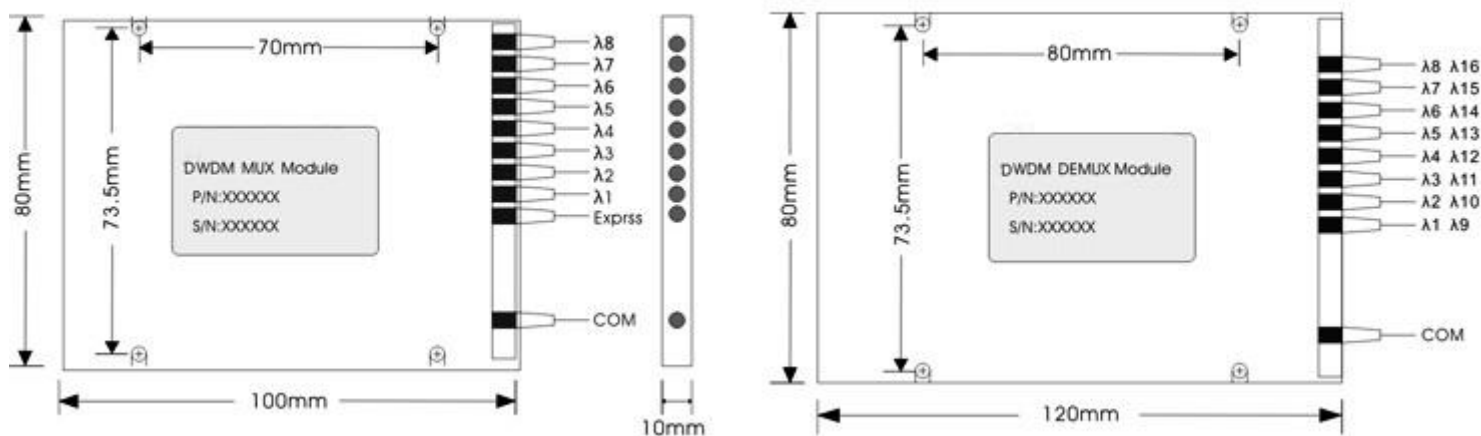
4CH 8CH 16CH 100GHz DWDM Module 8 Channel 16 Channel Mux Demux DWDM

DWDM (Dense Wavelength Division Multiplexing) is a group of optical wavelengths that can be combined to transmit using a single fiber. This is a laser technology used to increase bandwidth on existing fiber optic backbones. More precisely, the technology is to multiplex the tight spectral spacing of a single fiber carrier in a given fiber in order to take advantage of achievable transmission performance (for example, to achieve minimal dispersion or attenuation). In this way, for a given information transmission capacity, the total number of optical fibers required can be reduced.

Product Description

DWDM multi-channel multiplexer /demultiplexer (Mux /DeMux)modules are available on ITU channel spacing of 200GHz. They demonstrate low loss, temperature insensitivity and reliable performance in any system application. Mux / DeMux modules offer low-cost wavelength management solutions that are suitable for long haul, metro, and access application

Drawing:



Specifications:

Parameter		4-Channel		8-Channel		16-Channel	
		Mux	Demux	Mux	Demux	Mux	Demux
Channel Wavelength(nm)		ITU 100GHz Grid					
Channel Spacing(GHz)		100(0.8nm)					
Channel Passband (@-0.5dB bandwidth(nm))		>0.25					
Insertion Loss(dB)		≤1.8		≤3.7		≤5.5	
Channel Uniformity(dB)		≤0.6		≤1.0		≤1.5	
Channel Ripple(dB)		<0.3					
Isolation(dB)	Adjacent	N/A	>30	N/A	>30	N/A	>30
	Non-adjacent	N/A	>40	N/A	>40	N/A	>40
Insertion Loss Temperature Sensitivity(dB/°C)		<0.005					
Wavelength Temperature Shifting (nm/°C)		<0.002					
Polarization Dependent Loss(dB)		<0.1		<0.1		<0.15	
Polarization Mode Dispersion(ps)		<0.1					
Directivity(dB)		≥50					
Return Loss(dB)		≥45					
Maximum Power Handling(mW)		300					
Operating Temperature(°C)		-5~+75					
Storage Temperature (°C)		-40~+85					
Package dimension(mm)		A: L100×W80×H10					

	B: L120×W80×H18
	C: L141×W115×H18

Advantages of DWDM:

1. The multiplexer and demultiplexer of the integrated DWDM system are used at the transmitting end and the receiving end respectively, that is, only the multiplexer at the transmitting end and only the demultiplexer at the receiving end. OTU conversion equipment (this part is more expensive)? Therefore, the investment in DWDM system equipment can save more than 60%.
2. The integrated DWDM system uses only passive components (such as multiplexers or demultiplexers) at the receiving end and the transmitting end. Telecom operators can directly order from the device manufacturers, reducing the supply chain and lowering costs, thereby saving equipment costs. .
3. The open DWDM network management system is responsible for monitoring of OTM (mainly OTU), OADM, OXC, and EDFA, and its equipment investment accounts for about 20% of the total investment of the DWDM system; while the integrated DWDM system requires no OTM equipment, its The network management is only responsible for the monitoring of OADM, OXC, and EDFA. More manufacturers can be introduced to compete, and its network management costs can be reduced by about half compared to open DWDM network management.
4. Since the multiplexing / splitting equipment of the integrated DWDM system is a passive device, it is convenient to provide multiple services and multi-rate interfaces, as long as the wavelength of the optical equipment of the service end equipment meets G. 692 standard, which can access any service such as PDH, SDH, POS (IP), ATM, support 8M, 10M, 34M, 100M, 155M, 622M, 1G, 2.5G, 10G and other rates of PDH, SDH , ATM and IP Ethernet? Avoid the open DWDM system because of OTU, can only use the purchased DWDM system has determined the optical wavelength (1310nm, 1550nm) and the transmission rate of SDH, ATM or IP Ethernet equipment? It is simply impossible to use other interfaces.
5. If the laser device modules of optical transmission equipment such as SDH and IP routers are uniformly designed as pins of standard geometry, the interface is standardized, it is easy to maintain the plug, and the connection is reliable. In this way, maintenance personnel can freely replace the laser head of a specific color wavelength according to the wavelength requirements of the integrated DWDM system, which provides convenient conditions for laser head failure maintenance and avoids the disadvantages of having to replace the entire board by the manufacturer. High maintenance costs.
6. The color wavelength light source is currently only slightly more expensive than the ordinary 1310nm and 1550nm wavelength light sources, such as the 2.5G rate color wavelength light source is currently more than 3,000 yuan, but when connected to the integrated DWDM system for use, The cost of the system is reduced by nearly 10 times, and with the large number of applications of color wavelength light sources, its price will be close to ordinary light sources.
7. The integrated DWDM equipment has a simple structure and a smaller size, only about one fifth of the space occupied by open DWDM, saving machine room resources.