C21~C28 8 Channel Mux － Demux DWDM 8CH Single Fiber 1U 19' Rack Mount DWDM

Place of Origin: Shenzhen, China
Brand Name: OPTICO / OEM
Model Number: DWDM-08
Product name: Rack Mount 8 channel DWDM
Channel Number: 4CH, 8CH or 16CH optional
Structure: Mux or Demux
Channel Spacing: 100G(0.8nm)
Channel Wavelength: ITU 100 GHz Grid
Center Wavelength Accuracy: ± 0.05nm
Input/Output connector: FC, SC, LC optional
Input/Output length: 0.5m, 1m or customized
Package dimension: Rack Mount
Supply Ability: 20000 Pieces per Month
Packaging Details: Individual box or customized packaging
Port： Shenzhen

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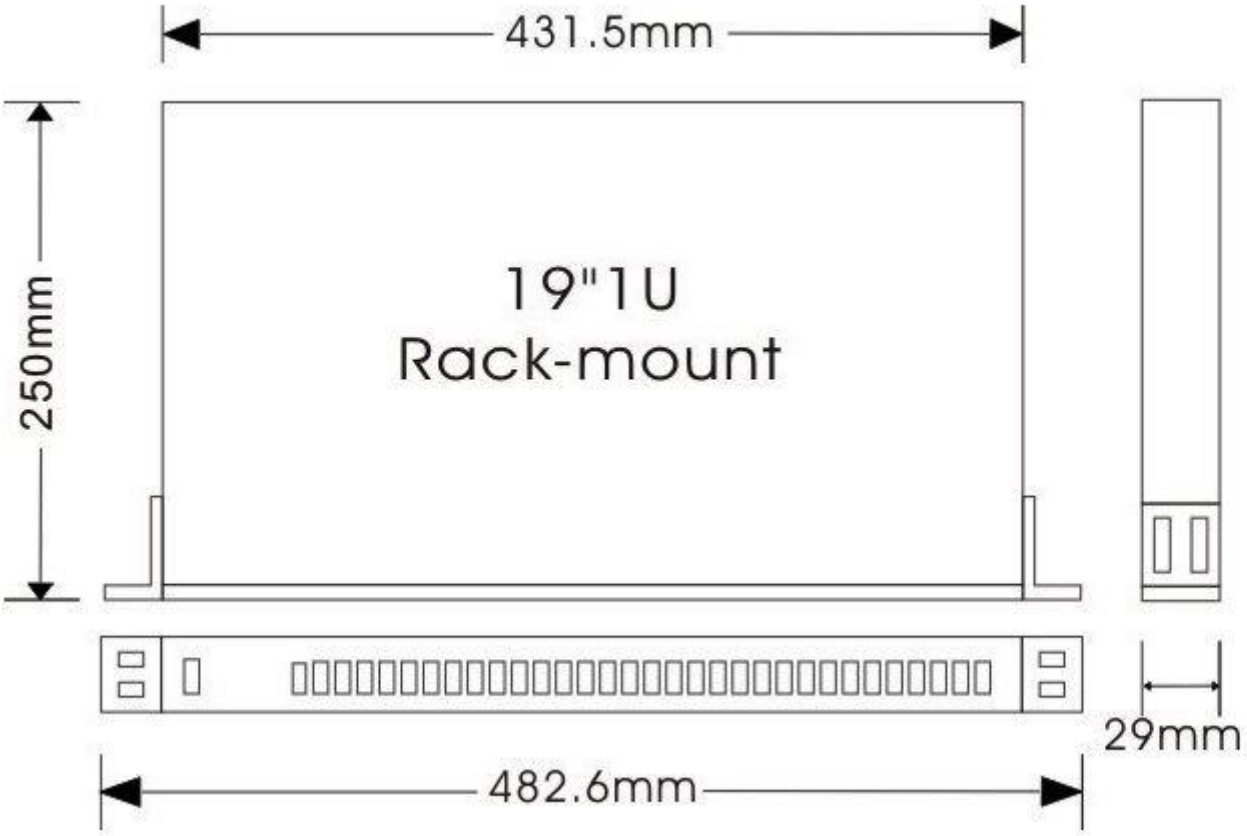
DWDM multi-channel multiplexer /demultiplexer (Mux /DeMux)modules are available on ITU channel spacing of 200GHz. They demonstrate low loss, temperature insensitivity and reliable performance in any system application.Mux/DeMux modules offer low-cost wavelength management solutions that are suitable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

DWDM technology uses the bandwidth and low loss characteristics of single-mode fiber and uses multiple wavelengths as carriers to allow each carrier channel to transmit

simultaneously in the fiber. Compared with the universal single-channel system, dense WDM-DWDM not only greatly improves the communication capacity of the network system, fully utilizes the bandwidth of the optical fiber, but also has many advantages such as simple expansion and reliable performance, especially it can directly access A variety of services make its application prospects very bright.

In actual operation, in order to be able to make reasonable use of the broadband resources generated by the single-mode fiber in the 1.55pm low-loss area, the low-loss area of the fiber needs to be divided into multiple optical channels according to different frequencies and wavelengths, and An optical channel establishes a carrier wave, which is what we call a light wave. At the same time, a demultiplexer is used to combine various signals with different specified wavelengths at the transmitting end. These combined signals are collectively passed into an optical fiber for signal transmission. When transmitting to the receiving end, these are combined at different wavelengths using an optical demultiplexer. The signals of different light waves are decomposed and separated into the initial state to realize the function of transmitting many different signals in one optical fiber.



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/℃)		<0.005					
Wavelength Temperature Shifting (nm/℃)		<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					
Opterating Temperature(℃)		-5~+75					
Storage Temperature (℃)		-40~+85					
Package dimension(mm)		A: L100×W80×H10					
		B: L120×W80×H18					
		C: L141×W115×H18					

DWDM Advantages:

The DWDM optical transport network provides an economical, large-capacity, high survivability, and flexible transmission infrastructure in the future network, which has extremely attractive prospects. Its main features are:

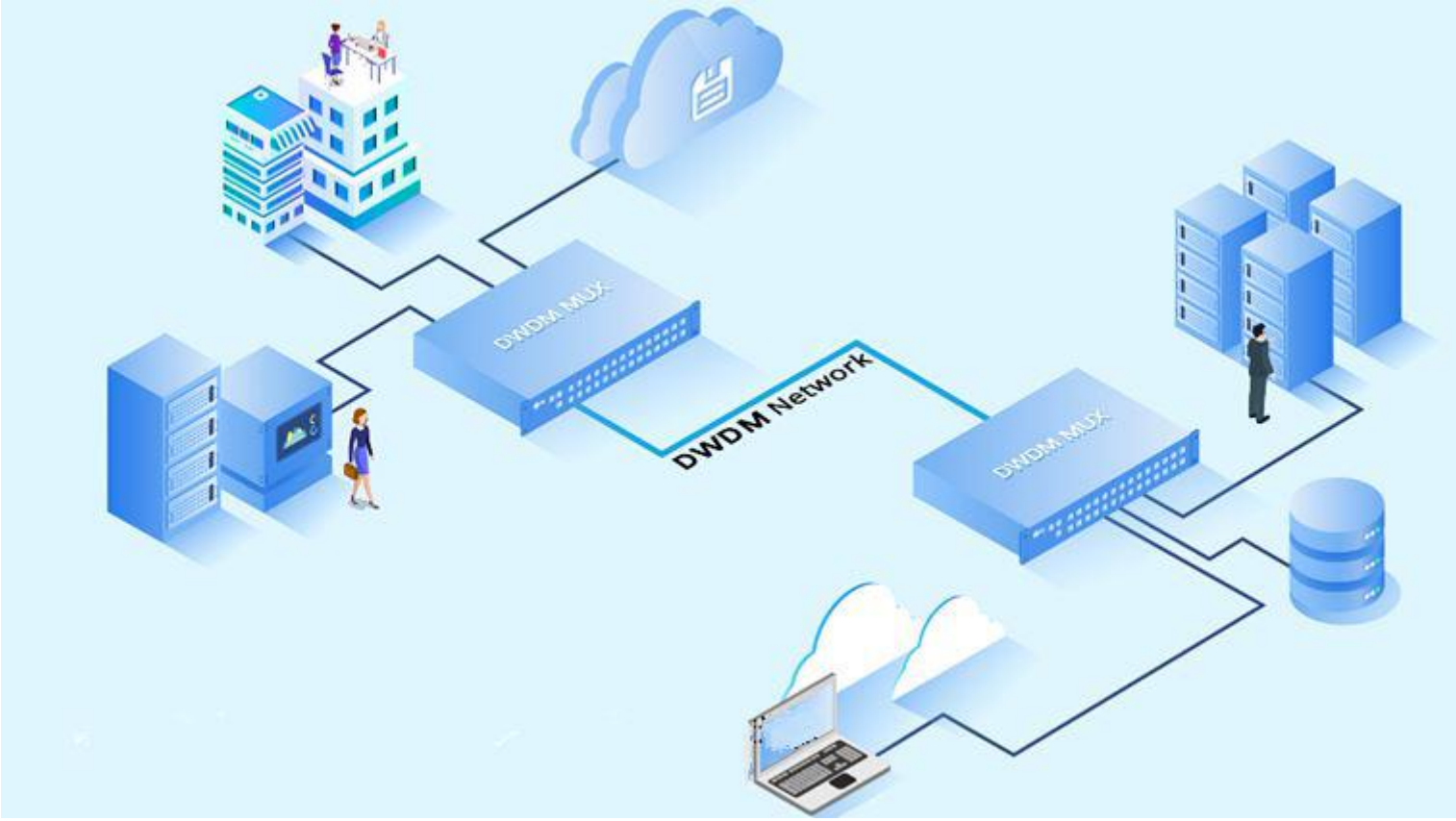
1, high capacity. The rate of each wavelength can reach 40Gbit / s, and a single fiber can transmit more than 160 wavelengths.

2. Wavelength routing: In WDM networks, routing is achieved through wavelength-selective devices, and topological connections between various nodes at different wavelengths are established.

3. Transparency. WDM optical transmission network will provide a new transparency different from SDH / SONET, that is, the transmission wavelength is independent of the protocol and rate. This is a key advantage of WDM optical transmission network, which guarantees that the optical transmission network can be used in optical channels. Any protocol can be transmitted, and signals of various bit rates can also be transmitted.

4, reconfigurability: WDM optical transmission network can realize the dynamic reconstruction function of optical wavelength channel through optical cross connection (OXC) and optical add / drop multiplexing (OADM) technology

5, Compatibility. To be recognized by the market, WDM optical transmission network must be compatible with the original transmission network technology, be connected to the existing transmission network and allow the existing technology to continue to function, so as to maintain the original investment of the user.



DWDM Applications:

1. Optical monitoring channel (OSC) of DWDM system
2, Optical Terminal Multiplexer (OTM)
3, fiber amplifier (OLA)
4, optical add / drop multiplexer OADM, OXC function
5, electric repeater (REG)
6, Application of DWDM technology in power system