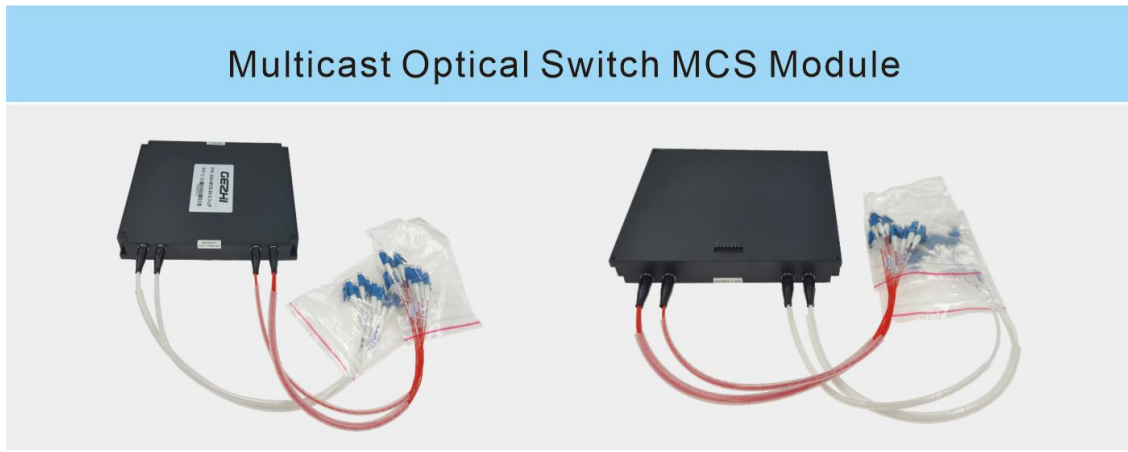


Multicast Optical Switch MCS Module

The Multicast Optical Switch (MCS) Module is an advanced, high-bandwidth, low-latency optical switching solution widely used in fiber-optic communication systems, data centers, broadcast television, cloud computing, and large-scale internet infrastructure. GEZHI' s Multicast Optical Switch (MCS) series is a high-reliability MxN fiber optic multicast switch module designed for next-generation CDC-ROADM systems based on PLC splitter and optical switch technology, integrating the MxN MCS core and electronic control unit into one compact module to support fully non-blocking, conflict-free, and flexible optical switching, allowing any optical input to be routed to any output port while supporting transmission speeds up to 100 GHz, making it an ideal passive optical multicast switch for critical nodes in telecom and CDC-ROADM optical networks.



Features	Application
<ul style="list-style-type: none"> ● Hitless switching ● Low power dissipation ● High Reliability 	<ul style="list-style-type: none"> ● Reduce Network Opex ● ROADM ● DWDM Networks

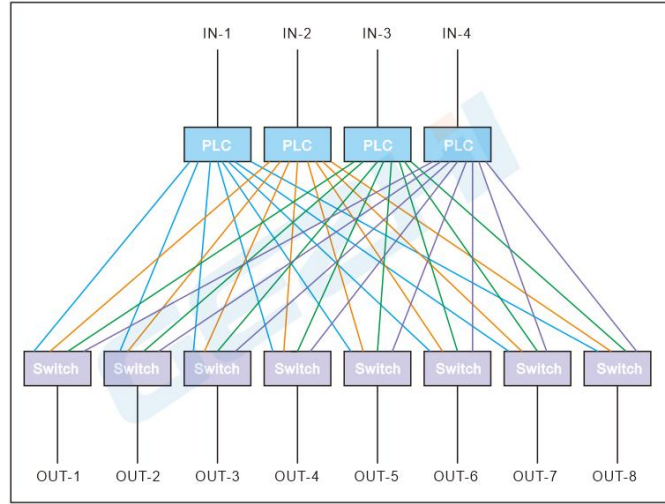
Performance

Parameters	Unit	Specifications					
		4x4	4x8	4x16	8x8	8x16	16x16
Wavelength Range	nm	1260~1650					
Test Wavelength	nm	1310 or 1550 or 1610					
Insertion Loss	dB	≤8.6	≤11.8	≤11.8	≤13	≤16	≤18
Insertion Uniformity	dB	≤1.5					
Return Loss	dB	≥45					
Port Isolation	dB	≥40					
PDL	dB	≤0.5					
Port Switch Time	ms	≤20					
Durability	Cycle	≥1×10 ⁹					
Control Voltage	v	5.0					
Operating Temperature	°C	-20~+70					
Storage Temperature	°C	-40~+85					
Interface Control	/	TTL Serial Control					

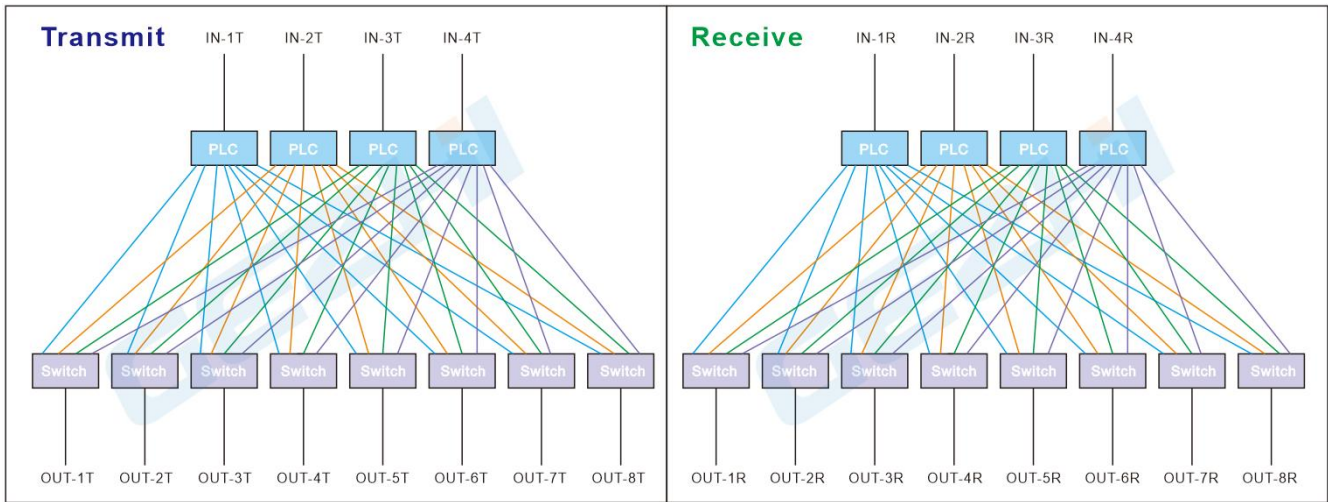
Note: the above insertion loss is not include connector, if with connector, the insertion loss will be increased 0.2dB.

Optical Route

4x8 MCS Module Simplex type in one module



4x8 MCS Module Duplex type in one module



Ordering Information GZ-MCS-XxX-X-XX-X-X-X-XX-XX-XX

MCS	Configuration	Wavelength	Package	Control Model	Fiber Type	Fiber Diameter	Fiber Length	Connector
4x4	S=Simplex	13=1310nm	M=Module	1=TTL	9=9/125	90=900um	05=0.5m	00=None
4x8	D=Duplex	15=1550nm	R=Rackmount	2=RS232	S=Specify	S=Specify	10=1.0m	FP=FC/PC
8x8		S=Specify					S=Specify	FA=FC/APC
1x16								SP=SC/PC
16x16								SA=SC/APC
S=Specify								LP=LC/PC
								LA=LC/APC
								S=Specify