

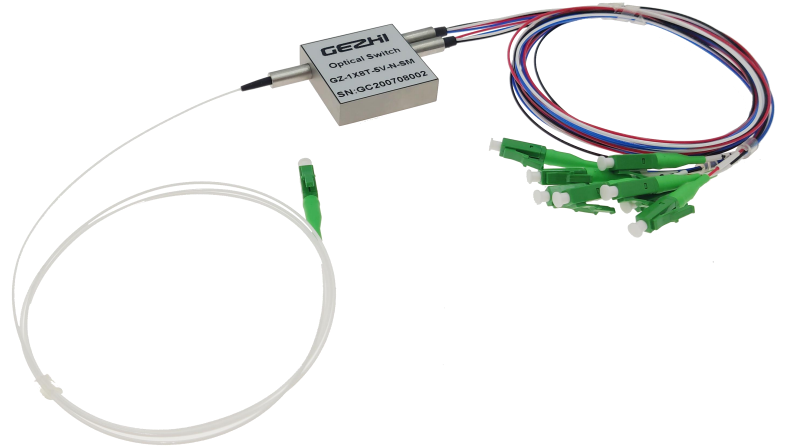
# 1x8T Mechanical Optical Switch

## Product Description:

Gezhi 1x8 fiber optic switch connects optical channels by redirecting an incoming optical signal into a selected output fiber. This is achieved by using opto-mechanical configuration activated via an electrical control signal.

Latching operation preserves the selected optical path after the drive signal has been removed. The switch has integrated electrical position sensors, and the new material based advanced design significantly reduces moving part position

sensitivity, offering unprecedented high stability as well as an unmatched low cost. Electronic driver is available for this series of switches.



Applications:	Features:
Channel Blocking	Unmatched Low Cost
Configurable Add/Drop	Low Optical Distortions
System Monitoring	High Isolation
Instrumentation	High Reliability
	Epoxy-Free Optical Path

## Specifications:

Parameters	Specifications	Unit
Operating Wavelength	1260~1620(SM)、850(MM)	nm
Insertion Loss	≤1.2	dB
Wavelength Dependent Loss	≤0.35	dB
Polarization Dependent Loss	≤0.05	dB
Temperature Dependent Loss	≤0.25	dB
Return Loss	SM≥50 MM≥30	dB
Cross Talk	SM≥55 MM≥50	dB
Switch Time	≤8	ms
Repeatability	≤±0.02	dB
Durability	≥10 <sup>7</sup>	times
Operating Voltage	3 or 5	V
Switch Type	Non-Latching/Latching	
Operating Temperature	-20~+70	°C
Storage Temperature	-40~+85	°C
Optical Power	≤500	mW
Dimension	35.0L×35.0W×9.0H	mm

**Pin Configurations:**

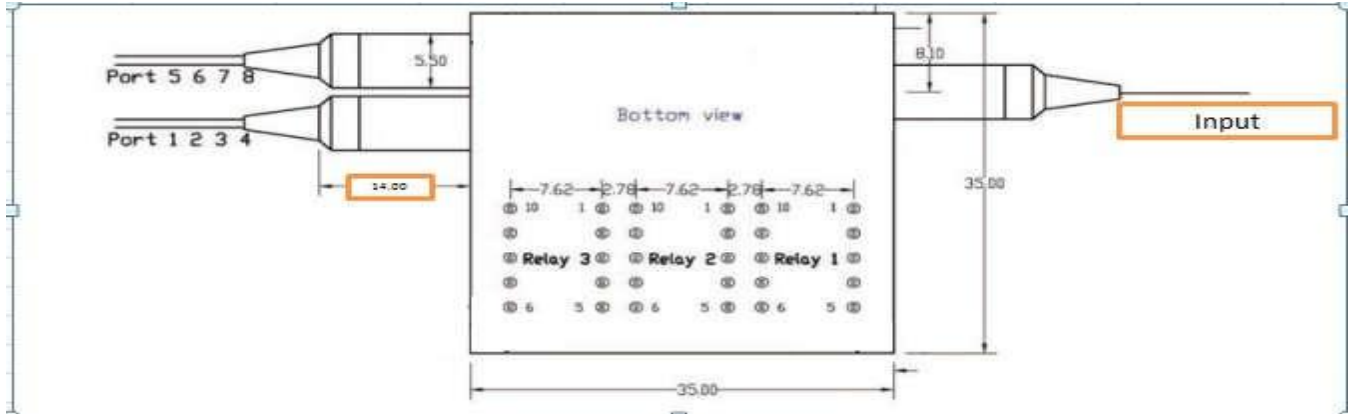
**Latching Type:**

Type	Optical Route	Relay	Electric Drive				State Sensor			
			Pin 1	Pin 5	Pin 6	Pin 10	Pin 2-3	Pin 3-4	Pin 7-8	Pin 8-9
Latching	Input-Port1(Black)	Relay1	--	--	GND	V+	Close	Open	Open	Close
		Relay2	--	--	GND	V+	Close	Open	Open	Close
		Relay3	V+	GND	--	--	Open	Close	Close	Open
	Input- Port 2 (red)	Relay1	--	--	GND	V+	Close	Open	Open	Close
		Relay2	V+	GND	--	--	Open	Close	Close	Open
		Relay3	--	--	GND	V+	Close	Open	Open	Close
	Input- Port 3(blue)	Relay1	--	--	GND	V+	Close	Open	Open	Close
		Relay2	--	--	GND	V+	Close	Open	Open	Close
		Relay3	--	--	GND	V+	Close	Open	Open	Close
	Input-Port4(White)	Relay1	--	--	GND	V+	Close	Open	Open	Close
		Relay2	V+	GND	--	--	Open	Close	Close	Open
		Relay3	V+	GND	--	--	Open	Close	Close	Open
	Input-Port5(Black)	Relay1	V+	GND	--	--	Open	Close	Close	Open
		Relay2	--	--	GND	V+	Close	Open	Open	Close
		Relay3	V+	GND	--	--	Open	Close	Close	Open
	Input- Port 6 (red)	Relay1	V+	GND	--	--	Open	Close	Close	Open
		Relay2	V+	GND	--	--	Open	Close	Close	Open
		Relay3	--	--	GND	V+	Close	Open	Open	Close
	Input- Port 7(blue)	Relay1	V+	GND	--	--	Open	Close	Close	Open
		Relay2	--	--	GND	V+	Close	Open	Open	Close
		Relay3	--	--	GND	V+	Close	Open	Open	Close
	Input-Port8(White)	Relay1	V+	GND	--	--	Open	Close	Close	Open
		Relay2	V+	GND	--	--	Open	Close	Close	Open
		Relay3	V+	GND	--	--	Open	Close	Close	Open

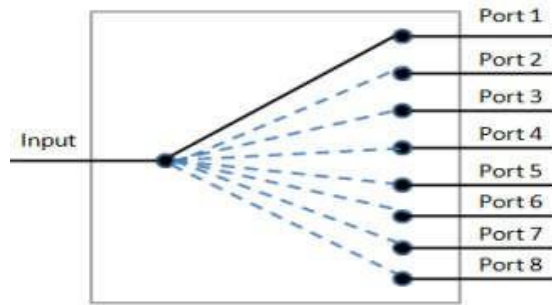
**Non-Latching Type:**

Type 1×8	Optical Route	Relay	Electric Drive				State Sensor			
			Pin 1	Pin 5	Pin 6	Pin 10	Pin 2-3	Pin 3-4	Pin 7-8	Pin 8-9
Non- Latching	Input-Port1(Black)	Relay1	--	--	--	--	Close	Open	Open	Close
		Relay2	--	--	--	--	Close	Open	Open	Close
		Relay3	V+	--	--	GND	Open	Close	Close	Open
	Input- Port 2 (red)	Relay1	--	--	--	--	Close	Open	Open	Close
		Relay2	V+	--	--	GND	Open	Close	Close	Open
		Relay3	--	--	--	--	Close	Open	Open	Close
	Input- Port 3(blue)	Relay1	--	--	--	--	Close	Open	Open	Close
		Relay2	--	--	--	--	Close	Open	Open	Close
		Relay3	--	--	--	--	Close	Open	Open	Close
	Input-Port4(White)	Relay1	--	--	--	--	Close	Open	Open	Close
		Relay2	V+	--	--	GND	Open	Close	Close	Open
		Relay3	V+	--	--	GND	Open	Close	Close	Open
	Input-Port5(Black)	Relay1	V+	--	--	GND	Open	Close	Close	Open
		Relay2	--	--	--	--	Close	Open	Open	Close
		Relay3	V+	--	--	GND	Open	Close	Close	Open
	Input- Port 6 (red)	Relay1	V+	--	--	GND	Open	Close	Close	Open
		Relay2	V+	--	--	GND	Open	Close	Close	Open
		Relay3	--	--	--	--	Close	Open	Open	Close
	Input- Port 7(blue)	Relay1	V+	--	--	GND	Open	Close	Close	Open
		Relay2	--	--	--	--	Close	Open	Open	Close
		Relay3	--	--	--	--	Close	Open	Open	Close
	Input-Port8(White)	Relay1	V+	--	--	GND	Open	Close	Close	Open
		Relay2	V+	--	--	GND	Open	Close	Close	Open
		Relay3	V+	--	--	GND	Open	Close	Close	Open

**Mechanical Dimensions (Unit:mm)**



**Optical Route**



**Ordering Information:**

Type	Wavelength	Switch Type	Voltage	Fiber Type	Package	Fiber Length	Connector
T18							
Special=00	1060=1 C+L=2 1310=3 1410=4 1550=5 1260-1610=A 1310/1550=9 850=8 Special=0	Latching=1 Non-latching=2	3V=3 5V=5	SM28=1 50/125=5 62.5/125=6	Bare fiber=1 900um tube=3 Special=0	0.25m=1 0.5m=2 1.0m=3 Special=0	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC/PC=7 Special=0