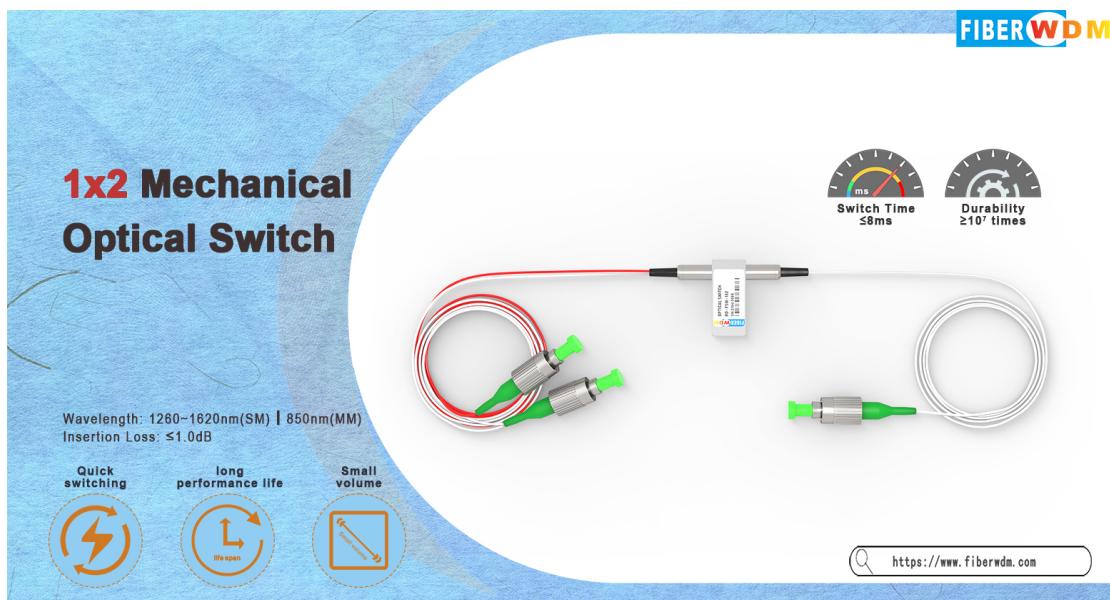


## 1x2 Mechanical Optical Switch



The 1x2 fiber optic switch connects optical channels by directing or blocking an incoming optical signal into the output fiber. This is achieved using a patent pending opto-mechanical configuration and activated via an electrical control signal. A latching version preserves the selected optical path after the drive signal has been removed, while the non-latching versions default to either the open or closed state when power is removed. The switch has integrated electrical position sensors. The new material based advanced design significantly reduces moving part position sensitivity, offering unprecedented high stability as well as unmatched low cost.

### Features

- ◆ Unmatched Low Cost
- ◆ Low Optical Distortions
- ◆ High Isolation
- ◆ High Reliability
- ◆ Epoxy-Free Optical Path

### Applications

- ◆ Channel Blocking
- ◆ Configurable Add/Drop
- ◆ System Monitoring
- ◆ Instrumentation

### Specifications

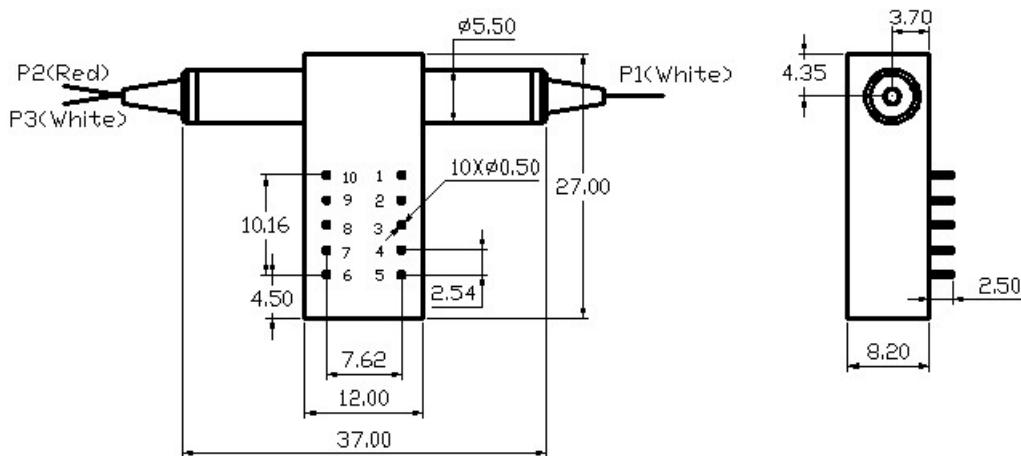
<b>Operating Wavelength</b>	1260~1620nm (SM) 850nm(MM)	<b>Insertion Loss</b>	≤1.0dB
<b>Wavelength Dependent Loss</b>	≤0.25dB	<b>Polarization Dependent Loss</b>	≤0.05dB
<b>Temperature Dependent Loss</b>	≤0.20dB	<b>Return Loss</b>	SM≥50dB MM≥30dB

<b>Cross Talk</b>	SM $\geq$ 55dB MM $\geq$ 35dB	<b>Switch Time</b>	$\leq$ 8ms
<b>Repeatability</b>	$\leq\pm 0.02$ dB	<b>Durability</b>	$\geq 10^7$ times
<b>Operating Voltage</b>	3 or 5V	<b>Switch Type</b>	Non-Latching/Latching
<b>Operating Temperature</b>	-20~+70°C	<b>Storage Temperature</b>	-40~+85°C
<b>Optical Power</b>	$\leq$ 500mW	<b>Dimension</b>	27.0L $\times$ 12.0W $\times$ 8.2H mm

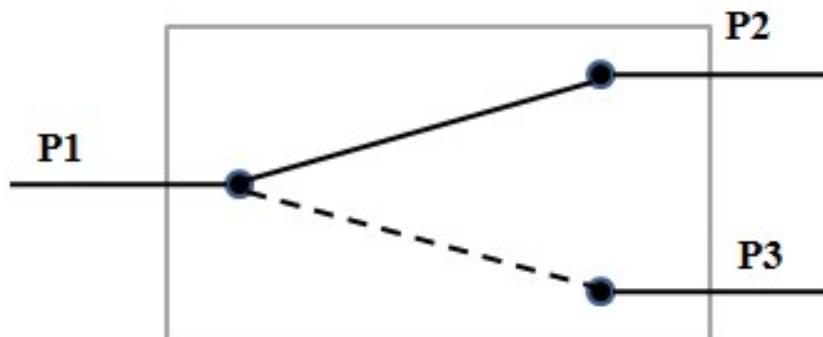
### Pin Configurations

Type	Optical Route	Electric Drive				State Sensor			
		Pin 1	Pin 5	Pin 6	Pin 10	Pin 2-3	Pin 3-4	Pin 7-8	Pin 8-9
1x2	P1-P2	--	--	GND	V+	Close	Open	Open	Close
	P1-P3	V+	GND	--	--	Open	Close	Close	Open
Latching	P1-P2	--	--	--	--	Close	Open	Open	Close
	P1-P3	V+	--	--	GND	Open	Close	Close	Open
Non-latching	P1-P2	--	--	--	--	Close	Open	Open	Close
	P1-P3	V+	--	--	GND	Open	Close	Close	Open

### Mechanical Dimensions (Unit:mm)



### Optical Route



**Ordering Information**

RD-FSW	-1X2-	-Wavelength-	-Switch Type-	-Voltage-	-Fiber Type-	-Package-	-Fiber length-	-Connector
		1060=1 C+L=2 1310=3 1410=4 1550=5 650=6 780=7 1260-1610=A 1310/1550=9 850=8 Special=0	Latching=1 Non-latching=2 MINI Latching=3 MINI Non-latching=4 Special=0	3V=3 5V=5 Special=0	SM28=1 50/125=5 62.5/125=6 Special=0	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 Duplex LC=8 Special=0