

## Description

XH-OSW-MINI1x8 fiber optic switch connects optical channels by redirecting an in-coming optical signal into a selected output fiber. 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.

## 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

Parameters	Unit	Specifications
Operating Wavelength	nm	1260~1620(SM)、850(MM)
Insertion Loss	dB	≤1.2
Wavelength Dependent Loss	dB	≤0.35
Polarization Dependent Loss	dB	≤0.05
Temperature Dependent Loss	dB	≤0.25
Return Loss	dB	SM≥50 MM≥30
Cross Talk	dB	SM≥55 MM≥50
Switch Time	ms	≤8
Repeatability	dB	≤±0.02
Durability	Times	≥107
Operating Voltage	V	3 or 5
Switch Type		Non-Latching/Latching
Operating Temperature	°C	- 20~ + 70
Storage Temperature	°C	- 40~ + 85
Optical Power	mW	≤500
Dimension	mm	35.0L×35.0W×9.0H

## Pin Configurations

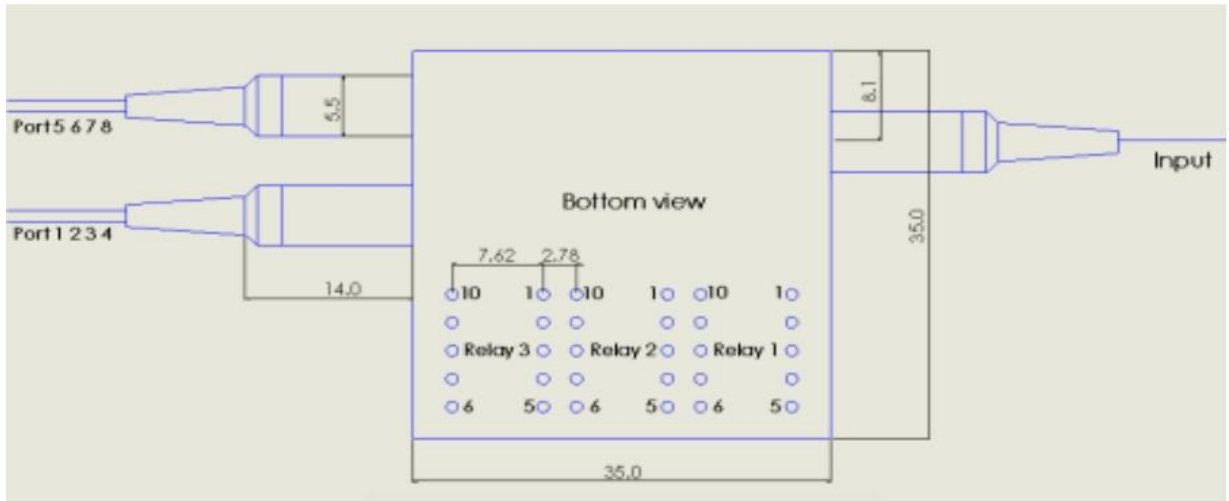
### Latching Type

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- Port 1(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- Port 4(White)	Relay1	--	--	GND	V+	Close	Open	Open	Close
		Relay2	V+	GND	--	--	Open	Close	Close	Open
		Relay3	V+	GND	--	--	Open	Close	Close	Open
	Input- Port 5(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- Port 8(White)	Relay1	V+	GND	--	--	Open	Close	Close	Open
		Relay2	V+	GND	--	--	Open	Close	Close	Open
		Relay3	V+	GND	--	--	Open	Close	Close	Open

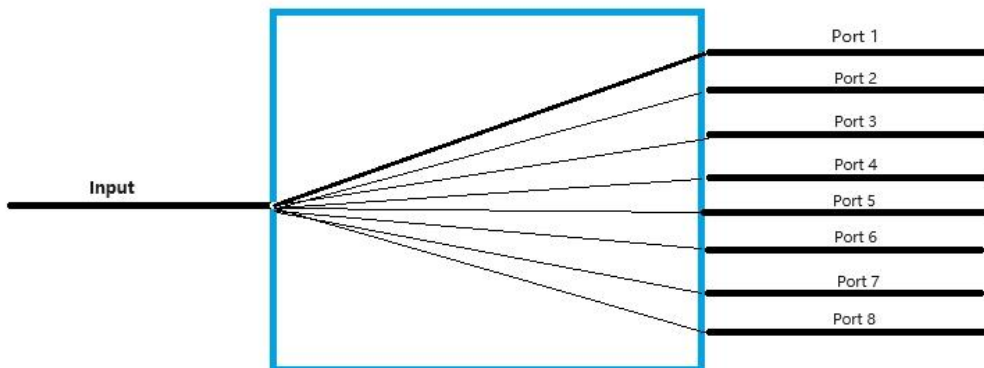
## Non-Latching Type

Type	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 1×8	Input- Port 1(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- Port 4(White)	Relay1	--	--	--	--	Close	Open	Open	Close
		Relay2	V+	--	--	GND	Open	Close	Close	Open
		Relay3	V+	--	--	GND	Open	Close	Close	Open
	Input- Port 5(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- Port 8(White)	Relay1	V+	--	--	GND	Open	Close	Close	Open
		Relay2	V+	--	--	GND	Open	Close	Close	Open
		Relay3	V+	--	--	GND	Open	Close	Close	Open

## Dimensions



## Optical Route



## Ordering Information: XH-OSW-mini 1X8-A-B-C-D-E-F-G

Wavelength(A)	Fiber Type(B)	Voltage Type(C)	Control Model(D)	Fiber Diameter (E)	Fiber Length(F)	Connector(G)
850:850nm 1310:1310nm 1550:1550nm 1310/1550:1310nm/1550nm X:Others	SM:SM,9/125 M5:MM,50/125 M6:MM,62.5/125	3:3V 5:5V	L=Latching N=Non-Latching	25::250um 90:900um	05:0.5m 10:1.0m 15:1.5m X:Others	NO:- FP: FC/PC FA: FC/APC SP: SC/PC SA: SC/APC LP: LC/PC LA: LC/APC X:Others