



Product Description

The Series 1x8 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	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	$\leq \pm 0.02$	dB
Durability	$\geq 10^7$	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			
1×8			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)	Relay	--	--	GND	V+	Close	Open	Open	Close
		Relay	--	--	GND	V+	Close	Open	Open	Close
		Relay	V+	GND	--	--	Open	Close	Close	Open
	Input- Port 2 (red)	Relay	--	--	GND	V+	Close	Open	Open	Close
		Relay	V+	GND	--	--	Open	Close	Close	Open
		Relay	--	--	GND	V+	Close	Open	Open	Close
	Input- Port 3(blue)	Relay	--	--	GND	V+	Close	Open	Open	Close
		Relay	--	--	GND	V+	Close	Open	Open	Close
		Relay	--	--	GND	V+	Close	Open	Open	Close
	Input- Port 4(White)	Relay	--	--	GND	V+	Close	Open	Open	Close
		Relay	V+	GND	--	--	Open	Close	Close	Open
		Relay	V+	GND	--	--	Open	Close	Close	Open
	Input- Port 5(Black)	Relay	V+	GND	--	--	Open	Close	Close	Open
		Relay	--	--	GND	V+	Close	Open	Open	Close
		Relay	V+	GND	--	--	Open	Close	Close	Open
	Input- Port 6 (red)	Relay	V+	GND	--	--	Open	Close	Close	Open
		Relay	V+	GND	--	--	Open	Close	Close	Open
		Relay	--	--	GND	V+	Close	Open	Open	Close
	Input- Port 7(blue)	Relay	V+	GND	--	--	Open	Close	Close	Open
		Relay	--	--	GND	V+	Close	Open	Open	Close
		Relay	--	--	GND	V+	Close	Open	Open	Close
	Input- Port 8(White)	Relay	V+	GND	--	--	Open	Close	Close	Open
		Relay	V+	GND	--	--	Open	Close	Close	Open
		Relay	V+	GND	--	--	Open	Close	Close	Open

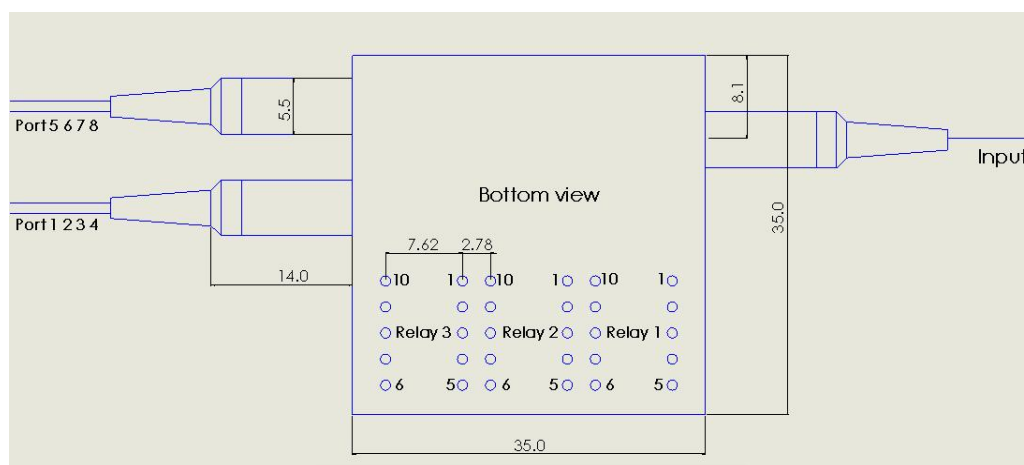


Non-Latching Type

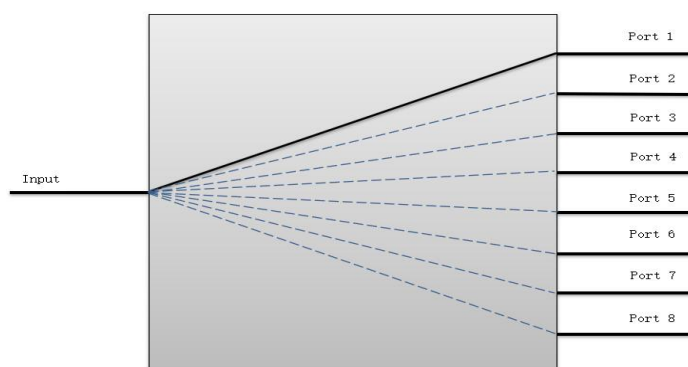
Type	Optical Route	Relay	Electric Drive				State Sensor			
1×8			Pin 1	Pin 5	Pin 6	Pin 10	Pin 2-3	Pin 3-4	Pin 7-8	Pin 8-9
Non-Latching	Input- Port 1(Black)	Relay	--	--	--	--	Close	Open	Open	Close
		Relay	--	--	--	--	Close	Open	Open	Close
		Relay	V+	--	--	GND	Open	Close	Close	Open
	Input- Port 2 (red)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



Mechanical Dimensions (Unit:mm)



Optical Route



Ordering Information HC-OSW-mini1×8-A-B-C-D-E-F

A	B	C	D	E	F
Test Wavelength	Type	Fiber Type	Fiber Dimension	Fiber Length	Connector
850: 850nm	3L: Latching	SM: Single Mode	025: Φ0.25mm	05: 0.5m	00: None
1310: 1310nm	3N: Non-latching	M1:Multi-mode 50/125	09: Φ0.9mm	10: 1.0m	FP: FC/UPC
1550: 1550nm	5L: Latching	M2:Multi-mode 62.5/125	X: other	15: 1.5m	FA: FC/APC
D: 1310/1550nm	5N: Non-latching	X: other		X: other	SP: SC/UPC
X: other					SA: SC/APC
					LP: LC/UPC
					LA: LC/APC
					X: other