

Description

XH-OSW-1X4 optical switch is an optical path control device, which has the role of controlling the optical path and converting the optical path. It has an important role in optical communication applications. The optical switch is mainly used in optical transmission system for multiple optical monitoring, LAN multi-source/detector automatic switching and optical sensing multi-point dynamic monitoring system optical test system for optical fiber, optical devices, network and field engineering optical cable testing; optical device installation and adjustment.

1x4 Optical Switch (SM) P/N:XH-OSW-1550nm-9/125-90-08-T-FA

Features

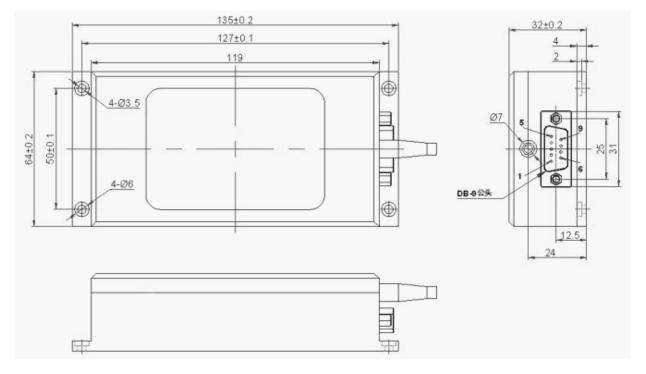
- Low insertion loss, wide wavelength range
- Low channel crosstalk, high stability, high reliability
- Proprietary technology, no glue in the optical path
- •Locking and non-locking control types are available

Performance

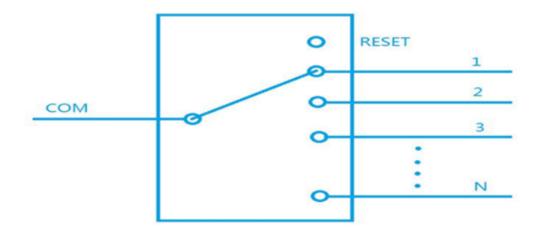
Performance		and the second se		
Parameter	Parameter Values			
Model	XH-OSW-1XN			
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Insertion Loss	Typ: 0.5 dB Max: 1.0 dB			
Wavelength Range	532~1064 nm	1260~1650 nm		
Wavelength Testing	532/650/780/850/980 nm	1310/1490/1550/1625 nm		
Return Loss	$MM \ge 30 SM \ge 50$			
Crosstalk	$MM \geq 70 \ SM \geq 70$			
PDL	≤0.05dB			
WDL	≤0.25 dB			
TDL	≤0.25 dB			
Repeatability	≤0.02 dB			
Lifetime	≥10 ⁷			
Switching Time	≤8 ms			
Transmission Power	≤500 mW			
Connector	FC、LC、SC、ST			
Control	TTL			
Operating Voltage	5V			
Working Current	500mA			
Operating Temperature	-20 ~+70			
Storage Temperature	-40 ~ +85			



Dimensions



Optical Route

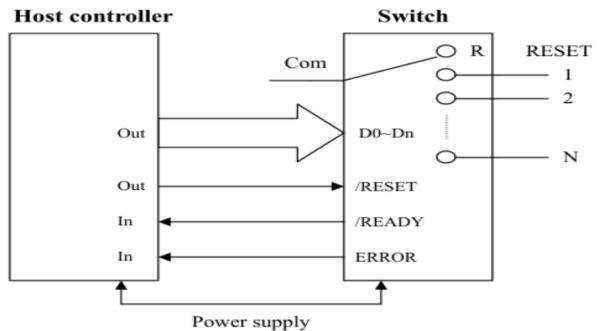




Pins

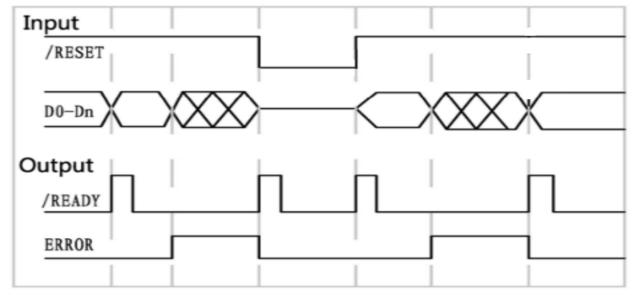
DB9 male connector				
Pins	Туре	Name	Functions	
1	Input	D0		
2	Input	D1	D3~D0 are the channel selection data bits, D3 is the high	
3	Input	D2	bit, D0 is the low bit	
4	Input	D3		
5	Input	RESET	low level indicates that the channel is reset, and a high level indicates that the data bits are active.	
6	Out	READY	low level indicates that the optical switch channel switching is completed, and a high level indicates that the optical switch channel is switching.	
7	Out	ERROR	low level indicates that the optical switch is operating normally, and a high level indicates that the optical switch channel selection data bit signal is overflowing or there is a fault inside the optical switch.	
8	Power	GND	Power supply ground	
9	Power	VCC	Positive power supply	

Control Schematic





Control timing diagram



Control Logic Table

Channel	D0	D1	D2	D3	RESET
COM-0	х	Х	х	Х	0
COM-1	0	0	0	0	1
COM-2	1	0	0	0	1
COM-3	0	1	0	0	1
					1
COM-14	1	0	1	1	1
COM-15	0	1	1	1	1
COM-16	1	1	1	1	1

*0 represents low level 0V, 1 represents high level 5V, the module has internal 5V pull-up resistor to support 3.3V microcontroller chip pin control.

Ordering Information : XH-OSW-1XN-A-B-C-D-E

Channel(N)	Wavelength(A)	Fiber Type(B)	Fiber Diameter(C)	Fiber Length (D)	Connector(E)
N:≤16	850:850nm 1310:1310nm 1550:1550nm 1310/1550:1310 nm/1550nm X:Others	SM:SM,9/125 M5:MM,50/125 M6:MM,62.5/12 5 HI1060:HI1060 X:Others	25::250um 90:900um 200:200um X:Others	05:0.5m 10:1.0m 15:1.5m X:Others	OO:None FP: FC/PC FA: FC/APC SP: SC/PC SA: SC/APC LP: LC/PC LA: LC/APC X:Others