Description:

XH-OSW-1X32 optical switch is an optical path control device, which has the function of controlling the optical path and converting the optical path. It plays an important role in optical communication applications. Optical switches are mainly used in multi-channel optical monitoring in optical transmission systems, automatic switching of LAN multi-light sources/detectors, and optical sensing multi-point dynamic monitoring systems in optical testing systems for optical fibers, optical devices, networks and field engineering. Optical cable testing ; Optical device adjustment.

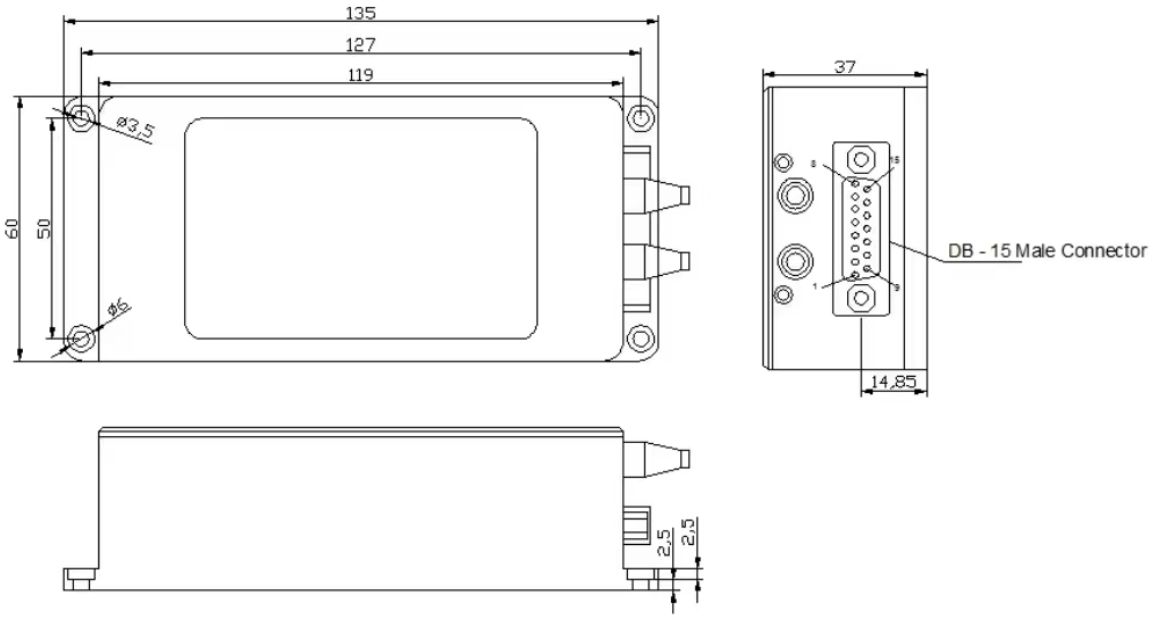
Features:

- ●Low insertion loss, wide wavelength range
- ● Low channel crosstalk, high stability, high reliability
- ●Unique technology, no glue in the optical path
- ●Selectable locking and non-locking control types

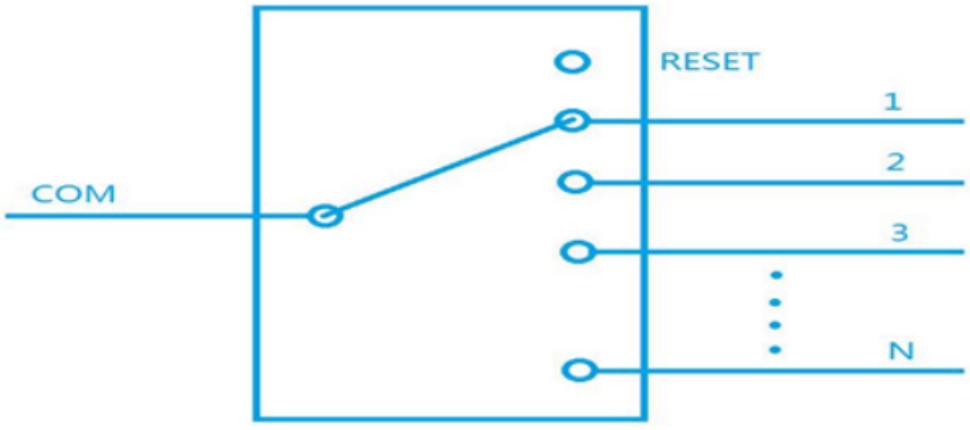
Parameter:

Parameter	parameter values
model	XH-OSW-1X32
Insertion Loss	16<N≤64
	Typ：0.6dB　　Max：0.8 dB
Wavelength Range	1260~1650 nm
Wavelength testing	1310/1490/1550/1625 nm
Return Loss	SM ≥ 50
Crosstalk	SM ≥ 70
PDL	≤0.05dB
WDL	≤0.25 dB
TDL	≤0.25 dB
Repeatability	≤0.02 dB
Lifetime	$\geq 10^7$ 次
Switching Time	≤8 ms （adjacent channel)
Transmission power	≤500 mW
Connector	FC、LC、SC、ST
Control	TTL
Operating Voltage	5V
Working current	600mA
Operating Temperature	-20　～+70
Storage Temperature	-40　～+85

Dimension



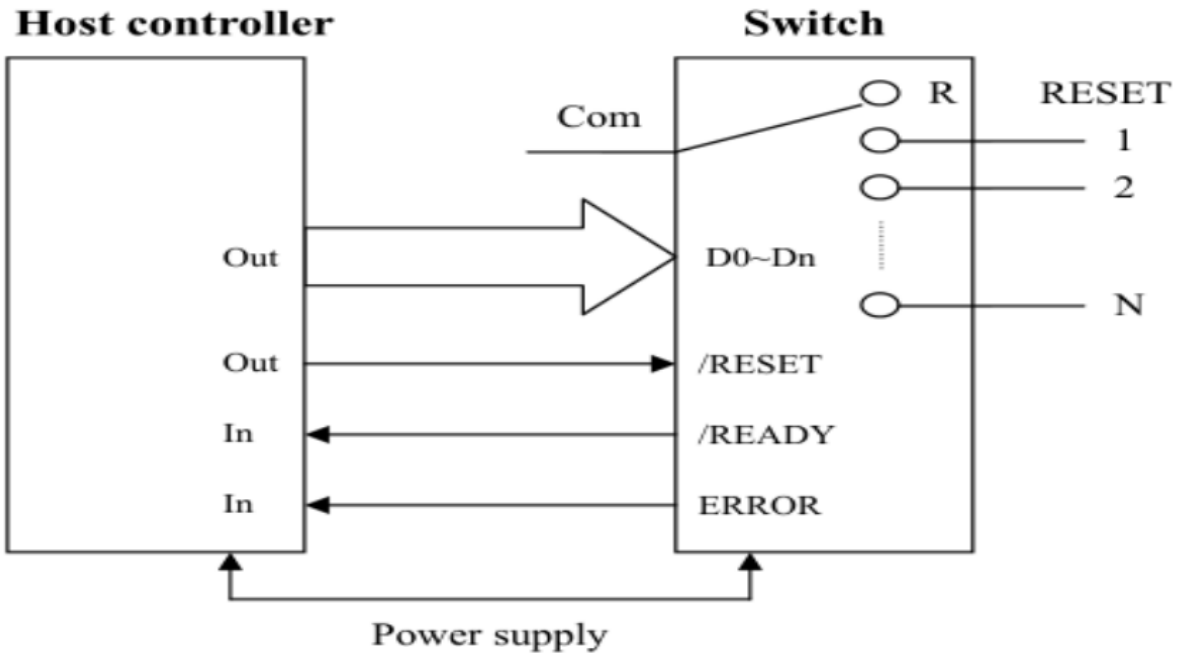
Optical Rout：



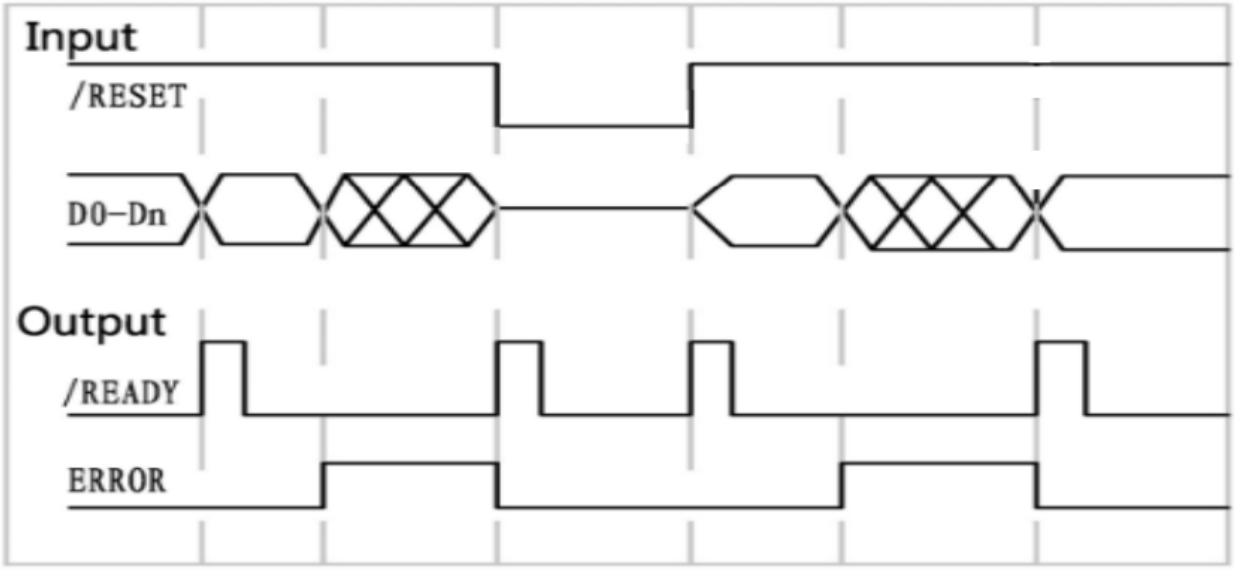
Pin：

DB15 male connector			
Pin	Type	Name	Function
2	Input	D0	D4~D0 are the channel selection data bits, D4 is the high bit, D0 is the low bit
3	Input	D1	
4	Input	D2	
5	Input	D3	
6	Input	D4	
7	Out	READY	A low level indicates that the optical switch channel switching is completed, and a high level indicates that the optical switch channel is being switched.
8	Out	ERROR	A low level indicates that the optical switch is operating normally, and a high level indicates that the optical switch channel selection data bit signal overflows or the optical switch has a fault inside.
11	Input	RESET	The low level indicates that the channel is reset, and the data bit is valid when the high level is used.
1,9	Power	GND	power supply ground
12	Power	VCC1	Positive pole of motor power supply
15	Power	VCC2	Positive pole of motor power supply
10, 13,14	NC	NC	null

Control Schematic:



Control timing diagram:



Control logic table:

Channel	D0	D1	D2	D3	D4	RESET
COM-0	x	x	x	x	x	0
COM-1	0	0	0	0	0	1
COM-2	1	0	0	0	0	1
COM-3	0	1	0	0	0	1
…						1
COM-30	1	0	1	1	1	1
COM-31	0	1	1	1	1	1
COM-32	1	1	1	1	1	1

*0 represents low level 0V, 1 represents high level 5V, there is a 5V pull-up resistor inside the module, which supports 3.3V single-chip chip pin control.

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

Number channels(N)	Test wavelength(A)	Fiber Type(B)	Protective sleeve(C)	Fiber length(D)	Connector(E)
N:≤64	850:850nm 1310:1310nm 1550:1550nm 1310/1550:1310nm/1550nm X:other	SM:SM,9/125 M5:MM,50/125 M6:MM,62.5/125 HI1060:HI1060 X:other	25::250um 90:900um 200:200um X:other	05:0.5m 10:1.0m 15:1.5m X:other	OO:None FP: FC/PC FA: FC/APC SP: SC/PC SA: SC/APC LP: LC/PC LA: LC/APC MPO X:other