

## 1×N Optical Switch (Stepper Motor )

### Features

- Up to 64 channels
- Low loss and high reliability
- Parallel interface (TTL,RS485,RS232)
- Modularized design
- Epoxy-free in optical path

### Applications

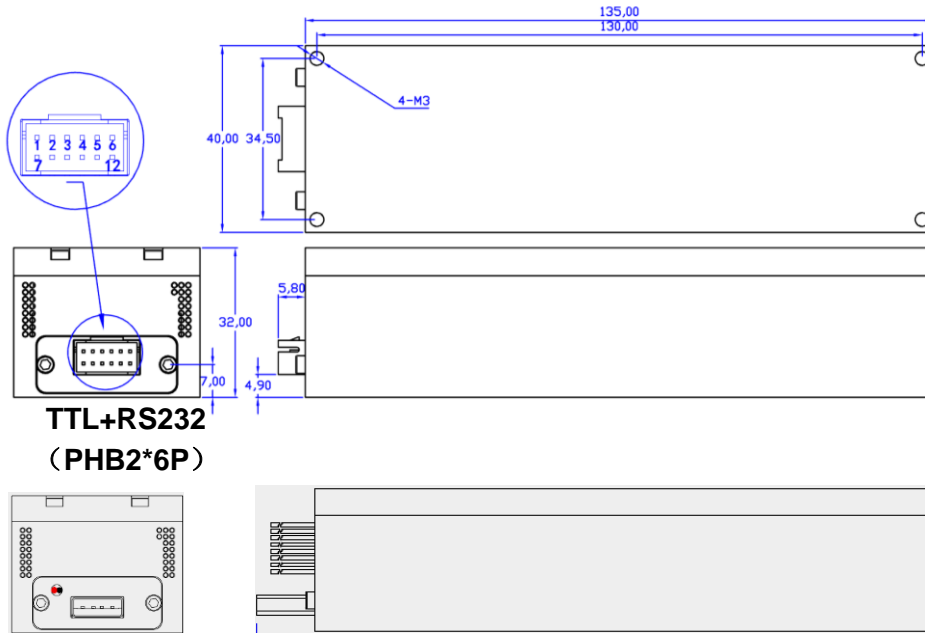
- Ring network
- Remote monitoring in optical network
- Testing of fiber optical component



### Specifications

Parameters	Unit	OSW-1×N	
		1<N≤32	32<N≤64
Insertion loss	dB	Typ:0.5 Max:1.0	Typ:1.0 Max:1.5
		532-780, 850-1310, 1260~1660	
Wavelength range	nm	532/650/780/850/980/1300/1310/1490/1550/1650	
Testing wavelength	nm	SM≥55、MM≥35	
Return loss	dB	≥-70	
Crosstalk	dB	≤0.10	
PDL	dB	≤0.25	
WDL	dB	≤0.30	
TDL	dB	≥18	
Extinction Ratio1	dB	≤±0.02	
Repeatability	dB	10 <sup>8</sup>	
Lifetime	cycle	≤1000	
Optical input power	mW	≤10 (Sequence switch time of adjacent channel)	
Switching time	ms	-40~+70	
Operating temperature	°C	-40~+85	
Storage temperature	°C	5	
Power supply	V	135X40X32 (N≤64)	
Dimensions	mm		

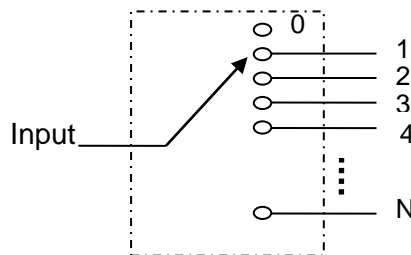
▣ **Dimensions**



**TTL+RS232  
(PHB2\*6P)**

**USB**

▣ **Optical Route**



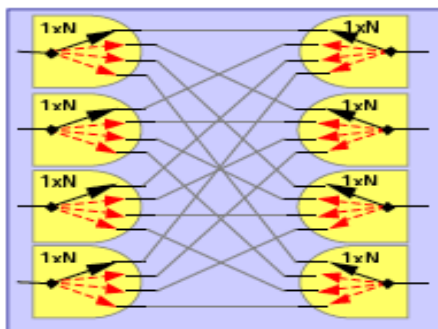
▣ **Pins**

Pin	I/O	SignalName	Description
1	Input	/RESET	TTL, Low level reset to channel 0. High level means channel selection bits are effective.
2	Input	D0	TTL, D0 is low, and D4 is high, Example: 00000b=1 CH; 11111b=32 CH.
3	Input	D1	
4	Input	D2	
5	Input	D3	
6	Input	D4	
7	Out	/READY	TTL, Ready (High=Not ready, Low=Ready)
8	Out	ERROR	TTL, Error (High=Error, Low=No error)
9	Power in	GND	Ground
10	Power in	5V	5.0±5% VDC Power Supply (max 500mA)
11	S-	RS232(485)	RX (B)
12	S+	RS232(485)	TX (A)

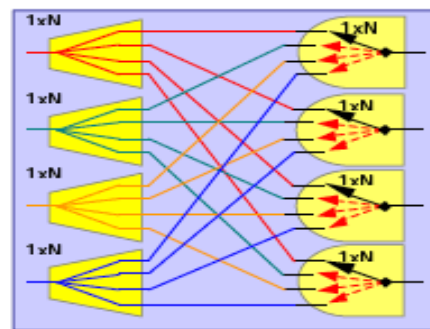
Ordering Information: OSW-1xN-A-B-C-D-E-F-G

N	A	B	C	D	E	F	G
	Fiber Type	Test Wavelength	sheath	Fiber Length	Connector	Control port	Size
1 ~ 64	SM: SM, 9/125 M5: MM50/125 M6: MM62.5/125 Hi:Hi1060	850: 850nm 1310: 1310nm 1550: 1550nm 13/15:1310/1550nm XX: othe	25:250um 90: 900um 20: 2.0mm FA:fiber array	05: 50±5cm 10: 100±5cm 15: 150±5cm	OO:None FP: FC/PC FA: FC/APC SP: SC/PC SA: SC/APC LP: LC/PC LA: LC/APC ST:ST/PC	01: TTL+RS232 02:TTL+RS485 03:USB	A:135X40X32 B:135X64X32

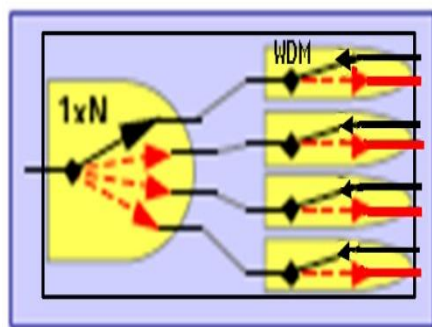
Flexible Architectures



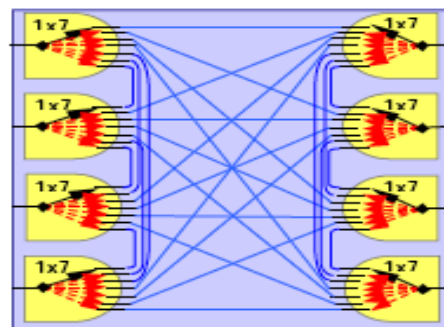
NXN Directional Matrix  
(Non-blocking OXC)



NXN Distributive Matrix  
(Broadcast Switch)



Optical Switch +WDM  
(Hybrid device)



Flex port Matrix  
(Any port to Any Port)