

1XN Mechanical Optical Switch

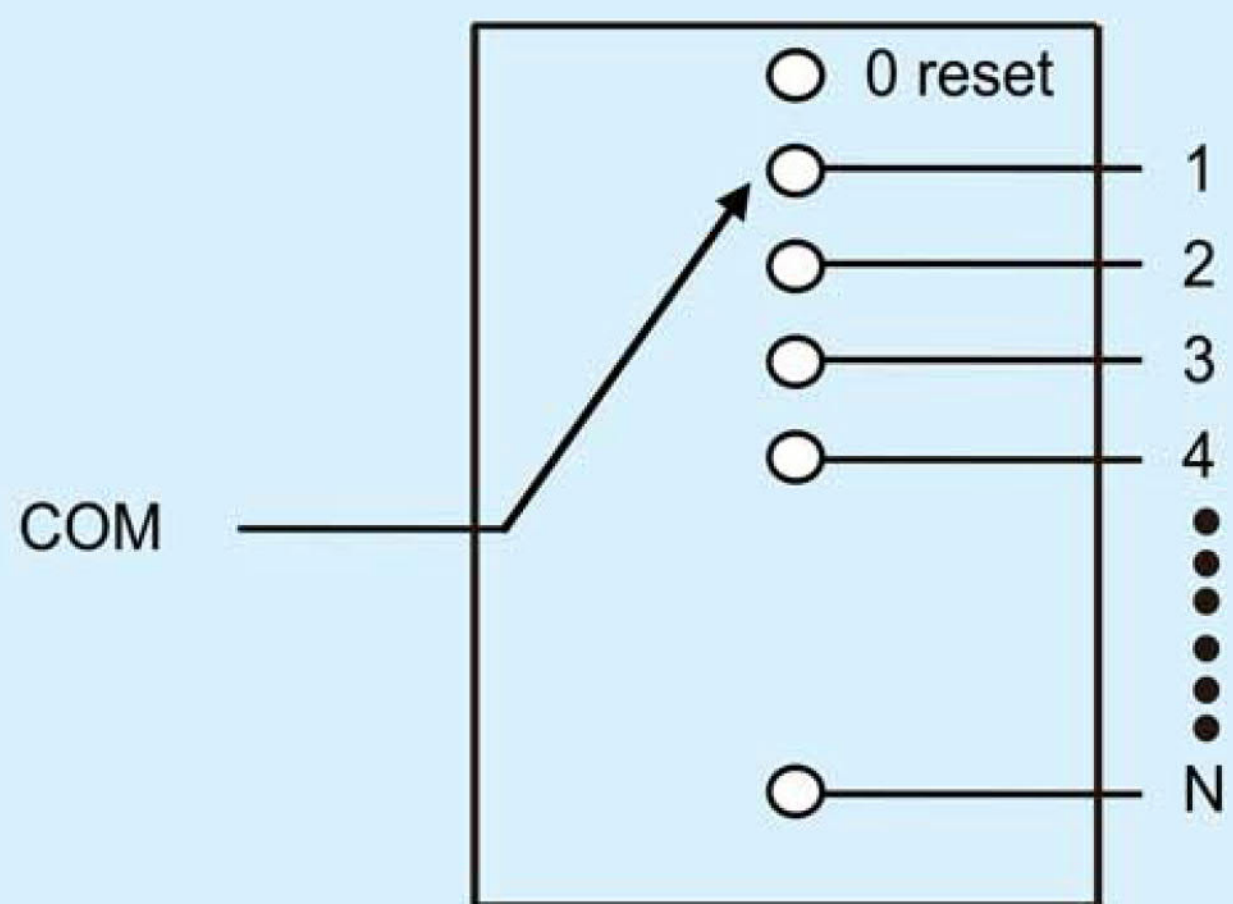
Features

- Up to 128 channels
- Low insertion loss
- Parallel interface (TTL)
- Modularized design
- Epoxy free on optical path

Applications

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

Optical Route



Performance Specifications

Parameter	1XN			
	1<N≤12	16<N≤32	32<N≤64	64<N≤128
Insertion Loss (dB)	Typ:0.8 Max:1.0	Typ:0.8 Max:1.0	Typ:1.2 Max:1.5	Typ:1.7 Max:2.0
Wavelength Range (nm)	850/1310/1550/1625			
Operating Wavelength (nm)	850±40, 1260~1650			
Wavelength Dependent Loss (WDL) (dB)	≤0.25			
Channel Crosstalk (dB)	MM≥35 SM≥55			
Return Loss (dB)	MM≥30 SM≥50			
Repeatability (dB)	≤0.02			
TDL(dB)	≤0.25			
PDL(dB)	≤0.05			
Transmission Power (mW)	500			
Switch Time (ms)	≤10			
Lifetime (Times)	≥10 ⁷			
Operating Temperature (°C)	-10~+70			
Storage Temperature (°C)	-40~+85			
Power Supply (V)	5 or 12			
Dimension (mm)	1<N≤12 (135x64x32)	12<N≤16 (184x78x36)	16<N≤32 (140x77.5x64)	
	32<N≤88(184x156x66)	88<N≤128 (184x220x66)		

Ordering Information

☐	☐	☐ ☐	☐	☐	☐	☐	☐
Channel	Mode	Wavelength	Voltage Type	Fiber Type	Fiber Diameter	Fiber Length	Connector
1~128	S=SM M=MM	85=850nm 13=1310nm 15=1550nm 65=1650nm 35=1310/1550nm S=Specify	5=5V 12=12V	1=SM 9/125 2=MM 50/125 3=MM 62.5/125 S=Specify	0=250μm 1=900μm 2=2.0mm 3=3.0mm	1=1m 2=1.5m S=Specify	0=None 1=FC/APC 2=FC/UPC 3=SC/APC 4=SC/UPC 5=LC/APC 6=LC/UPC 7=ST S=Specify

Performance Specifications

Pin No.	Signal Name	I / O	Description
1	D0	Input	TTL, Channel selection bit 0
2	D1	Input	TTL, Channel selection bit 1
3	D2	Input	TTL, Channel selection bit 2
4	D3	Input	TTL, Channel selection bit 3
5	/ RESET	Input	TTL, Low level reset to channel 0. High level means channel selection bits are effective
6	/ READY	Output	TTL, Ready (High=Not ready, Low=Ready)
7	ERROR	Output	TTL, Error (High=Error, Low=No error)
8	GND	Input	Ground
9	+5VDC	Input	5.0±5% VDC Power Supply (max 550mA)

Channel Selection Table

Max Channel	Input								Active Channel
	/RESET	D6	D5	D4	D3	D2	D1	D0	
N=16	0	X	X	X	X	X	X	X	0 reset
	1	X	X	X	0	0	0	0	COM — 1
		X	X	X	0	0	0	1	COM — 2
		X	X	X	0	0	1	0	COM — 3
		X	X	X					
		X	X	X	1	1	1	1	COM — 16

Dimension

Example: 135 x 64 x 32 mm (N≤12, DB-9 male)

