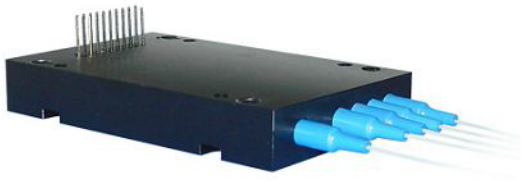


1x4, 1x8, 1x16 Optical Switch



Features:

- Wide Wavelength Range
- Low Back Reflection
- High Reliability、 High dependability
- Simple control
- Unique Patented Technology
- No glue in the route

Applications:

- Switching in Optical
- System Monitoring
- R&D in Laboratory

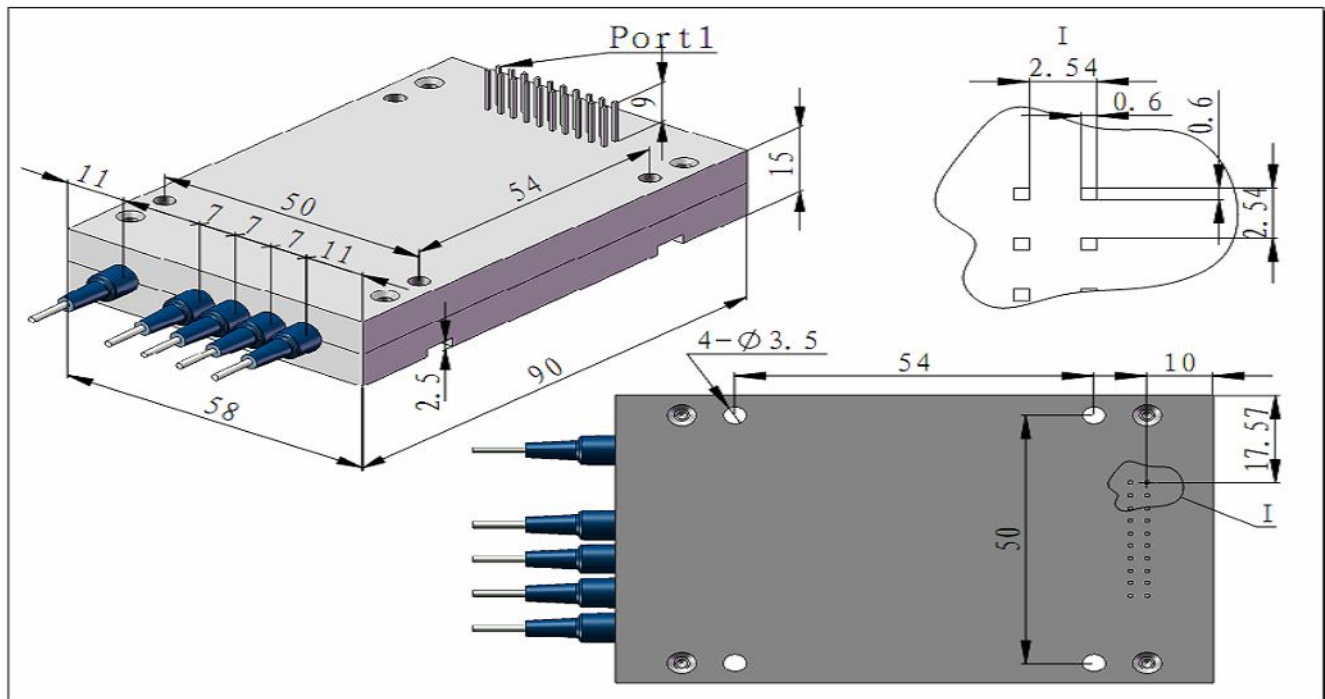
sw -1 × 4P、 1 × 8P、 1 × 16P Optical Switch, which is famous for its high performance, has a small dimension .It is an ideal Component for OADM , OXC , system monitoring and error protection. It could be easy to integrate into a high density optical communication system.

Specifications

Parameters	SW -1×4P、 1×8P、 1×16P						
Wavelength Range	nm	(1260~1620nm)		850, 1310 & 1490 & 1550 (SM)		535~980(MM)	
Insertion Loss (1x4)	dB	Typ:1.0	Max:1.2	Typ:1.2	Max:1.5	Typ:	Max:1.5
Insertion Loss (1x8)	dB	Typ:1.5	Max:1.8	Typ:1.8	Max:2.0	Typ:	Max:2.0
Insertion Loss (1x16)	dB	Typ:2.0	Max:2.4	Typ:2.4	Max:2.6	Typ:	Max:2.6
PDL	dB	≤ 0.05					
Return Loss	dB	SM ≥ 50、 MM ≥ 30					
WDL	dB	≤ 0.25					
Cross-Talk	dB	SM ≥ 55、 MM ≥ 35					
Repeatability	dB	≤ ± 0.02					
Operating Voltage	v	5.0					
Durability(Life)	times	≥ 10 ⁷					
Switching Time	ms	≤ 8					
Transmission Power	mW	≤ 500					
Operating Temperature		-20 ~ +70					
Storage Temperature		-40 ~ +85					
Dimension mm		1 × 4 (90 × 58 × 15)		1 × 4 (90 × 58 × 15)		1 × 4 (90 × 58 × 15)	

Dimension (mm)

1 × 4 Optical Switch Module size (mm)



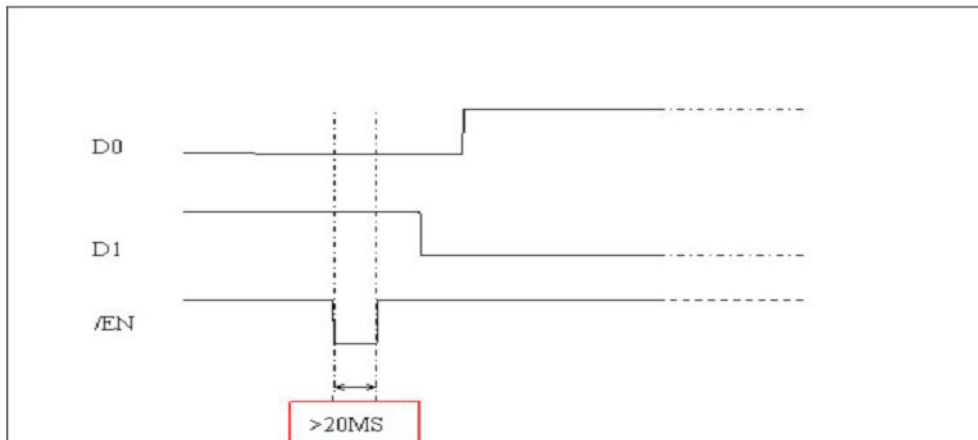
1 × 4 Optical Switch Pins Defining:

Pin Number	Name	Input or Output	Function
1	D0	Input	Port Selection Pin 1 (TTL signals)
2	D1	Input	Port Selection Pin 2 (TTL signals)
3	NC		No Connect
4	NC		No Connect
5	/EN		Enable (Input)
6	NC		No Connect
7	VCC	Input	+5.0V Power Supply (TTL Power)
8	GND	Input	Power Ground
9	NC		No Connect
10	NC		No Connect
11	NC		No Connect
12	NC		No Connect
13	S0		Inquiring status values 0 (TTL signals)
14	S1		Inquiring status values 1 (TTL signals)
15	NC		No Connect
16	NC		No Connect
17	NC		No Connect
18	NC		No Connect
19	NC		No Connect
20	NC		No Connect

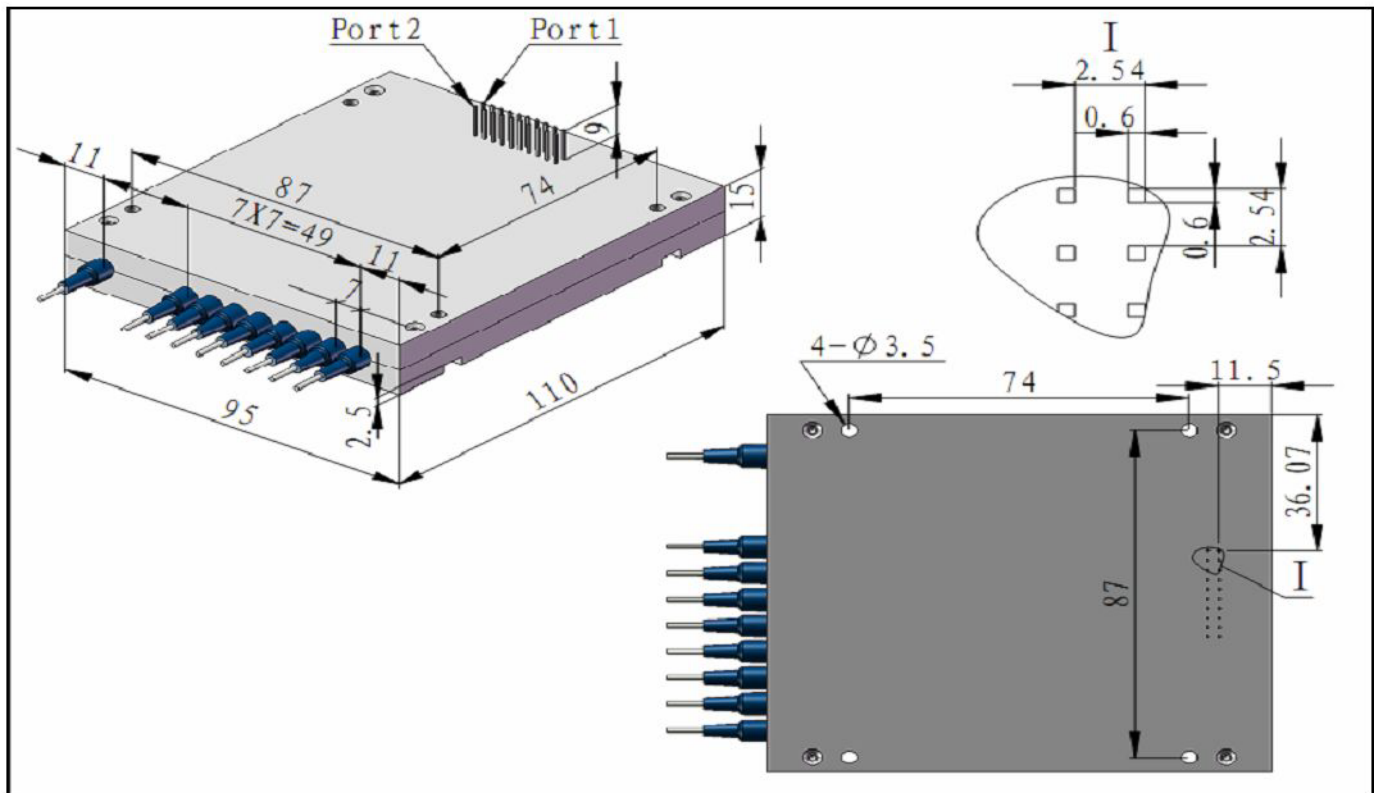
1 × 4 Optical Switch Control

Input Signals		The Selected Path	Output Signals	
D1	D0		S1	S0
0	0	Input→Output 1	0	0
0	1	Input→Output 2	0	1
1	0	Input→Output 3	1	0
1	1	Input→Output 4	1	1
Default : Input→Output 4				

1 × 4 Optical Switch switching sequence chart



1 × 8 Optical Switch Module Size (mm)



1 × 8 Optical Switch Pins Defining:

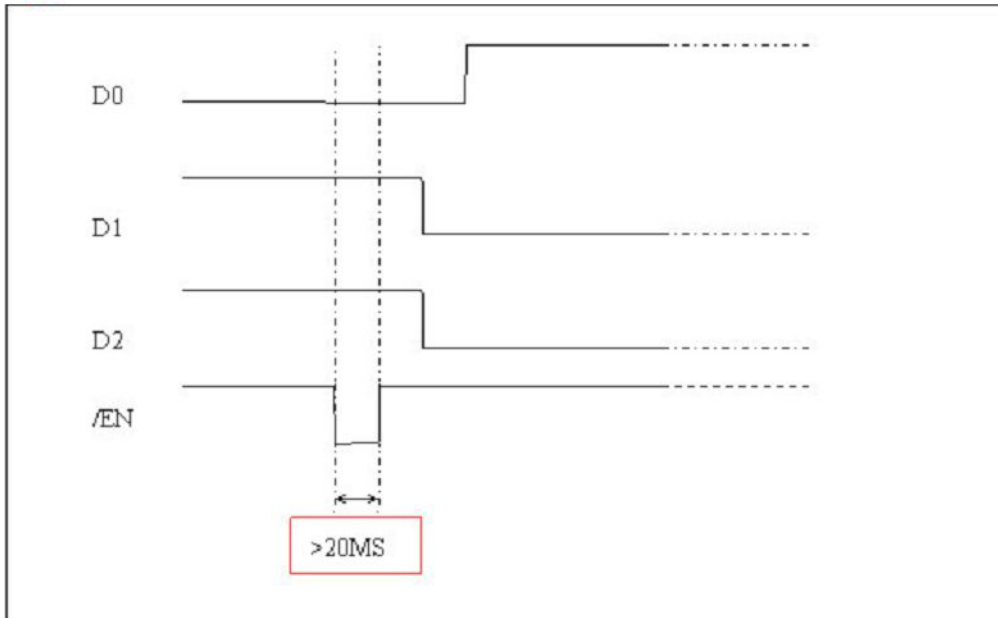
Pin Number	Name	Input or Output	Function
1	D0	Input	Port Selection Pin 1 (TTL signals)
2	D1	Input	Port Selection Pin 2 (TTL signals)
3	D2	Input	Port Selection Pin 3 (TTL signals)
4	NC		No Connect
5	/EN		Enable (Input)
6	NC		No Connect
7	VCC	Input	+5.0V Power Supply (TTL Power)
8	GND	Input	Power Ground
9	NC		No Connect
10	NC		No Connect
11	NC		No Connect
12	NC		No Connect
13	S0		Inquiring status values 0 (TTL signals)
14	S1		Inquiring status values 1 (TTL signals)
15	S2		Inquiring status values 2 (TTL signals)
16	NC		No Connect
17	NC		No Connect
18	NC		No Connect
19	NC		No Connect
20	NC		No Connect

1 × 8 Optical Switch Control

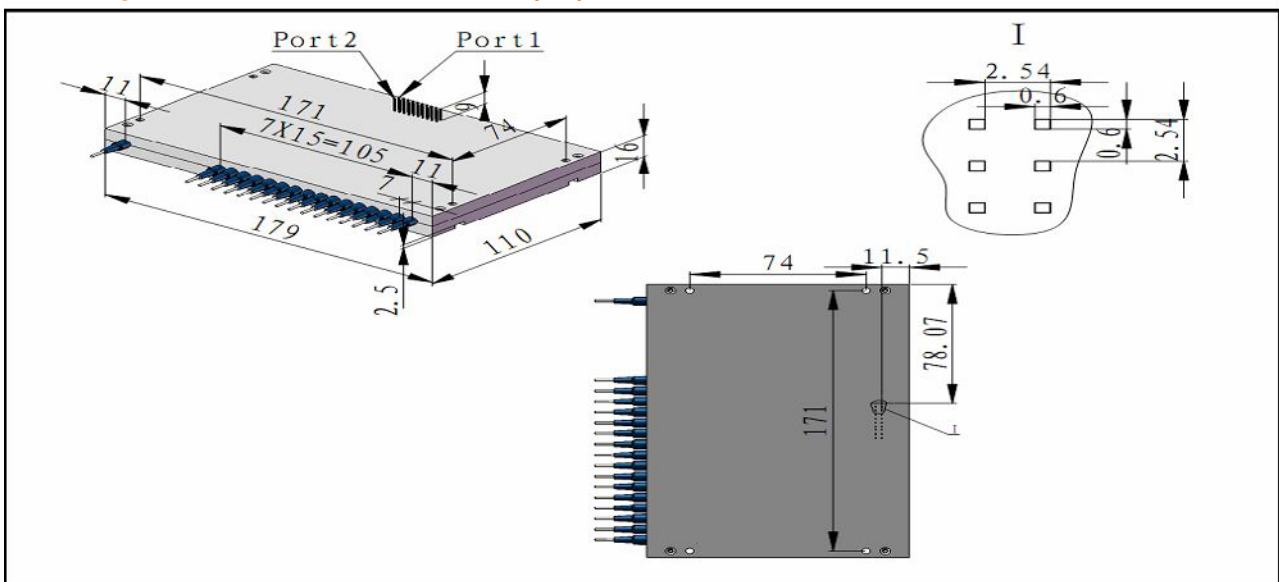
Input Signals			The Selected Path	Output Signals		
D2	D1	D0		S2	S1	S0
0	0	0	Input→Output 1	0	0	0
0	0	1	Input→Output 2	0	0	1
0	1	0	Input→Output 3	0	1	0
0	1	1	Input→Output 4	0	1	1
1	0	0	Input→Output 5	1	0	0
1	0	1	Input→Output 6	1	0	1
1	1	0	Input→Output 7	1	1	0
1	1	1	Input→Output 8	1	1	1

Default : Input→Output 8

1 × 8 Optical Switch switching sequence chart



1 × 16 Optical Switch Module Size (mm)



1 × 16 Optical Switch Pins Defining:

Pin Number	Name	Input or Output	Function
1	D0	Input	Port Selection Pin 1 (TTL signals)
2	D1	Input	Port Selection Pin 2 (TTL signals)
3	D2	Input	Port Selection Pin 3 (TTL signals)
4	D3	Input	Port Selection Pin 4 (TTL signals)
5	/EN		Enable (Input)
6	NC		No Connect
7	VCC	Input	+5.0V Power Supply (TTL Power)
8	GND	Input	Power Ground
9	NC		No Connect
10	NC		No Connect

NO. 1 Service NO.1 Quality

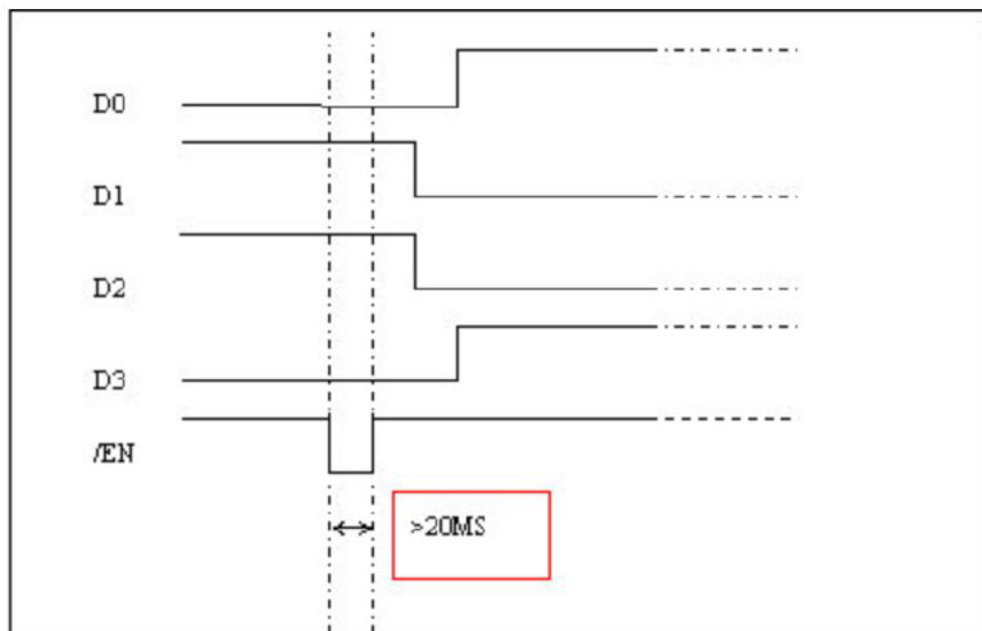
11	NC		No Connect
12	NC		No Connect
13	S0		Inquiring status values 0 (TTL signals)
14	S1		Inquiring status values 1 (TTL signals)
15	S2		Inquiring status values 2 (TTL signals)
16	S3		Inquiring status values 3 (TTL signals)
17	NC		No Connect
18	NC		No Connect
19	NC		No Connect
20	NC		No Connect

1 × 16 Optical Switch Control

Input Signals				The Selected Path	Output Signals			
D3	D2	D1	D0		S3	S2	S1	S0
0	0	0	0	Input→Output 1	0	0	0	0
0	0	0	1	Input→Output 2	0	0	0	1
0	0	1	0	Input→Output 3	0	0	1	0
0	0	1	1	Input→Output 4	0	0	1	1
0	1	0	0	Input→Output 5	0	1	0	0
0	1	0	1	Input→Output 6	0	1	0	1
0	1	1	0	Input→Output 7	0	1	1	0
0	1	1	1	Input→Output 8	0	1	1	1
Default : Input→Output 16								

Input Signals				The Selected Path	Output Signals			
D3	D2	D1	D0		S3	S2	S1	S0
1	0	0	0	Input→Output 9	1	0	0	0
1	0	0	1	Input→Output 10	1	0	0	1
1	0	1	0	Input→Output 11	1	0	1	0
1	0	1	1	Input→Output 12	1	0	1	1
1	1	0	0	Input→Output 13	1	1	0	0
1	1	0	1	Input→Output 14	1	1	0	1
1	1	1	0	Input→Output 15	1	1	1	0
1	1	1	1	Input→Output 16	1	1	1	1
Default : Input→Output 16								

1 × 16 Optical Switch switching sequence chart



Ordering Information

FSW-1×n-a-b-c-d-e-f-g-h

n	a	b	c	e	f	g	h
channel	mode	wavelength	voltage type	fiber type	fiber diameter	fiber length	connector
1~16	s:sm m:mm	85: 850nm 13: 1310nm 14: 1490nm 15: 1550nm 162: 1625nm 165: 1650nm 13/15:1310/1550nm x: others	3: 3v 5: 5v	5:50/125、 6:62.5/125 9: 9/125 x: other	25:250um 90:900um; 20:2.0mm 30: 3.0mm x: other	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 sp: st/pc sa: st/apc lp: lc/pc la: lc/apc x: other