

1xN (4~128) Opto-Mechanical Switch

FEATURES

- Unmatched Low Cost
- Low Insertion Loss
- Epoxy-Free Optical Path
- High Reliability and Stability
- High Stability

APPLICATIONS

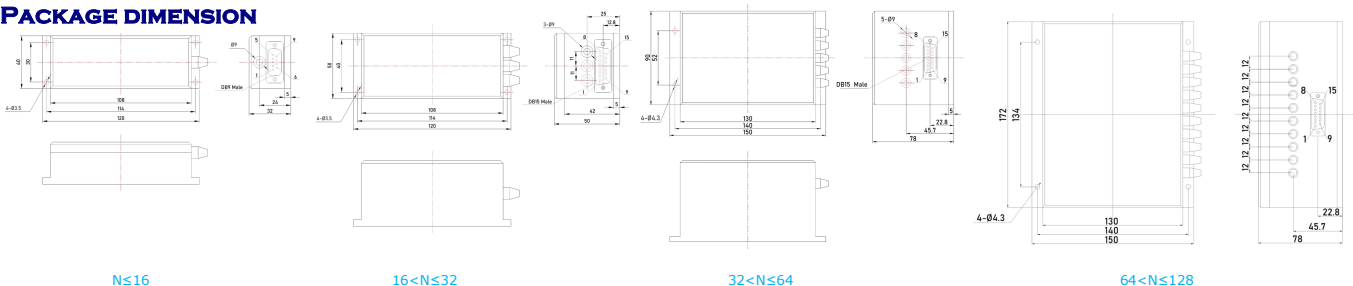
- Configurable Optical Networks
- Fiber Optic Instruments
- Optical Signal Routing
- Testing Instruments
- System Monitoring

SPECIFICATIONS

Parameters	Unit	Single Window		Dual Window
Center Wavelength	nm	1310, 1480, 1550 1590, 1625		1310&1550 C+L(1520~1620)
Bandwidth	nm	+/-30		
Configuration	-	1xN (N≤16)	1xN (17<N≤64)	1xN (65<N≤128)
Insertion Loss	dB	≤1.0	≤1.2	≤1.5
Wavelength Dependent Loss	dB	≤0.30		
Return Loss	dB	≥50		
PDL	dB	≤0.10		
Cross Talk	dB	≥55		
Switching Speed	ms	≤10 (Sequence switch time of adjacent channel)		
Durability	cycle	≥10,000,000		
Repeatability	dB	≤+/-0.15		
Fiber Type	-	SMF-28 Fiber		
Fiber Tensile Load	N	5		
Maximum Optical Power (CW)	mW	300		
Operating Temperature	°C	0~70		
Storage Temperature	°C	-40~85		

- Note:**
1. Specifications are for device without connectors; Specifications may change without notice.
 2. To add connectors, IL is 0.3dB higher, RL is 5dB lower.
 3. Devices for higher optical power or with other type fiber or consigned fiber are also available.

PACKAGE DIMENSION



ORDERING INFORMATION (PN)

FOMS -	NNNN	- M	NNN	(C)	-	C	NN	- CC/CCC
	<i>Center Wavelength</i>		<i>Configuration</i>	<i>Control Interface</i>		<i>Fiber Sleeve</i>	<i>Fiber Length</i>	<i>Connector Type</i>
	1310-1310nm		004-1x4 Type	S- Serial RS232		B- Bare Fiber	05-0.5m	N-Without Connector
	1550-1550nm		032-1x32 Type	T- Serial TTL		L- Loose Tube	10-1.0m	FC/APC=FC/APC Connector
	1315-1310nm&1550nm		088-1x88 Type	Blank for Parallel		2- 2mm Cable	15-1.5m	LC/PC=LC/PC Connector
	CL- C+L Band		128-1x128 Type			3- 3mm Cable	20-2.0m	SC/UPC=SC/UPC Connector

PIN CONFIGURATION (PARALLEL)

DB9 Male Connector (Max. 1x16):

Pin#	Signal	I/O	Description
1	D0	Input	TTL, Channel Selection Bit
2	D1	Input	TTL, Channel Selection Bit
3	D2	Input	TTL, Channel Selection Bit
4	D3	Input	TTL, Channel Selection Bit
5	/RESET	Input	TTL, L: reset to channel 0, H: Channel selection bit are effective
6	/READY	Output	TTL, L=Ready, H=Not Ready
7	ERROR	Output	TTL, H=Error, L=No Error
8	GND	Input	Ground
9	+5VDC	Input	5.0±5%VDC Power Supply

DB15 Male Connector (Max. 1x32):

Pin#	Signal	I/O	Description
2	D0	Input	TTL, Channel Selection Bit
3	D1	Input	TTL, Channel Selection Bit
4	D2	Input	TTL, Channel Selection Bit
5	D3	Input	TTL, Channel Selection Bit
6	D4	Input	TTL, Channel Selection Bit
10	D5	Input	TTL, Channel Selection Bit
13	D6	Input	TTL, Channel Selection Bit, NA for ≤1x64
11	/RESET	Input	TTL, L: reset to channel 0, H: Channel selection bit are effective
7	/READY	Output	TTL, L=Ready, H=Not Ready
8	ERROR	Output	TTL, H=Error, L=No Error
1, 9	GND	Input	Ground
15	+5VDC	Input	5.0±5%VDC Digital Power Supply
12	VM	Input	5.0±5%VDC or 12.0±5% Drive Power Supply
14	NA	NA	

CHANNEL SLECTION TABLE

Optical Path	Input							
	/RESET	D6	D5	D4	D3	D2	D1	D0
RESET	0	NA	NA	NA	NA	NA	NA	NA
Com-1	1	0	0	0	0	0	0	0
Com-2	1	0	0	0	0	0	0	1
Com-3	1	0	0	0	0	0	1	0
...	1
Com-128	1	1	1	1	1	1	1	1

TIMNG DIAGRAM

