

# 1x8 Mechanical SM Fibreroptic Switch



ACP's MS Series switch connects optical channels by redirecting an incoming optical signal into a selected output fiber. This is achieved using a patent pending opto-mechanical proprietary configuration and activated via an electrical control signal. The Switch offers ultra-high reliability and fast switching speed as well as bi-directional performance. The MS fibreroptic switches are true switching solution for optical networking applications.

## PERFORMANCE SPECIFICATIONS

Parameter	Specifications	
Operating Windows	Single	Dual
Operating Wavelength	1260 ~ 1360 or 1510 ~ 1560	1310/1550 ± 30nm
Grade	P	P
Insertion Loss	≤ 1.5dB	≤ 1.8dB
Wavelength Dependent Loss	≤ 0.25dB	≤ 0.30dB
Polarization Dependent Loss	≤ 0.20dB	
Channel Crosstalk	≥ 50dB	
Return Loss	≥ 55dB	
Repeatability	± 0.05dB	
Switching Speed (Max.)	≤ 2.5ms	
Power Supply	+5VDC Voltage: 5V +5DC Current: ≤ 200mA +3.3VCD Voltage: 3.3V	
Digital Interface Logic	CMOS (3.3V)	
Durability (Cycles)	10Million	
Optical Power	≤ 300mW	
Operating Temperature	0 to +70°C	
Storage Temperature	- 40 to +85°C	
Package Dimensions (LxWxH)	86x80x20	

All values referenced are without connector.

## FEATURES

- Unmatched Low Cost
- Low Insertion Loss
- High Channel Isolation
- High Stability and Reliability
- Epoxy Free Optical Path
- Latching or Non-Latching

## APPLICATION

- Optical Network Protection/ Restoration
- Optical Signal Routing
- Configurable Optical Add/Drop
- Transmitter & Receiver Protection
- Network Test Systems
- Instrumentation

≤ 10ms



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### OPTICAL PATH AND DATA PIN CONFIGURATION

Data Input	D0	0	1	0	1	0	1	0	1
	D1	0	0	1	1	0	0	1	1
	D2	0	0	0	0	1	1	1	1
Output	Port#	1	2	3	4	5	6	7	8

### ELECTRICAL PIN CONFIGURATIONS

Pin #	1	2	3	4	5	6	7	8	9	10
Name	+5V	GND	D0	D1	D2	Strobe	Busy	Error	GND	+3.3V

### ORDERING INFORMATION

Option	Grade	Operating Wavelength	Port	Fiber Type*	Pigtail Style	Fiber Length	In Connector	Out Connector
L=Latching	P=P Grade	31=1260 ~ 1360nm 55=1510 ~ 1610nm 3155=1310/1550nm	108=1x8	2=SMF-28 Ultra (G.657.A1) 3=ClearCurve ZBL(G.657.B3)	1=Bare fiber 2=900um loose tube	05=0.5m 10=1.0m . . 20=2.0m	0=None 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=ST 6=LC/UPC 7=LC/APC	0=None 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=ST 6=LC/UPC 7=LC/APC

\*1=SMF-28(G.652) is available upon request.