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# **1x8 Mechanical Fiberoptic 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 fiberoptic switches are true switching solution for optical networking applications.

#### **Key Features**

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

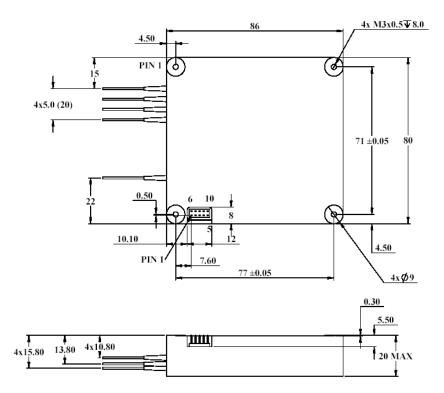
### **Applications**

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

### **Performance Specifications**

Parameter	Specifications						
Channel Wavelength	1260nm to1360nm or 1510nm to 1610nm	1310nm / 1550nm ± 40nm					
Insertion Loss	≤ 1.5dB (Max.)	<u>≤</u> 1.8dB (Max.)					
Wavelength Dependent Loss	<u>≤</u> 0.25dB	<u>≤</u> 0.30dB					
Polarization Dependent Loss	≤ 0.2df	≤ 0.2dB					
Channel Cross Talk	≥ 55dE	3					
Return Loss	≥ 55dE	3					
Repeatability	± 0.05d	B					
Switching Speed (Typ.)	<u>≤</u> 25ms						
+5 VDC Power Supply	5V (Тур	5V (Тур.)					
+3.3 VDC Power Supply	3.3V (Typ.)						
+5 VDCSwitch Current	200mA (Max.)						
Digital Interface Logic	3.3V CM	OS					
Durability (Cycles)	10 Million						
Optical Power	300mW						
Operating Temperature	0 to +70	0 to +70°C					
Storage Temperature	orage Temperature -40 to +85°C						
Fiber Type	SMF-28						
Fiber Length	1.0m ± 0.1m						
Package Dimensions	L86mm x W80mr	L86mm x W80mm x H20mm					

# **Mechanical Dimensions**



## **Electrical Pin Configuration**

PIN#	1	2	3	4	5	6	7	8	9	10
NAME	+5V	GND	D0	D1	D2	STR	BUSY	ERR	GND	+3.3V

# **Optical Switch Configuration**

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

### **Ordering Information**

MS							
Option	Operating Wavelength	Port	Grade	Pigtail Style	Fiber Length	In/Out Connector	
L = Latching	15 = 1510 to 1610nm 13 = 1260 to 1360nm 35 = 1310 to 1550nm	0108 = 1x8	P = P Grade	1 = Bare Fiber 2 = 900um Jacket	1 = 1.0m 2 = 2.0m	0 = None 1 = FC/APC 2 = FC/PC 3 = SC/APC 4 = SC/PC 5 = ST 6 = LC/UPC 7 = LC/APC	