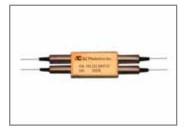


phone: 408.986.9838 email: sales@acphotonics.com website: www.acphotonics.com

# 2x2 Mechanical PM Fiberoptic Switch (Lantching or Non-Lantching)



**ACP's** PMS 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 configuration and activated via an electrical control signal. At the same time, the polarization state of the signal is preserved.

#### **Key Features**

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

#### Applications

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

#### **Performance Specifications**

Parameter	Specifications			
Channel Wavelength	1310 ± 40nm	1550 ± 40nm		
Insertion Loss	0.8dB (Typ.), 1.2 dB (Max.)			
Wavelength Dependent Loss	≤ 0.20dB			
Extinction Ratio	≥ 18dB (20dB Typ.)			
Channel Cross Talk	≥ 60dB			
Return Loss	≥ 55dB			
Repeatability	± 0.02dB			
Switching Speed (Typ.)	<u>&lt;</u> 10ms (Min.)			
Operating Voltage	4.5 - 5V			
Durability (Cycles)	10 Million			
Optical Power	500mW			
Operating Temperature	0 to +70°C			
Storage Temperature	-40 to +85°C			
Package Dimensions	L29mm x W15mm x H10mm			

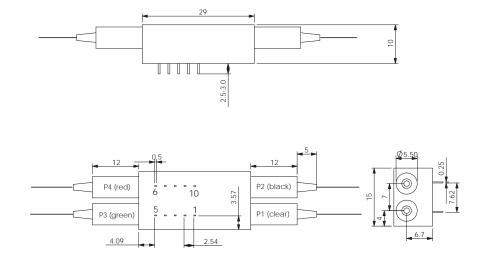
Note:

1. The PM fiber and the connector key are aligned to the slow axis.

2. The ER is for fiber  $\leq$  0.75 meter. Increase fiber length can decrease the ER.

3. For devices with connectors, insertion loss will be 0.3dB higher, return loss will be 5dB lower, and extinction loss will be 2dB lower.

## **Mechanical Dimensions**





# **Electrical Pin Configuration**

Optical Path		Port1- Port2		Port1- Port3	
Electric Drive	Non-Latching			Pin1	Pin10
	Latching	Pin10	Pin6	Pin1	Pin5
		V+	GND	V+	GND
Sensor Status	Non-Latching and Latching	Pin2-3, Pin8-9 Closs		Pin2-3, Pin8-9 Open	
		Pin3-4, Pin7-8 Open		Pin3-4, Pin7-8 Closs	

Parameter	Typical	Minmum	Maxmum
Switch Voltage	5V	4.5V	5.5V
Switch Current	> 40mA		
Pulse Duration	> 25ms		

## **Ordering Information**

PMS							
Option	Operating Wavelength	Port	Grade	Pigtail Style	Fiber Length	In/Out Connector	Working axis
L = Latching N = Non-Latching	15 = 1550nm 13 = 1310nm	0202 = 2x2	P = P Grade	1 = Bare Fiber 2 = 900um Jacket	1 = 0.75m 2 = 1.0m 3 = 1.5m S = Specify	0 = None 1 = FC/APC 2 = FC/PC 3 = SC/APC 4 = SC/PC 5 = ST 6 = LC/UPC 7 = LC/APC	S = Slow axis working F = Fast axis working