## 1x4 Mechanical PM Fiberoptic Switch

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.

PERFORMANCE SPECIFICATIONS

## Parameter

Operating Wavelength
Insertion Loss
Wavelength Dependent Loss
Extinction Ratio
Channel Cross Talk
Return Loss
Repeatability
Switching Speed (Typ.)
Operating Voltage
Durability (Cycles)
Optical Power
Fiber Type
Operating Temperature
Storage Temperature
Package Dimensions

## Specifications

1310nm, 1550nm
$\leq 1.1 \mathrm{~dB}$
$\leq 0.20 \mathrm{~dB}$
$\geq 18 \mathrm{~dB}$ (20dB Typ.)
$\geq 55 \mathrm{~dB}$
$\geq 50 \mathrm{~dB}$
$\pm 0.02 \mathrm{~dB}$
10 ms (5ms Typ.)
5 V
10 Million
500 mW
Panda PM fiber
O to $+70^{\circ} \mathrm{C}$
-40 to $+85^{\circ} \mathrm{C}$
L26mm $\times \mathrm{W} 25.5 \mathrm{~mm} \times \mathrm{H} 10.3 \mathrm{~mm}$

## FEATURES

High Extinction Ratio
Low Insertion Loss
High Channel Isolation
High Stability and Reliability
Epoxy Free Optical Path

## APPLICATION

Optical Signal Routing
Network Test Systems Instrumentation

## Note:

1. The PM fiber and the connector key are aligned to the slow axis. 2. The ER is for fiber < 0.75 meter. Increase fiber length can decrease the ER.
2. For devices with connectors, insertion loss will be 0.3 dB higher, return loss will be 5 dB lower, and extinction loss will be 2 dB lower.

## MECHANICAL DIMENSIONS



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## ELECTRICAL PIN CONFIGURATION

| Relay Status | Electric Drive (Pin \#) |  |  |  | Sensor Status (Pin \#) |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 5 | 6 | 10 | $2-3$ | $3-4$ | $8-7$ | $8-9$ |
|  | GND | GND | GND | + | Close | Open | Open | Close |
| $\mathbf{1}$ (set) | + | GND | GND | GND | Open | Close | Close | Open |

OPTICAL SWITCH CONFIGURATION

| Relay No. | $\mathbf{1}$ | $\mathbf{2}$ | Switch Status |
| :---: | :---: | :---: | :---: |
| Relay Status | 0 | 0 | C-Port 1 |
|  | 0 | 1 | C-Port 2 |
|  | 1 | 0 | C-Port 3 |
|  | 1 | 1 | C-Port 4 |

## ORDERING INFORMATION

PMS

| Option | Operating Wavelength | Port | Grade | Pigtail Style | Fiber Length | In/Out Connector | Working axis |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $L=$ Latching | $15=1550 \mathrm{~nm}$ | $0104=1 \times 4$ | $P=P$ Grade | 1 = Bare Fiber | $1=0.75 \mathrm{~m}$ | $0=$ None | S = Slow axis |
|  | $13=1310 \mathrm{~nm}$ |  |  | 2 = 900um Jacket | $2=1.0 \mathrm{~m}$ | 1 = FC/APC | working |
|  |  |  |  |  | $3=1.5 \mathrm{~m}$ | $2=F C / P C$ | $B=$ Both axes |
|  |  |  |  |  | S = Specify | 3 = SC/APC | working |
|  |  |  |  |  |  | $4=S C / P C$ | F = Fast axis |
|  |  |  |  |  |  | $5=S T$ | working |
|  |  |  |  |  |  | $6=$ LC/UPC |  |
|  |  |  |  |  |  | 7 = LC/APC |  |

