

Dual 1x2 Mechanical Optical Switch Spec



The dual 1x2 fiber optic switch connects optical channels by directing or blocking an incoming optical signal into the output fiber. This is achieved using a patent pending opto-mechanical configuration and activated via an electrical control signal.

A latching version preserves the selected optical path after the drive signal has been removed, while the non-latching versions default to either the open or closed state when power is removed. The switch has integrated electrical position sensors.

The new material based advanced design significantly reduces moving part position sensitivity, offering unprecedented high stability as well as unmatched low cost.

Features

- Low Insertion Loss
- Wide wavelength range
- Low channel crosstalk
- Lock or Non-lock
- High stability and reliability

Application

- Metro network
- Laboratory research and development
- Monitoring system
- Dynamic configuration distribution multiplexing

Performance Specifications

| Parameters | Specifications | Unit |
|-----------------------------|-----------------------|-------|
| Operating Wavelength | 1260~1620(SM)、850(MM) | nm |
| Insertion Loss | ≤1.0 | dB |
| Wavelength Dependent Loss | ≤0.25 | dB |
| Polarization Dependent Loss | ≤0.05 | dB |
| Temperature Dependent Loss | ≤0.25 | dB |
| Return Loss | SM≥50 MM≥30 | dB |
| Cross Talk | SM≥55 MM≥35 | dB |
| Switch Time | ≤8 | ms |
| Repeatability | ≤±0.02 | dB |
| Durability | ≥10 ⁷ | times |
| Operating Voltage | 3 or 5 | V |
| Switch Type | Non-Latching/Latching | |
| Operating Temperature | -20~+70 | °C |
| Storage Temperature | -40~+85 | °C |
| Optical Power | ≤500 | mW |
| Dimension | 27.0L×12.0W×8.2H | mm |

* Notes: 1. Insertion Loss tested without connector.

Hirundo Optics Inc

Factory: 2nd Floor, Building 6, #16 Xinfa Road, Southern Cable Industrial Park, Rongli Ronggui Street, Shunde District, Foshan city, Guangdong 528305 China
Tel: 0757-26619220 Email: info@hirundo-link.com Website: <https://www.hirundo-link.com>

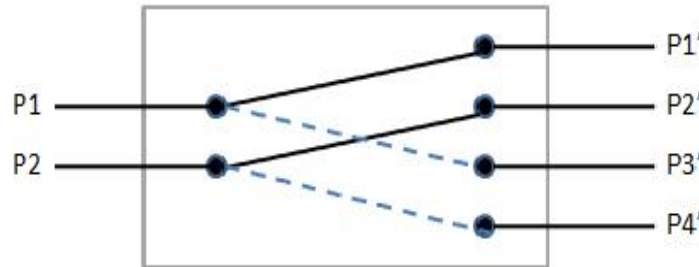
Dual 1x2 Mechanical Optical Switch Spec



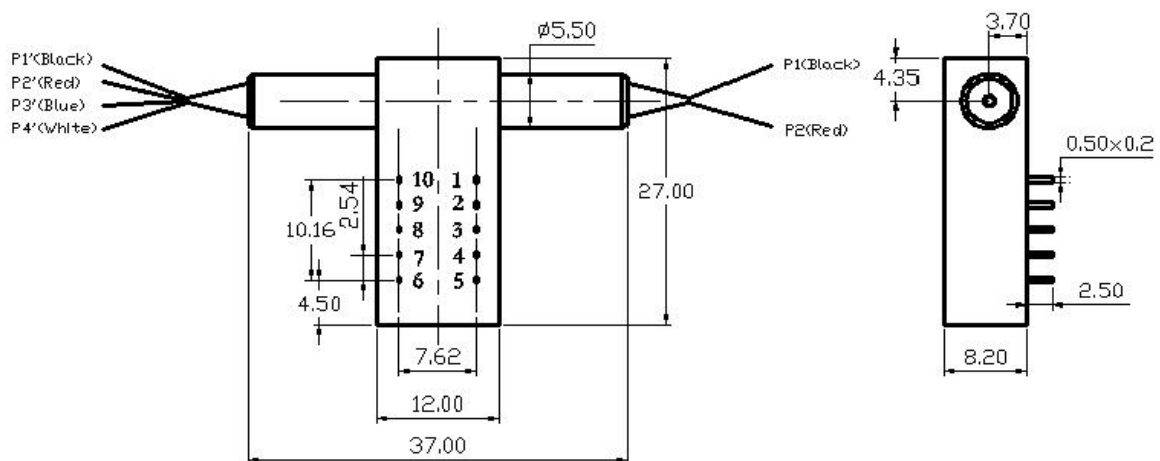
Pin Configurations

| Type | Optical Path | Electric Drive | | | | Status Sensor | | | |
|--------------|----------------|----------------|-------|-------|--------|---------------|---------|---------|---------|
| | | Pin 1 | Pin 5 | Pin 6 | Pin 10 | Pin 2-3 | Pin 3-4 | Pin 7-8 | Pin 8-9 |
| D1x2 | | | | | | | | | |
| Latching | P1-P3', P2-P4' | -- | -- | GND | V+ | Close | Open | Open | Close |
| | P1-P1', P2-P2' | V+ | GND | -- | -- | Open | Close | Close | Open |
| Non-Latching | P1-P3', P2-P4' | -- | -- | -- | -- | Close | Open | Open | Close |
| | P1-P1', P2-P2' | V+ | -- | -- | GND | Open | Close | Close | Open |

Optical Route



Dimensions Diagram(Unit:mm)



Order information:

SW (Switch) PN: SW-XXXXXXXX-XX (SW+11 Code+2 Serial Number)

| SW | X | XXXX | X | X | X | X | X | X | XX | | | | | | | |
|------|--------------------|------------|--------------|--------------|--------------|--------------|------------------|---|---------|---|---------|---|--------------|---|---------|--------|
| Type | Central Wavelength | Fiber Type | Fiber Jacket | Fiber Length | Connector | Control Type | Drive Voltage | | | | | | | | | |
| 1 | 1X1 | 0850 | 850 | 0 | SM, 9/125 | 0 | 250um Bare Fiber | 0 | 0.5m | 0 | none | L | Latching | 3 | 3V | S N |
| 2 | 1X2 | 0980 | 980 | 1 | MM, 50/125 | 1 | 0.9mm Loose | 1 | 1.0m | 1 | SC/UPC | N | Non-latching | 5 | 5V | |
| 3 | 1X2T | 1060 | 1060 | 2 | MM, 62.5/125 | S | Special | 2 | 1.5m | 2 | SC/APC | | | S | Special | |
| 4 | 2X2B | 1310 | 1310 | 3 | PM | | | 3 | 2.0m | 3 | FC/UPC | | | | | |
| 5 | 2X2T | 1480 | 1480 | 3 | Special | | | 4 | 2.5m | 4 | FC/APC | | | | | |
| 6 | 1X4 | 1550 | 1550 | | | | | 5 | 3.0m | 5 | LC/UPC | | | | | |
| 7 | 1X6 | 1315 | 1310&1550 | | | | | 6 | 3.5m | 6 | LC/APC | | | | | |
| 8 | 1X8 | 1625 | 1625 | | | | | 7 | 0.7m | 7 | ST/UPC | | | | | |
| S | Special | 000S | Special | | | | | 8 | 1.2m | 8 | E2000 | | | | | |
| | | | | | | | | 9 | 2.7m | S | Special | | | | | |
| | | | | | | | | S | Special | | | | | | | |

Hirundo Optics Inc

Factory: 2nd Floor, Building 6, #16 Xinfa Road, Southern Cable Industrial Park, Rongli Ronggui Street, Shunde District, Foshan city, Guangdong 528305 China
 Tel: 0757-26619220 Email: info@hirundo-link.com Website: https://www.hirundo-link.com