

# 1x1 Single Mode Mechanical Optical Switch

This 1x1 optical switch features low insertion loss and high switching speed. The switch is designed for use in optical fiber communication networks and measurement instruments.



## Overview

### High-Performance Optical Switching

The 1x1 Single Mode Mechanical Optical Switch is a compact, high-reliability device engineered for precise optical signal routing and network protection. It offers exceptional performance across a wide wavelength range, featuring low insertion loss and minimal polarization dependency. Designed for durability, it supports up to 10 million switching cycles, making it an ideal choice for demanding applications such as optical network reconfiguration and remote testing.

## Optical Performance

### Insertion Loss

**0.6 dB**

Insertion Loss

### Key Performance Metrics

Parameter	Value
WDL	< 0.15 dB
PDL	< 0.02 dB
TDL	< 0.20 dB
Channel Cross Talk	> 55 dB
Repeatability	± 0.03 dB
Return Loss	> 55 dB

Operating Wavelengths: 850nm, 1310nm, 1490nm, 1550nm, 1625nm

## Mechanical & Electrical

Switching Speed	10 ms
Drive Voltage	3V, 5V
Power Handling	500 mW
Durability	10 million cycles

## Environmental & Physical

Operating Temperature	-20 to +80 °C
Storage Temperature	-40 to +85 °C
Dimensions (LxWxH)	27 x 12.6 x 8.5 mm