



## POLARIZATION MAINTAINING AND SINGLEMODE FIBER OPTIC SWITCHES

### Features

- Maintains polarization to better than 20dB
- Low Losses
- Latching and Non-Latching versions
- Reliable switching mechanism
- Low Cost

### Applications

- Polarization Maintaining Optical Networks
- Optical Add/Drop Systems
- Test Instruments

Preliminary



Polarization Maintaining Fiber Switch

OZ Optics now offers polarization maintaining fiber optic switches. These switches are built using polarization maintaining (PM) fiber and maintain polarization to better than 20dB on both channels, while providing less than 0.6dB losses. The switches have been tested over millions of switching cycles with no change in losses or polarization performance. These switches are ideal for next generation high-speed networks, thanks to the use of PM fiber to eliminate PMD and PDL issues. They are also ideal for test instruments that use PM fibers to make measurements. Singlemode fiber versions are also available.

### Standard Product Specifications:

| Parameters                         | Specification  |
|------------------------------------|--|
| Operating Wavelength (nm)          | 1510 - 1610 Standard. Other wavelengths available on request |
| Insertion loss                     | <=0.6 (LL version), <=0.8 (Standard)                         |
| Wavelength Dependent Loss (dB)     | <=0.25dB   |
| Polarization Extinction Ratio (dB) | >20dB (both channels)  |
| Return Loss (dB)                   | < - 55dB   |
| Repeatability                      | <= ±0.05dB   |
| Drive Voltage (V)                  | 5V   |
| Durability (Cycles)                | Millions   |

### Description

#### Part Number

**FOS-12N-a/b-F-W-XYZ-JD-L-S-(-LL)**

**a/b** = Fiber core/cladding sizes in microns  
 9/125 for 1300/1550 nm singlemode fiber  
 8/125 for 1550 nm PM fiber  
 7/125 for 1300 nm PM fiber  
 See tables 1 to 5 of the Standard Tables data sheet for other standard fiber sizes.

**F** = Fiber Type  
 S = Singlemode  
 P = Polarization Maintaining

**W** = Wavelength: Specify in nanometers  
 (Example: 1550 for 1550 nm)

**LL** = Low loss (<0.6dB) option

**S** = Switch Type  
 L = Latching  
 N = Non-Latching

**L** = Fiber length, in meters (1 meter is standard)

**JD** = Fiber jacket type  
 0.25 = 250 micron OD acrylate coating  
 1 = 900 micron OD hytrel jacket

**XYZ** = Connector codes for each port  
 3S = Super NTT-FC/PC  
 3U = Ultra NTT-FC/PC  
 3A = Angled NTT-FC/PC  
 LC = LC  
 SC = SC  
 SCA = Angled SC

See table 6 of the Standard Tables data sheet for other connectors