## FIBER-OPTIC SWITCH

## FOS Fiber-Optic Switch

The FOS Series Fiber-Optic Switch is a convenient way to connect up to eight lasers to a single fiber-coupled instrument, such as the wavelength meters and spectrum analyzers provided by Bristol Instruments.

The FOS Fiber-Optic Switch is a self-contained microelectromechanical
 (MEMS) switch that operates from 400 to 1700 nm . The switch is USB powered and controlled using a simple and intuitive PC application. Switching can be done manually, with the user selecting an appropriate channel. Or, switching can be done automatically by cycling through user specified channels.

| SPECIFICATIONS |  |
| :---: | :---: |
| SWITCH TYPE | $1 \times 4$ or $1 \times 8$ |
| WAVELENGTH RANGE | 400-1700 nm |
| INTERNAL FIBER TYPE | $9 \mu \mathrm{~m}$ core diameter (single-mode over 1260-1625nm) |
| CONNECTOR TYPE | FC/UPC or FC/APC |
| TRANSMISSION ${ }^{1,2}$ | $\begin{gathered} 10-30 \%(400-600 \mathrm{~nm}) \\ 30-40 \%(600-1700 \mathrm{~nm}) \end{gathered}$ |
| REPEATABILITY ${ }^{2}$ | $\geq 0.01 \mathrm{~dB}$ |
| POLORIZATION DEPENDENT LOSS ${ }^{2}$ | $\geq 0.1 \mathrm{~dB}$ |
| RETURN LOSS ${ }^{2}$ | $\geq 40 \mathrm{~dB}$ |
| CROSSTALK ${ }^{2}$ | $\leq-50 \mathrm{~dB}$ |
| SWITCHING TIME | $\leq 5 \mathrm{~ms}$ |
| SWITCHING FREQUENCY | $\leq 30 \mathrm{~Hz}$ |
| LIFETIME | Earlier of $10^{8} \mathrm{cycles}$ or two years |
| MAXIMUM INPUT POWER | $\begin{gathered} 0.05 \mathrm{~mW}(400-500 \mathrm{~nm}) \\ 10 \mathrm{~mW}(500-600 \mathrm{~nm}) \\ 100 \mathrm{~mW}(600-1700 \mathrm{~nm}) \end{gathered}$ |
| DIMENSIONS ( $\mathrm{H} \times \mathrm{W} \times \mathrm{D}$ ) | 2.5 " $\times 5.5$ " $\times 9.0$ " ( $64 \mathrm{~mm} \times 140 \mathrm{~mm} \times 229 \mathrm{~mm}$ ) |
| WEIGHT | $2.5 \mathrm{lbs}(1.1 \mathrm{~kg})$ |
| POWER | USB 2.0/500 mA |
| INSTRUMENT INTERFACE | Windows-based application via USB 2.0 or greater |

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[^0]:    (1) With $9 \mu \mathrm{~m}$ core diameter external fiber
    (2) Typical

