## Optical A/B Switch

For Secure Fiber Optic Signal Selection Applications
The LuxLink ${ }^{\circledR}$ OS-5111 is a fiber optic switch that can be controlled remotely or through a front panel switch. The optical path through the units is purely mechanical. There is no optical to electrical to optical conversion. As a result, there is no data rate limitation or bandwidth limit on the fiber optic path. In addition, since the optical signal is not demodulated the optical data is totally secure. The optical path can be select via a front panel switch or via contact closure input. In event of loss of power, the unit has a fail safe mode that opens the switch.

Common applications for this device are optical routing, system bypass, network cut off switch, and fiber optic testing. The OS5111 control can be daisy chained to switch multiple optical connections. For two OS-5111 mounted in a single housing, order the OS-5211.


Technical Specifications
Important Features

| Switching Time | $<10 \mathrm{~ms}$ |
| :--- | :--- |
| Back Reflection | $<-50 \mathrm{~dB}$ |
| Insertion Loss | $<1.3 \mathrm{~dB}$ |
| Cross Talk | $<-50 \mathrm{~dB}$ |
| Switch Life cycle | $>1$ Million cycles |
| Operating Wavelength | $850 / 1310$ or 1310/1550nm |
| Optical Connectors | ST, SC, or FCPC |
| Operating Temperature | $0^{\circ}$ to +70 C |
| Humidity | $<95 \%$ non condensing |
| MTBF(per MIL HBK 217) $>120,000$ hours |  |
| Power Requirements* | $11-24 \mathrm{VAC/DC} @ 150 \mathrm{~mA}$ |
| Size $(\mathrm{mm})$ Single | $5.0^{\prime \prime}(127) \times 3.0^{\prime \prime}(76) \times 1.0^{\prime \prime}(25.4)$ |
| Size $(\mathrm{mm})$ Dual | $5.0^{\prime \prime}(127) \times 3.0^{\prime \prime}(76) \times 2.23^{\prime \prime}(56.6)$ |

* -48 VDC only models available by request.

Note that all specifications are subject to change without prior

- Switching time < $\mathbf{1 0}$ ms
- Fail-safe return to bypass mode with loss of power
- Small physical footprint
- Multimode or singlemode versions
- Power and Switch status indicators
- Stand-alone, DIN or Rack Mountable (same unit) notice.


Ordering Information; OS-5111-X where " $X$ " = Wavelength/Fiber/Connector $-3=850 / 1310 \mathrm{~nm}$ Multi-mode ST/PC $\quad-4=850 / 1310 \mathrm{~nm}$ Multi-mode- SC/PC $-5=1310 / 1550 \mathrm{~nm}$ Single-mode SC/PC $\quad-6=1310 / 1550 \mathrm{~nm}$ Single-mode LC/PC $-7=1310 / 1550 \mathrm{~nm}$ Single-mode FC/PC


Fiber Optic Transmission Systems

