### **Product Features**

Low insertion loss of 1.7 dB maximum

Return loss better than 55 dB

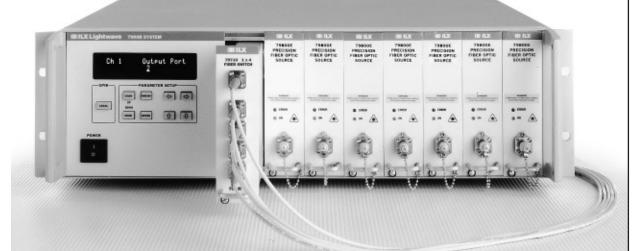
Excellent repeatability of <0.03 dB (random switching)

High channel isolation, -80 dB maximum crosstalk The FOS-79710 Fiber Optic Switch Module is designed for high return loss, low insertion loss, and excellent stability. Transparent to signal formats and bandwidths, this optically passive fiber optic switch is bi-directional in operation and offers a choice of timed, random, sequential or triggered switching modes.

In the FOM-7900B System Mainframe, the front panel or GPIB-accessible command set controls the FOS-79710 Fiber Optic Switch Module. A single channel input can go to any of the 4 outputs via the FOM-7900B control panel. A "blocking" position switches the input to a zero-reflection terminaton. The user can define and initiate sequential switching through an external trigger, or by defining a switch interval time.



Fiber Optic Switch Module



Switch Wavelengths Easily During Multiple Channel Testing





# Fiber Optic Switch Module

### **Product Overview**

Typical applications include routing a signal around the device under test (DUT) for a reference measurement, sequential switching of the test signal to numerous DUTs, or testing a single DUT at sequentially switched wavelengths.

### **Multi-channel Flexibility**

Through the FOM-7900B System Mainframe, FOM-79710 modules can be controlled via an intuitive front panel, or by a state-of-the-art GPIB/IEEE-488.2 interface. This interface uses the National Instruments TNT 488<sup>®</sup> chip-set, supporting high-speed GPIB protocol — allowing you to control up to 200 source modules from a single GPIB address.

## The First Name in Fiber Optic Test

Today's largest world-leading fiber optic component manufacturers are testing with more laser sources from ILX Lightwave than from any other company. There are good reasons for this. You tap into the experience built on this large installed base when you choose ILX Lightwave for your test system.

### Specifications

#### GENERAL

Configuration: Wavelength Range: Fiber Type: Connector Type:<sup>1</sup> Insertion Loss<sup>2</sup> Typical: Maximum:<sup>3</sup> Crosstalk: Polarization Dependent Loss:<sup>4</sup> Repeatability:<sup>5</sup> Switching Time:<sup>6</sup>

#### Maximum

Continuous Input Power: Return Loss: Switch Life: Operating Temperature: Storage Temperature: Operating Humidity: 1x4 1280–1650 nm 9/125, SMF 28 FC/APC

1.2 dB 1.7 dB <-80 dB <0.05 dB <0.03 dB 16 ms/channel +300 ms (maximum)

+24 dBm >55 dB >10 million cycles 15°C--35°C -20°C to 70°C <85% RH, non-condensing

#### NOTES

- Other connector options available upon request.
- 2 Measured at 23°C ±5°C.
- 3 Maximum insertion loss, any module output port.
- 4 Measured at 1550 nm.
- 5 Sequential switching, 100 cycles measured at constant temperature after module warmup.
- 6 Excluding GPIB and mainframe processor latency.

In keeping with our commitment to continuous improvement, ILX Lightwave reserves the right to change specifications without notice and without liability for such changes.

#### ORDERING INFORMATION

FOS-79710 1x4 Fiber Optic Switch Module



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