EOSPACE

Exceptionally-Low-Loss $LiNbO_3$ Optical Devices & ICs

Technology Originally Developed for High-Performance Aerospace Systems

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Custom High-Speed **Lithium Niobate** Electro-optic Switches

λ = 1550nm; Please call for other λ : 2000+, 1700, 1300, 1060, 980, 850, 700nm

Ultra-High-Speed (sub-nanoseconds) **1x2, 2x2 Optical Switches/Modulators**

(wideband traveling-wave electrode structure with internal 50-Ω termination)

2.56" x 0.35" x 0.195" (65 x 8.9 x 4.95 mm³)

1x2, 2x1, 2x2 Ultra-high-speed Switch/Modulator

- *Single polarization (SP), separate DC bias port*
- *>10GHz (>18GHz option), T_{switch}<<100ps, $V\pi$ ~ 5V*
- *Insertion loss < 4.0dB (< 3.0dB option)*

Very-High Speed (nanoseconds) **1xN, Nx1, NxN Optical Switches**

Single-Polarization (SP) or Polarization Independent (PI)

1x1, 1x2 , 2x1, 2x2 Switches

Single Polarization (SP) version:

- *Insertion Loss < 4.0 dB (< 2.5 dB option) • Switching Voltage ~ 5 V • Crosstalk < -20 dB*
- *Capacitive electrode (C<25pF), Switching Time << 100 ns.*

Polarization Independent (PI) version:

- *Insertion Loss < 4.0 dB , (< 2.5 dB option)*
- *Switching Voltage <15V • Crosstalk < -18 dB*
- *Capacitive electrode (C<25pF), Switching Time << 100 ns.*

1x8 (8x1) Switch-Array Module

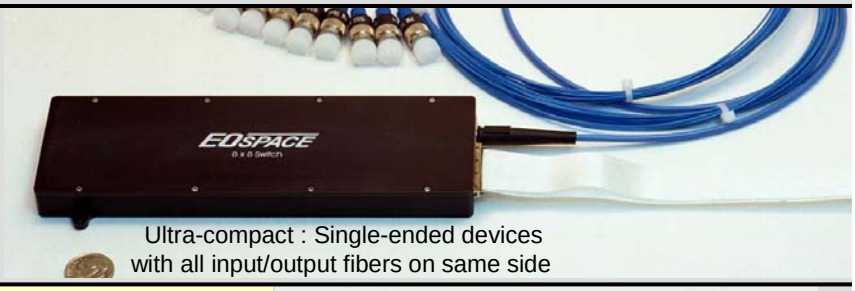
Single Polarization version: *• Insertion Loss < 5 dB, (< 3.5 dB option)*

• Crosstalk < -20 dB • Capacitive electrode (C<25pF), Switching Time << 100 ns.

• Polarization Independent version (please call)

Compact, High-speed 8x8 Switch-Array Module

- *Strictly Non-Blocking*
- *Double-Stage Crosstalk-Suppression*



Ultra-compact : Single-ended devices with all input/output fibers on same side

Custom: Large-scale Switch Module-examples

Programmable, 4-bit (binary) Optic Time-Delay Switch Module

32-channel (8-λ,4x4) Cross-Connect Switch