



INTEGRATED PHOTONICS TECHNOLOGY

ISO 9001 Registered

1x2 OPTICAL SWITCH

FSX-OSW
DTX-OSW



The FSX/DTX Optical Switch is a high performance unit designed for operation in analog or digital networks. It operates with single mode optical signals at 1310nm or 1550nm. The optical switch unit is designed for integration in applications using fiber ring, dual fiber feed, direct distribution systems or in any network which requires high reliability. When used in a cable system, the switch can provide trunk transmitter redundancy over a single fiber link or trunk receiver and fiber link redundancy over a dual fiber link. With switches installed at both the head-end and the receiving location, 100% redundancy is achieved.

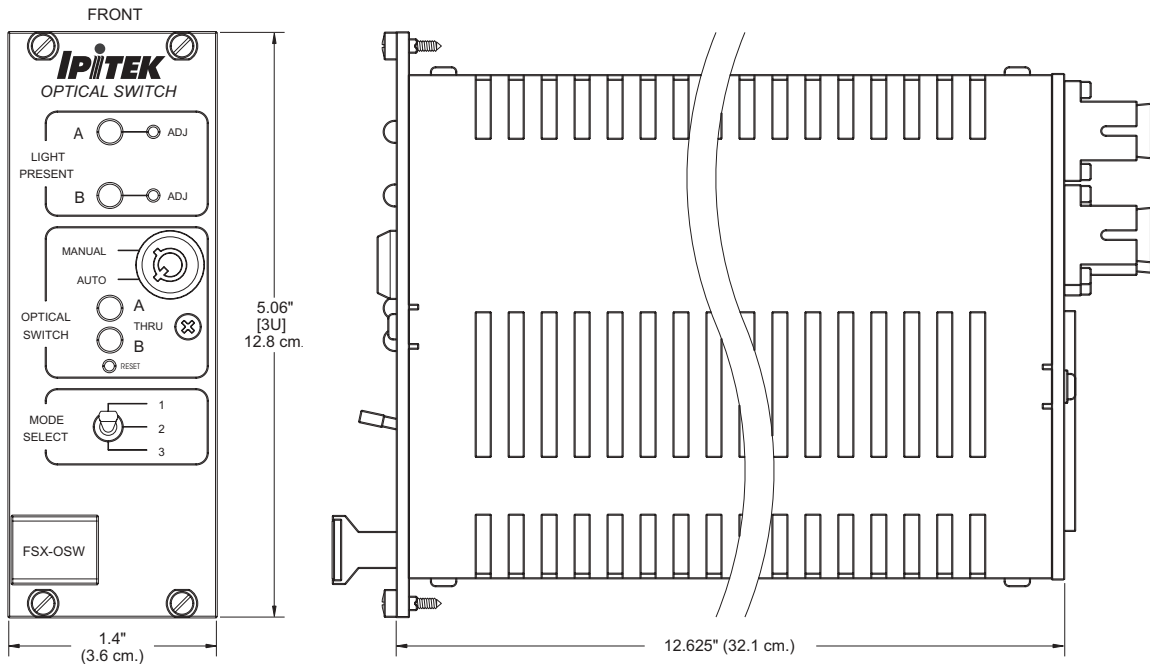
Front panel adjustments allow the optical threshold for both "A" and "B" to be set. This is especially helpful when the optical signals are at different input levels. The switch has low insertion loss, typically less than 2 dB including connectors. Switching time is 50ms or less. The unit is available for operation with a variety of optical input levels, ranging from -10 dBm up to +30 dBm input.

FEATURES & BENEFITS

- Operates with 1310nm or 1550nm Single Mode Optical Systems
- Low Optical Loss and High Isolation in Through-put or Switched Mode
- Provides a Wide Range of System Applications
- Options for Internal Automatic Control or External Control from a Network Management System
- Easily Integrated with all FSX/DTX Series Equipment

The unit provides a variety of operational control functions. A front panel locking key switch sets the unit in manual or automatic mode. When locked in manual mode, the unit may be set to either the "A" or "B" configuration. In manual mode the unit remains in the selected state until manually switched to another state. The automatic mode provides three options. Option one sets the system to "A" with automatic switch to "B" upon loss of light at "A". The system will reset to the original state on restoration of optical signal. A second option sets the system to "A". The unit will automatically switch to "B" upon loss of light at "A". The unit will remain switched to "B" even if the light returns to "A", unless the signal is lost on "B". The final option allows the system to be controlled directly by signals from a Network Management System (NMS).

MECHANICAL



SPECIFICATIONS

Optical:

Wavelength:	1310 or 1550 nm, ± 20 nm
Operating Power Range:	Options from -10 dBm to +25 dBm input
Back Reflection:	< -55 dB
Isolation:	80 dB
Repeatability:	± 0.05 dB
Switching Threshold:	6 dB nominal, user adjustable
Switching Time:	< 50 ms, 10ms typical
Optical Insertion Loss:	< 2dB (typical including Connectors)

Electrical/Environmental Mechanical:

Powering:	Supplied by DTX Power System
Operating Temperature:	0 °C to +50 °C
Storage Temperature:	-40 °C to +70 °C
Humidity:	5% to 85% non-condensing
Dimensions	FSX: 1.4" W x 5.06" H x 12.625" D (3.6 cm x 12.8 cm x 32.1 cm) DTX: 1.78" W x 5.06" H x 12.625" D (4.5 cm x 12.8 cm x 32.1 cm)
Optical Return Loss:	12.86 cm x 4.523 cm x 32.07 cm
Weight:	4 lb. (1.81 kg)

ORDERING INFORMATION

FSX-OSW	-	NXX	-	12	-	XXX	-	XX	-	X
12-Slot FSX COMPATIBLE OPTICAL SWITCH		Wavelength N13 = 1310 nm N15 = 1550 nm NDW = Dual Window 1310/1550 nm		Port Configuration 12 = 1 X 2		Switch Threshold PXX = +XX dBm MXX = -XX dBm		Optical Connector FC = FC SC = SC E2 = E-2000I		Polish A = APC P = UPC
DTX-OSW	-	NXX	-	12	-	XXX	-	XX	-	X
10-Slot DTX COMPATIBLE OPTICAL SWITCH		Wavelength N13 = 1310 nm N15 = 1550 nm NDW = Dual Window 1310/1550 nm		Port Configuration 12 = 1 X 2		Switch Threshold PXX = +XX dBm MXX = -XX dBm		Optical Connector FC = FC SC = SC E2 = E-2000I		Polish A = APC P = UPC



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IPITEK reserves the right to modify product specifications without prior notification.