



INPUT

SX-4FX-5-FC WITH MANUAL SWITCH CONTROL SX-4FX-5J-FC WITH GPI CONTROL (OPTIONAL)

#### FEATURES:

- Local & Remote Switch Control
- Data Format/Rate Independent
- Compatible With Any Fiber Transport Product
- ST or FC optical connectors
- Local LED Indicators To Monitor Switch Status
- Spectrasmart Network Management Compatible
- Hot Swappable Cards
- Optional GPI Control Port

## **CONFIGURATIONS:**

The SX-4FX-x card is available as a 1-slot chassis mount card that can be installed in all of the Meridian card chassis. This product can be easily converted to a standalone module with the SR-500 or SR-1002 chassis.

### **MARKETS:**

- √ Pro Audio/Video
- √ Government/Military
- $\sqrt{}$  Security and Surveillance
- √ Broadcast
- Video/Audio/Data Transport Systems

### **DESCRIPTION:**

**OPTICAL FIBER SWITCH** 

OUT 1

The SX-4FX-x switch is a continuing expansion of Meridian's fiber transport products to provide improved fiber network security. Depending on applied connection diagramm, this product can function as 1x4 All-Optical Fiber Switch or Fiber Protection Switch. **1x4 All-Optical Fiber Switch** connection provides the ability to selectively switch the singlemode fiber optical input to any one or all of the switched outputs. As an all-optical switch, this device is data type and rate agnostic and can switch video, audio or data signals via an input singlemode optical fiber. Each port of the switch can be controlled either locally using the front-panel mounted DIP switches or remotely using the USB interface or Meridian's SpectraSmart network management system. Optional GPI Control port is available. Front panel mounted indicator lights show the status of each output port (on or off) as well as indicating the mode of operation (local/remote). **Fiber Protection Switch** mode provides switching between four

active fibers. The user can manually select one of the fiber paths. The switch is typically used at the receiving or head-end side to switch the transmission path to the redundant fiber in the event a main fiber break.

This switch has a number of front panel indicators to indicate the status of the input fibers as well as the switch position.

Optional latching function is available, so it will retain its state during a loss of electrical power.

An internal microcontroller ensures that the switch does not switch to the opposite state on a power-up. This switch can also be used with bi-directional information such as camera PTZ control and video conferencing systems.

The manual switch or optional GPI Control port on the front panel allows the user to force the optical switch to either the A, B, C or D position.

The functionality of this card is further enhanced by its compatibility with Meridian's PC based SpectraSmart network Management and remote diagnostic software system. SpectraSmart monitors the operating parameters of the card and allows the user to remotely select the optical transmission path as well as change the switching threshold, among other performance monitors. See SpectraSmart brochure for additional details.

SX-4FX-x

DigiSlim™

# 1x4 All-Optical Fiber Switch and 4-Ch Fiber Protection Switch

IN A  $\vdash O$ IN B  $\vdash O$ IN C  $\vdash O$ IN C  $\vdash O$ IN D  $\vdash O$ FIBER PROTECTION SWITCH

# **SPECIFICATIONS:**

## **Optical**

Wavelength range:	1260nm to 1610nm
Insertion loss:	7.5dB (typical), 8.5dB (max)
Return loss	50dB
Channel isolation	55dB
Repeatability	+/- 0.02dB (typical)
Polarization dependent loss	
(PDL)	0.1dB
Switching speed	5 msec (typical), 10msec (max)
Switching lifetime	10 million cycles
Optical input range	-50dBm to +10dBm

## **Connectors**

Optical	ST - MM (default), FC - SM (default)
USB	Mini-B USB 2.0
Power	See Meridian chassis specs.
GPI (optional)	RJ11 (6-pin)

# Enviromental

Operating Temperature	$0^{\circ}$ C to $+70^{\circ}$ C
Storage Temperature	
Relative Humidity	0 to 95% Non-condensing

\* Due to variations of drivers and diagnostic options, power shown @ max value



Card ..... 1 Watt

Indicators (LEDs)

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Power ..... Green
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Local/Remote ..... Red (Remote), Green (Local) Output Indicators..... Green (ON), Red (OFF)

#### **Physical** n:mar

Dimensions (Card)	
Weight (Card) No. of Slots Module	

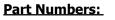
160 mm (6.3") L, 127 mm (5") W 20mm (0.80") W 450 gms (16 Oz) 1

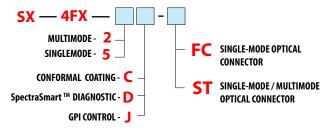
See SR-500 Brochure . . . .

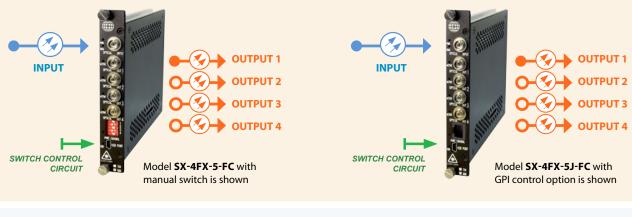
35°C per MIL217F

# Quality

MTBF ...... >120,000 hours @ Ground Fix

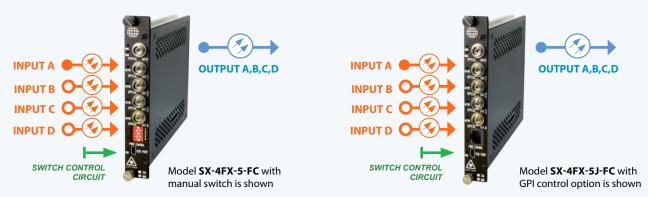






**OPTICAL FIBER SWITCH MODE** 

## FIBER PROTECTION SWITCH MODE



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