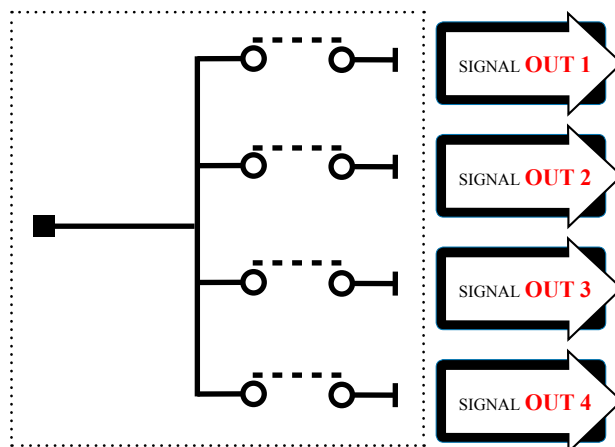# MERIDIAN
TECHNOLOGIES

1x4 All-Optical Fiber Switch

FEATURES:

- All Passive Singlemode Optical Switch

- 1 channel Input with 4 Independent Switchable Optical Output Ports

- Local & Remote Switch Control

- Data Format/Rate Independent

- Compatible With Any Unidirectional Fiber Transport Product

- Local Led Status Indicators To Monitor Switch Status

- Spectrasmart Network Management Compatible

- Hot Swappable Cards

DESCRIPTION:

This fiber optic switch is another product in our expanding line of Meridian's fiber optic transport products. It 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, remotely using the USB interface or Meridian's SpectraSmart network management system. 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).

CONFIGURATIONS:

The SX-1x4-SM 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-1000/1001 chassis.

MARKETS:

√ Pro Audio/Video
√ Government/Military
√ Security and Surveillance
√ Broadcast
√ Video/Audio/Data Transport Systems

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 .... -30dBm to +10dBm

Connectors

Optical .... FC, ST
USB .... Mini-B USB 2.0
Power .... See SR Series Chassis
for Details

Enviromental

Operating Temperature .... 0°C to +70°C
Storage Temperature .... -55°C to +85°C
Relative Humidity .... 0 to 95% Non-condensing

Power *

Card .... 1 Watt

Indicators (LEDs)

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

Physical

Dimensions (Card) .... 160 mm (6.3") L, 127 mm (5") W
20mm (0.80") W
Weight (Card) .... 450 gms (16 Oz)
No. of Slots 1
Module .... See SR-500 Brochure

Quality

MTBF .... >120,000 hours @ Ground Fix
35°C per MIL217F

Part Numbers:

SX — 1x4 — SM – ☐ – ☐

CONFORMAL COATING - **C**

SpectraSmart ™ DIAGNOSTIC - **D**

FC, ST
- SINGLEMODE
CONNECTOR
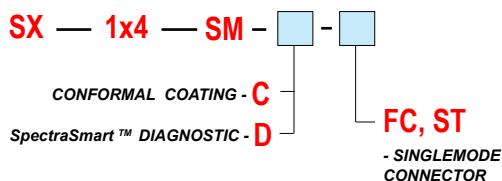
* Due to variations of drivers and diagnostic options, power shown @ max value

FIBER-OPTIC INPUT

SWITCH CONTROL CIRCUIT

FIBER-OPTIC OUT 1

FIBER-OPTIC OUT 2

FIBER-OPTIC OUT 3

FIBER-OPTIC OUT 4

SX-1x4-SM
Fiber-Optic Switch