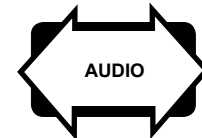


## Digitally Encoded One Full Duplex 24-Bit Audio Channel



### FEATURES:

- One Bi-directional 24-Bit Audio Channel
- Laser Based Systems for Multimode and Singlemode Fiber
- Surface Mount Technology (SMT) for High Reliability and Repeatability
- SpectraSmart Network Management Compatible
- Local LED Status Indicators to Monitor Critical System Diagnostics and Performance Parameters
- ST, FC Optical Connector
- Hot Swappable Rack Cards
- Back - Biased Photo Detector Circuitry for Stable Optical Laser Output Over Full Temperature Range
- Meets NEMA TS1 / TS2 & CALTRANS Specifications.
- Screw Terminal Type Connectors for Audio
- Wide Optical Dynamic Range: Optical Attenuators are Never Needed

### DESCRIPTION:

This module in the DigiSlim™ product family incorporates an all-digital encoding technology. It transmits One Bi-directional 24 bit Audio over single fiber. These single fiber, laser based systems are available in both, Multimode and Singlemode modules. The versatility of the SXA/SXB-1A-xS system is enhanced by *SpectraView*, an On-Screen Video Diagnostic / Setup firmware system and *SpectraSmart*, an optional PC Based Network Diagnostic System. *SpectraView* includes a selectable on-board audio test signal generator with built-in local and remote loop-back functions. If greater diagnostic capability is required, the SXA/SXB-1A-xS system is also available with Meridian's *SpectraSmart* Network management and diagnostic PC based system. See the *SpectraSmart* or *SpectraView* brochures for additional details.

### CONFIGURATIONS:

The SXA/SXB-1A-xS system is available as rack mount cards and modules that can be installed in any of Meridian's desk chassis or in 19" racking frames. This system can be configured in either star (module to rack) or trunking (rack to rack) configurations. These systems can be transformed in to a standalone module by utilizing an SR-500/S (standard configuration) or an SR-1000/S.

### MARKETS:

- ✓ Security and surveillance
- ✓ Access Control

SPECIFICATIONS:

Audio

I/O Impedance .....	600 Ohm (Bal.), 47 KOhm (Un Bal.)
Frequency Response .....	10 Hz to 20 KHz
SNR .....	>90dB (Weighted)@ 1 KHz
In/Out Level .....	-8 to +8 dBm (4V <sub>p-p</sub> max.) (+18 dBm available on request)
Total Harmonic Distortion ....	<0.01% @ 1KHz
Resolution .....	24 Bit

Optical

Fiber Data Rate .....	250 Mb/s
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Connectors

Optical .....	ST, FC
Power (module) .....	See SR-500 Brochure for details
Audio .....	Screw Terminal

Power \*\*

Card .....	6 Watts
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Indicators (LEDs)

1 - Green .....	Power On
1 - Bi-color .....	TX Carrier/ Laser Over Current
1 - Bi-color .....	RX Carrier - Present / Error
2 - Bi-Color .....	Audio Present / Overmodulation

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

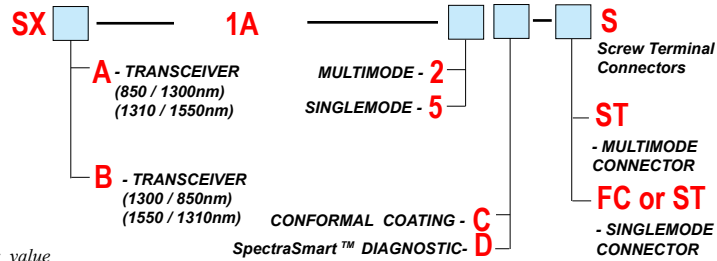
Enviromental

Operating Temperature ...	-34°C to +74°C
Storage Temperature .....	-55°C to +85°C
Relative Humidity .....	0 to 95% Non-condensing

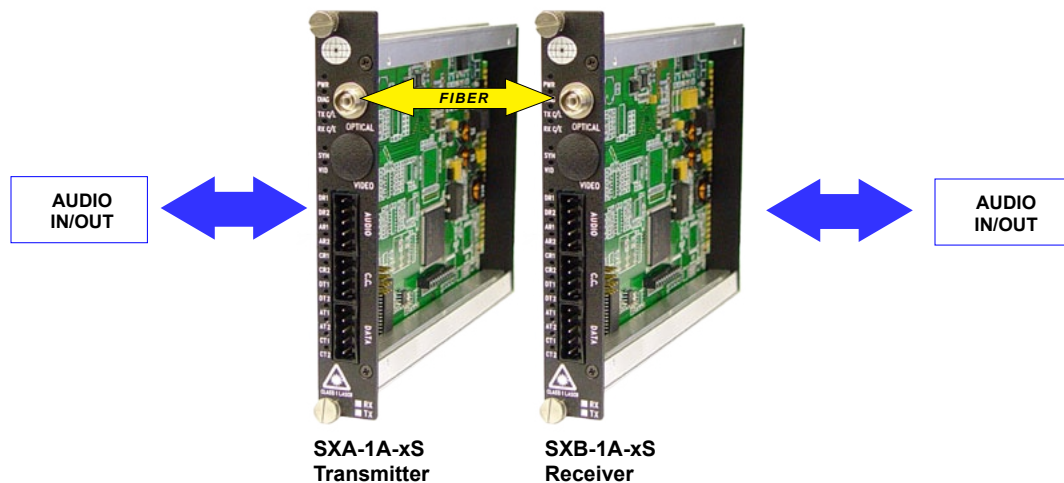
Quality

MTBF .....	>170,000 hours @ Ground Fix 35°C per MIL217F
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Part Numbers:



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



OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
Multimode (FP Laser) 62.5 / 125	-6	-27	21	850/1300	ST	24
Singlemode (FP Laser) 9 / 125	-6	-27	21	1310 / 1550	ST, FC	24