





FEATURES:

- Two Channels of 24 Bit Digitally Encoded Bi-directional Audio Channels over one Fiber
- 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.
- Utilizes Internal Switching Power Supplies
- Automatically Resettable Solid-State Current Limiters on All Power Lines: Provides Equipment Protection
- Wide Optical Dynamic Range: Optical Attenuators are Never Needed

DESCRIPTION:

This module in the SA product family incorporates all-digital encoding technology and transmits/receives two, 24-bit full-duplex audio channels over one optical fiber. Local indicators provide visual operational of each audio channel. These single fiber, laser based systems are available in both, Multimode and Singlemode modules. The SA series is also compatible with Meridian's SpectraSmart Network management and diagnostic PC based system. See the SpectraSmart brochure for additional details.

CONFIGURATIONS:

The SA product family 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:

- ✓ Intelligent transportation systems (ITS)
- ✓ Security and surveillance
- Access Control



SPECIFICATIONS:

Audio

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

Optical

Fiber Data Rate 250 Mb/s

Connectors

75 Ohm BNC (Gold Center Pin) Optical ST, FC See SR-500 Brochure for details Power (module) Audio DB25 Female

Power **

Card 6 Watts

Indicators (LEDs)

1 - Green 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 Module See SR-500 Brochure

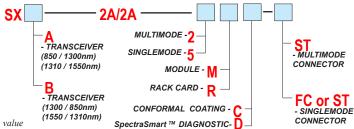
Enviromental

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

Quality

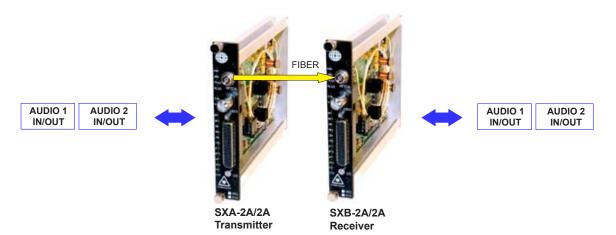
>170,000 hours @ Ground Fix MTBF 35°C per MIL217F

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	-5	-26	21	1300 / 850	ST	24
Singlemode (FP Laser) 9 / 125	-5	-26	21	1310 / 1550	ST, FC	24