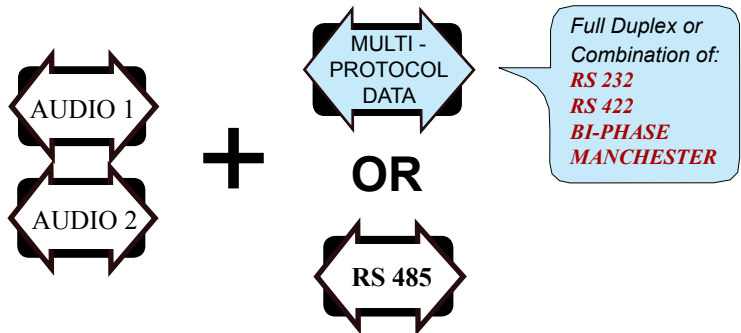


Digitally Encoded Full Duplex Multi-Protocol Data and Two Bi-directional 24-bit Audio



FEATURES:

- One Slot Digital Module Design
- Real Time Audio and Data Transmission
- Meets RS-250C Short Haul Transmission Specifications
- Two 24-bit bi-directional Audio Channels
- Full Duplex Multiprotocol Data Channel
- Wide Optical Dynamic Range: Eliminates Need For Optical Attenuators
- Laser Based Systems for Multimode and Singlemode
- Surface Mount Technology (SMT) for High Reliability and Repeatability
- SpectraSmart™ Network Management Compatible
- Local LED Status Indicators to Monitor Critical System Diagnostics for Performance Parameters
- ST, FC Optical Connector
- Hot Swappable Cards
- Laser Back - Biased Photo Detector Circuitry for Stable Optical Output Over Full Temperature Range.
- Meets EIA RS-170, RS-343A Formats

DB25F connector for Audio/Data interfaces

DESCRIPTION:

This module in the **SXA/SXB-2A1G-x** product incorporates an all-digital encoding technology that transmits two full-duplex 24-bit audio channels and one user selectable, full duplex, multi-protocol data channel. RS-232, RS-422, RS-485 (2 or 4 wire), Manchester and Bi-Phase data protocol/formats are all supported. NTSC, PAL and SECAM video formats are all seamlessly supported. A standard DB25F connector is provided for the audio/data interface. These single fiber, laser based systems are available in both, Multimode and Singlemode modules.

The **SXA/SXB-2A1G-x** system is also compatible with Meridian's SpectraSmart Network management and diagnostic PC based system. See the SpectraSmart brochure for additional details.

CONFIGURATIONS:

The **SXA/SXB-2A1G-x** product is available as rack mount cards that can be installed in either Meridian's desk chassis or in 19" racking frames. Shelf/surface mount modules are also available. This system can be configured in either star (module to rack) or trunking (rack to rack) configurations. These systems can be made a standalone system by using the SR-500/S, SR-1000/s, 1 or 2 slot desk / wall mount chassis (87 VAC- 264VAC)

MARKETS:

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

SPECIFICATIONS:

Data

Formats	RS-232, RS-422, RS-485, Manchester or Bi-Phase
Data Rate.....	DC to 125 Kb/s
Bit Error Rate	10 ⁻⁹ *

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 _{pp} max.) (+18 dBm available on request)
Total Harmonic Distortion	<0.01% @ 1KHz
Resolution	24 Bit

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST, FC
Power (module)	See SR-500 Brochure for details
Data	3-pin Screw Terminal

Optical

Fiber Data Rate	250 Mb/s
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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
1 - Green	Tx Data Present
1 - Green	Rx Data Present
2 - Green	Audio Input Present
2 - Green	Audio Output Present

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

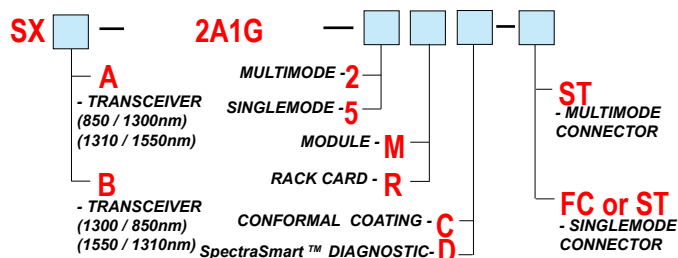
Environmental

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

Quality

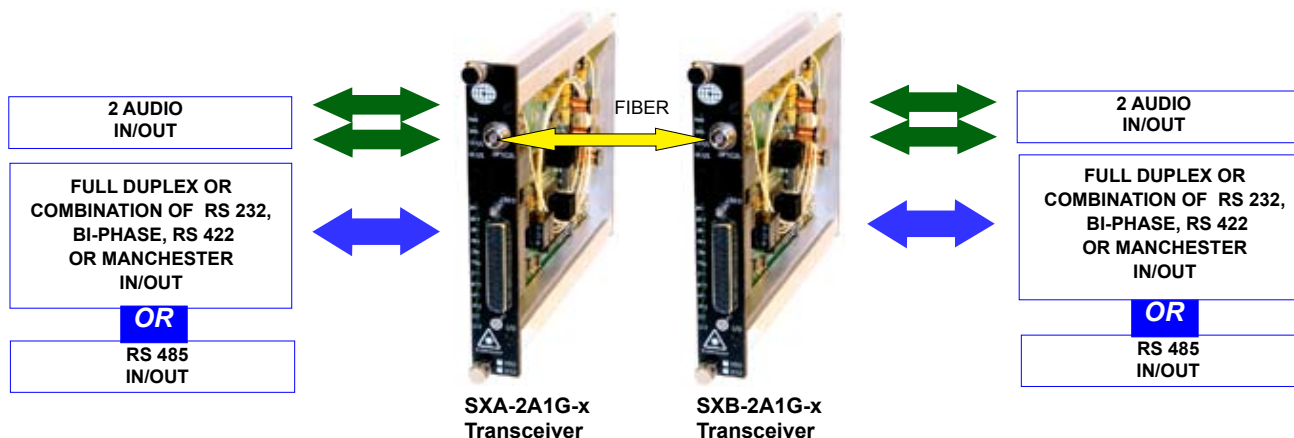
MTBF	>170,000 hours @ Ground Fix 35°C per MIL217F
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Part Numbers:



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