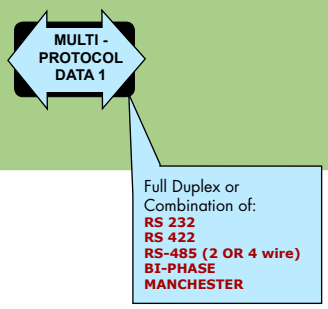
MERIDIAN TECHNOLOGIES

One Full Duplex Multiprotocol Data over One Fiber



FEATURES

- Full Duplex Multiprotocol Data Channel Supports RS-232, RS-422 & RS-485 (2 & 4-wire)
- Meets RS-250C Short Haul Transmission Specifications
- NTSC, PAL, SECAM Compatible
- Wide Optical Dynamic Range: Eliminates Need For Optical Attenuators
- Laser Based Systems for both Multimode and Singlemode modules
- Surface Mount Technology (SMT) for High Reliability and Repeatability
- SpectraSmart™ PC Based Network Management
- Local LED Status Indicators to Monitor Critical System 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
- Screw Terminal Connectors for Data

DESCRIPTION

The SXA/SXB-1G-x series fiber optic transmission system that takes advantage of Meridian's new digital encoding technology transmits following signals:

1. One channel of user selectable, full duplex RS-232, RS-485 (2 or 4 wire), RS-422, Manchester, Bi-Phase or in combination

Both, multimode and singlemode, one fiber versions are available. The versatility of the SXA/SXB-1G-x system is enhanced by enhanced by its compatibility with Meridian's PC based SpectraSmart™, Network Management and Remote Diagnostic Software System. SpectraSmart supervises the operating parameters of the transmission system such as status on video levels, sync, carrier detect, voltage, temperature, optical levels, data present etc. See the SpectraSmart brochure for more details.

CONFIGURATIONS

The SXA/SXB-1G-x product are available as rack mount cards that can be installed in Meridian's card chassis, desk chassis and 19" racking frames. 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, 1 slot desk / wall mount chassis (87VAC-264VAC).

MARKETS

√ Security and Surveillance
√ Intelligent Transportation System (ITS)
√ Access Control Systems
√ Campus Lecture Networks

SPECIFICATIONS:

Data

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

Optical

Fiber Data Rate	50 Mb/s

Connectors

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

Power **

Card	4 Watts

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

Physical

Dimensions (Card)	20 (W) x 127 (H) x 160 (D) mm (0.8 x 5.0 x 6.3 inch)
Weight (Card)	450 gms (16 Oz)
No. of Slots	1
Module	See SR-500 Brochure

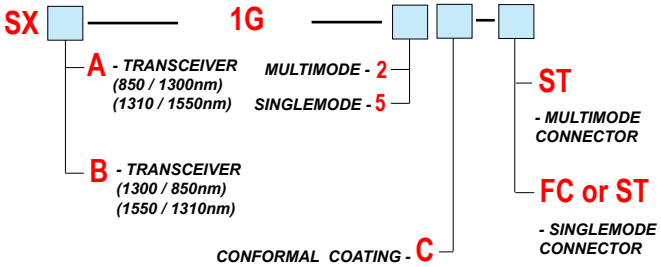
Enviromental

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

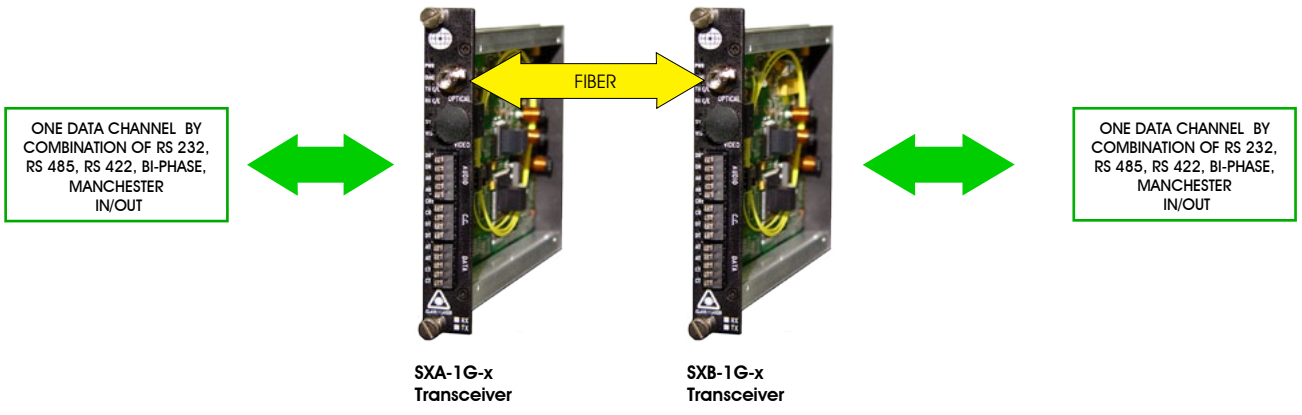
Quality

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

Part Numbers:



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



SXA-1G-x Transceiver **SXB-1G-x Transceiver**

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

Meridian Technologies Inc.
700 Elmont Road. •Elmont, NY 11003 • 516. 285. 1000 • FAX 516. 285. 6300 • E-mail sales@meridian-tech.com
www.meridian-tech.com

ver 02/2013 A