

**Digitally Encoded Full Duplex  
Two RS-232 Data Channels****FEATURES:**

- Real Time Data Transmission
- Two Bi-directional RS-232 Data Channels
- 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™* PC Based Network Management
- *SpectraView™* Fault / Setup Firmware
- 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
- Screw Terminal Type Connectors for RS-232 Data

**DESCRIPTION:**

This module in the DigiSlim™ product family incorporates an all-digital encoding technology. It transmits two Bi-directional RS-232 Data over one fiber. The *SpectraView* diagnostic system incorporates a selectable on-board data test signal generator with built-in local and remote loop-back functions. If greater diagnostic capability is required, the SXA/SXB-2D-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-2D-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 into a standalone module by utilizing an SR-500/S (standard configuration) or an SR-1000/S.

**MARKETS:**

- ✓ Security and surveillance
- ✓ Access Control

SPECIFICATIONS:

Data

|                      |                    |
|----------------------|--------------------|
| Formats .....        | RS-232             |
| Data Rate .....      | DC to 125 Kb/s     |
| Bit Error Rate ..... | 10 <sup>-9</sup> * |

Optical

|                       |          |
|-----------------------|----------|
| Fiber Data Rate ..... | 125 Mb/s |
|-----------------------|----------|

Connectors

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

Power \*\*

|            |         |
|------------|---------|
| Card ..... | 6 Watts |
|------------|---------|

Indicators (LEDs)

|                    |                                |
|--------------------|--------------------------------|
| 1 - Green .....    | Power On                       |
| 1 - Bi-color ..... | TX Carrier/ Laser Over Current |
| 1 - Bi-color ..... | RX Carrier - Present / Error   |
| 4 - Green .....    | Data Present                   |

Physical

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

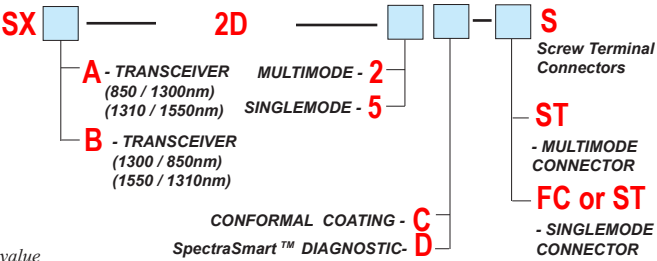
Enviromental

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

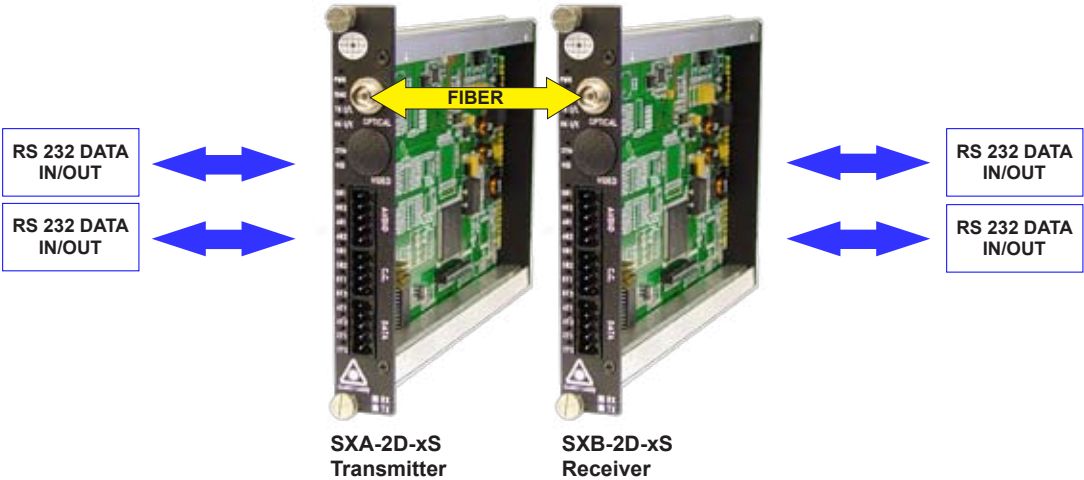
Quality

|            |                                                 |
|------------|-------------------------------------------------|
| MTBF ..... | >170,000 hours @ Ground Fix<br>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)<br>62.5 / 125 (OpticCode 2) | -6                   | -27                        | 21                  | 850/1300        | ST                | 24                         |
| Singlemode (FP Laser)<br>9 / 125 (OpticCode 5)   | -6                   | -27                        | 21                  | 1310 / 1550     | ST, FC            | 24                         |