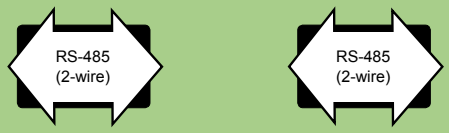
MERIDIAN TECHNOLOGIES

Two Full Duplex RS 485 (2-wire) Data over One Fiber



FEATURES

- Two Full Duplex RS 485 (2-wire) Data Channels
- Low Power Consumption
- High Efficiency, Isolated Power Supply
- 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
- SpectraView™ Fault / Setup Firmware
- 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 Terminals Type Connectors for Data

DESCRIPTION

The FXA/FXB-2J/2J-x series fiber optic transmission system that takes advantage of Meridian's new digital encoding technology transmits following signals:

1. Two Bi-directional channels of RS-485 (2 wire) Data

Both, multimode and singlemode, one fiber versions are available. The versatility of the FXA/FXB-2J/2J-x system is enhanced by *SpectraView™*, an On-Screen Video Diagnostic / Setup firmware system. *SpectraView* features a selectable on-board data test signal generator with built-in local and remote loop-back functions. If greater diagnostic capability is required, the functionality of FXA/FXB series is further 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 FXA/FXB-2J/2J-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-485
Data Rate	DC to 250 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 Terminals Connector

Power **

Card	3 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)	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

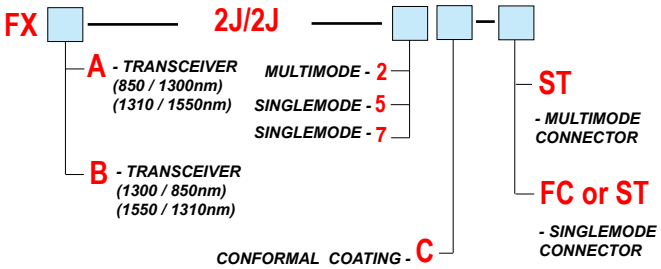
Enviromental

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

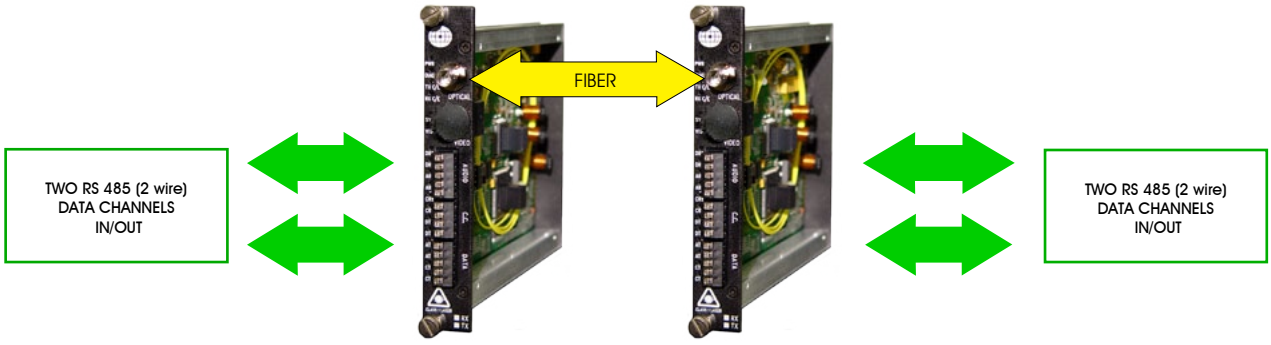
Quality

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*



FXA-2J/2J-x Transceiver

FXB-2J/2J-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	-25	20	1300 / 850	ST	23
Singlemode (FP Laser) 9 / 125	-5	-25	20	1310 / 1550	ST, FC	23
Singlemode (DFB Laser) 9 / 125	+3	-25	28	1310/1550	ST, FC	23

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