



FEATURES:

- Standard 24 Bit Digital Audio Encoding
- 4 Channels of Full Duplex RS 422 & Audio
- 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
- SpectraSmartTM 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 NEMA TS1 / TS2 & CALTRANS Specs.
- DB 9 Type Connector for Data and Audio
- DC to 1 Mb/s Data Rate

DESCRIPTION:

The DX-4A4F series is a reliable, cost effective, one fiber, state-of-the—art, 4 Channels of full duplex 24 Bit Digital Audio & RS-422 Data transmission system. This fiber optic system transmits in real-time on one Singlemode or Multimode fiber. The functionality of DV-4A4F series are further enhanced by their 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 Audio Parameters, carrier detect, voltage, temperature, optical levels, data activity etc. See the SpectraSmart brochure for more details.

CONFIGURATIONS:

The DX-4A4F product family is available as rack mount cards and modules that can be installed in all of Meridian's card chassis, desk chaises and 19" racking frames. These 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-1000/S, 2 slot desk / wall mount chassis (87VAC-264VAC)

MARKETS:

- √ Security and Surveillance
- √ Access Control Systems
- √ Intercomms

SPECIFICATIONS: -

Data

Formats	RS-422
Data Rate	DC to 1Mb/s
Bit Error Rate	10-9*

Audio

I/O Impedance	600 Ohms (Bal. / Un Bal.)
Frequency Responce	10 Hz to 20 KHz
SNR	>90dB (Weighted)@ 1 KHz
In/Out Level	-8 to +8 dBm (4Vp-p max.)
	(+18 dBm available on request)
Total Harmonic Distort	<0.01% @ 1KHz
Resolution	24 Bit

Optical

Fiber Data Rate 270 Mb/s

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST. FC
Power	See SR-1000 Brochure for details
Data & Audio	DB9 Female

Power **

Card 8 Watts

Quality

MTBF >240,000 hours @ Ground Fix 35°C per MIL217F

MODEL NO:

DXA-4A4F-2 . ..Transceiver side "A", MM, 850 / 1300 nm Laser DXB-4A4F-2 . . Transceiver side "B", MM, 850/1300 nm, Laser DXA-4A4F-5 . . Transceiver side "A", SM, 1310 / 1550 nm Laser DXB-4A4F-5 . . Transceiver side "B", SM, 1310/1550 nm, Laser DXA-4A4F-8 . . Transceiver side "A", SM, 1310 / 1550 nm DFB Laser DXB-4A4F-8 . . Transceiver side "B", SM, 1310/1550 nm, DFB Laser

Indicators (LEDs)

1 - Green	Power On
1 - Bi-color	TX Carrier/ Laser Over Current
1 - Bi-color	RX Carrier - Present / Error
1 - Bi-color	RX optical signal - Present / Absent
8 - Green	Data Present
8 - Green	Audio Present
8 - Red	Audio Overload

Physical

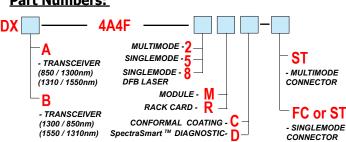
Dimensions:	
Card	160 mm (6.3") L, 100 mm (4") W
	44 mm (1.7") H
Weight:	(,)11
Card	450 gms (16 Oz)
No. of Slots	2

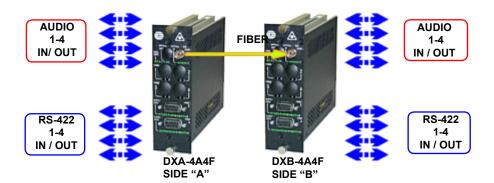
Enviromental

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

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

Part Numbers:





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	-3 / -5	-23 / -22	20 / 17	1300 / 850	ST	23
Singlemode (FP Laser) 9 / 125	-3 / -3	-23 / -23	20 / 20	1310 / 1550	ST, FC	23
Singlemode (DFB Laser) 9 / 125	+3 / +3	-23 / -23	26 / 26	1310 / 1550	ST, FC	23