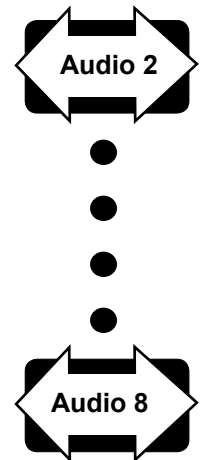


Bi-directional, One Fiber Audio Transceiver 2-8 Channels



FEATURES:

- Upto 8 Channels of 24 Bit Digitally Encoded Bi-directional Audio Channels over one Fiber
- Laser Based Systems for Multimode and Singlemode Fiber
- Surface Mount Technology (SMT) for High Reliability and Repeatability
- *SpectraSmart* Network Management Compatible
- Local LED Status Indicators to Monitor Critical System Diagnostics and Performance Parameters
- ST, FC Optical Connector
- Hot Swappable Rack Cards
- Back - Biased Photo Detector Circuitry for Stable Optical Laser Output Over Full Temperature Range
- Meets NEMA TS1 / TS2 & CALTRANS Specifications
- Utilizes Internal Switching Power Supplies
- Automatically Resettable Solid-State Current Limiters on All Power Lines: Provides Equipment Protection
- DB 9 Type Connectors for Audio
- Wide Optical Dynamic Range: Optical Attenuators are Never Needed

DESCRIPTION:

The DX-A/A series product incorporates a new digital encoding technology. This fiber optic system is available in different configurations ranging from minimum of 2 Channel up to maximum of 8 Channels of Bi-directional Audio signals over one Singlemode or Multimode fiber. Meridian's digital product line incorporates plug-in personality circuit cards to easily configure a wide variety of data channels on this system. The functionality of the DX-A/A series are further enhanced by its compatibility with Meridian's PC based *SpectraSmart* Network Management & Diagnostic Software system. *SpectraSmart* supervises the operating parameters of the transmission system such as the status on Digital carrier detect, voltages, temperatures, optical levels, Laser currents, Digital Power supply etc. See *SpectraSmart* brochure for further details.

CONFIGURATIONS:

The DX-A/A product family is available as rack mount cards suitable for mounting in Meridian card chassis and utilizes 2 card slots. These products can easily be converted to a Standalone module with the SR-1000/S, Desk / Wall mount 2-slot chassis. See SR-1000 brochure for further details.

MARKETS:

- ✓ Security and surveillance
- ✓ CCTV Networks
- ✓ Intercomms
- ✓ Highway Emergency Stations

SPECIFICATIONS:

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

Power*

Card	8 Watts
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Connectors

Data	DB 9F
Optical	ST, FC

NOTE: Standard Systems incorporates Fabry Perot Lasers

Optical

Bandwidth	250 Mb/s.
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Enviromental

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

Model No.

SIDE "A"

DXA-2A / 2A-2.	2 Ch. Transceiver, 1300 / 850 nm, MM
DXA-4A / 4A-2.	4 Ch. Transceiver, 1300 / 850 nm, MM
DXA-6A / 6A-2.	6 Ch. Transceiver, 1300 / 850 nm, MM
DXA-8A / 8A-2.	8 Ch. Transceiver, 1300 / 850 nm, MM

DXA-2A / 2A-5.	2 Ch. Transceiver, 1550 / 1310 nm, SM
DXA-4A / 4A-5.	4 Ch. Transceiver, 1550 / 1310 nm, SM
DXA-6A / 6A-5.	6 Ch. Transceiver, 1550 / 1310 nm, SM
DXA-8A / 8A-5.	8 Ch. Transceiver, 1550 / 1310 nm, SM

SIDE "B"

DXB-2A / 2A-2.	2 Ch. Transceiver, 850 / 1300 nm, MM
DXB-4A / 4A-2.	4 Ch. Transceiver, 850 / 1300 nm, MM
DXB-6A / 6A-2.	6 Ch. Transceiver, 850 / 1300 nm, MM
DXB-8A / 8A-2.	8 Ch. Transceiver, 850 / 1300 nm, MM

DXB-2A / 2A-5.	2 Ch. Transceiver, 1310 / 1550 nm, SM
DXB-4A / 4A-5.	4 Ch. Transceiver, 1310 / 1550 nm, SM
DXB-6A / 6A-5.	6 Ch. Transceiver, 1310 / 1550 nm, SM
DXB-8A / 8A-5.	8 Ch. Transceiver, 1310 / 1550 nm, SM

NOTE: ADD THE SUFFIX "D" AT THE END OF THE PART NUMBER FOR DIAGNOSTICS AND SuFFIX "F" FOR CONFORMAL COATING

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
1 - Red	Audio Overload (One per Channel)
1 - Green	Audio Present (One per Channel)
1 - Bi-color (Optional)	Card Diagnostics

Physical

Dimensions:	
Card	160 mm (6.3") L, 100 mm (4") W 44mm (1.7") H
Weight:	
Card	450 g (16 oz.)
Number of Rack Slots	Two

Quality

MTBF	>200,000 hours, @ 35°C Ground Fix as per MIL 217F
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* 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) 62.5 / 125	-4	-24	20	1300 / 850	ST	24
Singlemode (FP) 9 / 125	-4	-24	20	1310 / 1550	ST, FC	24
Singlemode (DFB) 9 / 125	+3	-24	27	1310 / 1550	ST, FC	24