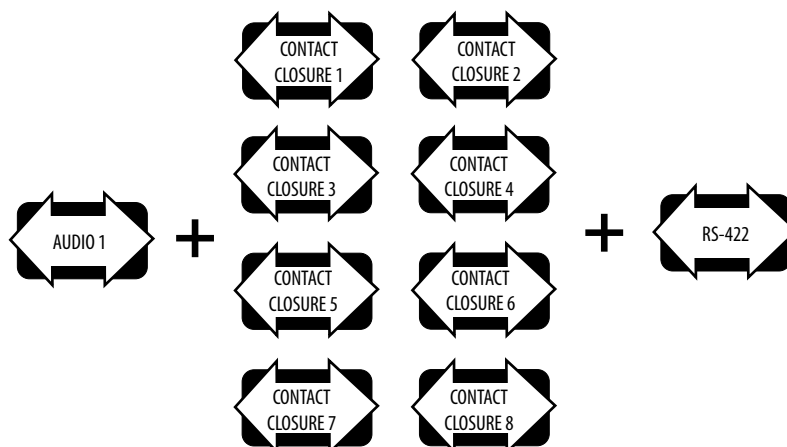




1-Channel Bi-directional Audio,
 8-Channel Bi-directional Contact Closure and
 1-Channel Bi-directional RS-422 Data



FEATURES:

- Standard 24-Bit Digital Audio Encoding
- Individually Programmed Contacts for Either Normally-Open or Normally-Closed
- Bi-directional 24-Bit Digital Audio, Full Duplex Contact Closure and Bi-directional RS-422 Data
- 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™ 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.
- Meets EIA RS-170, RS-343A Formats
- DB-9 Type Connector for Audio and Data
- DB-15 Type Connector for Contacts

DESCRIPTION:

The DXA/DXB-1A8C1F/1A8C1F-x series is a reliable, cost effective, one fiber transmission system with one Full-Duplex channel of 24-Bit Digital Audio, eight Bi-directional channels of Contact Closure and one Bi-directional RS-422 Data channel.

This fiber optic system transmits in real-time on one single-mode or multimode fiber. The functionality of this system is further enhanced by 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:

This system is available as rack mount cards and modules that can be installed in all of 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. This unit can be made a standalone system by using the SR-1000, 2 slot desk / wall mount chassis (87VAC-264VAC)

MARKETS:

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

SPECIFICATIONS:

Audio

I/O Impedance	600 Ohms (Bal. / Un Bal.)
Frequency Response	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

Data

Formats	RS-422
Data Rate	DC to 250 Kb/s
Bit Error Rate	10 ⁻⁹ *

Contact Closure

Formats	Normally Open (N.O.) or Normally Closed (N.C.) - jumper selectable
Rate	10 Hz.(Per Channel)
Contact Rating	0.3A, 30V AC / DC
Contact Bounce Time	5 ms

Connectors

Optical	ST - MM(default), FC - SM(default)
Power (module)	See SR-1000 Brochure for details
Audio and RS-422 Data	DB9 Female
Contact Closure	DB15 Female

Optical

Fiber Data Rate	270 Mb/s
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Power **

Card	7 Watts
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* measured @ max. optical budget

** Due to variations of drivers and diagnostic options, power shown @ max value

Indicators (LEDs)

1 - Green	Power On
1 - Bi-color	TX Carrier/ Laser Over Current
1 - Bi-color	RX Carrier - Present / Error
1 - Green	RX Optical Signal -Present/Absent
2 - Green	Data Present
2 - Green	Audio Present
2 - Red	Audio Overload
16 - Green	Contact Present

Physical

Dimensions (Card)	44 (W) x 127(D) x 160 (H) mm (1.7 x 5.0 x 6.3 inch)
Weight (Card)	540 gms (1.2 lb.)
No. of Slots	2

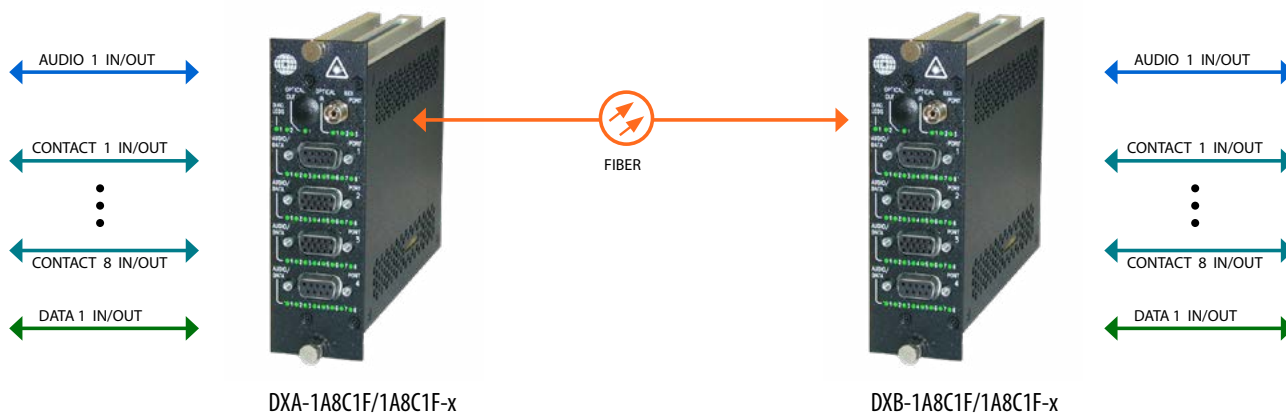
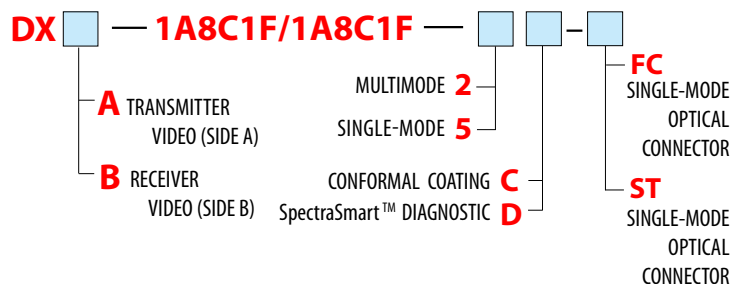
Enviromental

Operating Temperature	-40°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
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Part Numbers:



OPTICAL:

Meridian Optical Code	Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)	Max Distance (Km)
2	Multimode (FP Laser) 62.5 / 125	-3	-24	21	1300 / 850	ST	24	4
5	Singlemode (FP Laser) 9 / 125	-3	-24	21	1310 / 1550	ST, FC	24	60

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