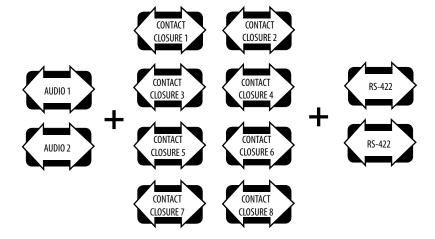


2-Channel Bi-directional Audio, 8-Channel Bi-directional Contact Closure and 2-Channel Bi-directional RS-422 Data





#### **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
- 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.
- 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-2A8C2F/2A8C2F-x series is a reliable, cost effective, one fiber transmission system with two Full-Duplex channels of 24-Bit Digital Audio, eight Bi-directional channels of Contact Closure and two Bi-directional RS-422 Data channels.

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 chaises 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 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

#### **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

# **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
4 - Green	Data Present
4 - Green	Audio Present
4 - 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

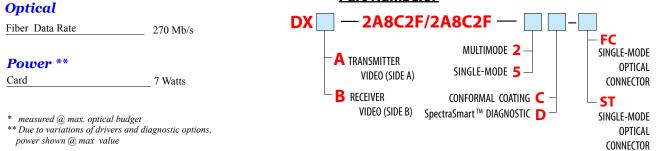
### **Enviromental**

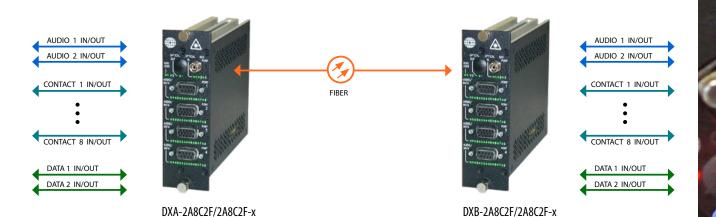
Operating Temperature	$-40^{\circ}$ C to $+74^{\circ}$ C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

# Quality

MTBF	>170,000 hours @ Ground Fix
	35°C per MIL217F

# **Part Numbers:**





# **O**PTICAL:

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