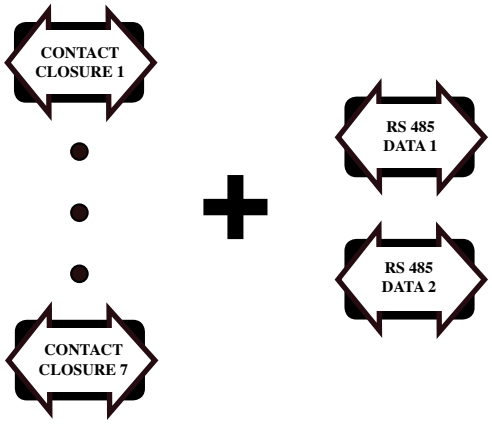
MERIDIAN TECHNOLOGIES

DXA/DXB-7C2J-x

DigiFlex™

Digitally Encoded Seven Channels of Bi-directional Contact Closure & Two Bi-directional RS-485 Data (2-wire)



FEATURES:

- Real Time Contact Closure and Data Transmission
- Meets RS-250C Short Haul Transmission Specifications
- Seven Full Duplex Contact Closure and Two Bi-directional RS-485 (2-wire) Data Channels
- 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
- DB-9 Type Connector for Data
- DB-15 Type Connector for Contacts

DESCRIPTION:

The DXA/DXB-7C2J-x series fiber optic transmission system takes advantage of Meridian's new digital encoding technology and transmits following signals over one fiber:

1. Seven Bi-directional Contact Closure channels
2. Two full-duplex RS-485 Data (2-wire)

Both, multimode and singlemode, one or two fibers versions are available. The versatility of the DXA/DXB-7C2J-x system is 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 DigiFlex™ products are 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/S, 2 slot desk / wall mount chassis (87VAC-264VAC)

MARKETS:

√ Security and Surveillance
√ Access Control Systems
√ Intercomms

SPECIFICATIONS:

Contact Closure

Rate	10 Hz (Per Channel)
Contact Rating	0.3A, 30VAC / DC
Contact Bounce Time	5 ms

Data

Formats	RS-485 (2 wire)
Data Rate	DC to 1Mb/s
Bit Error Rate	10^{-9}*

Optical

Fiber Data Rate	250 Mb/s

Connectors

Optical	ST - MM(default), FC - SM(default)
Power	See SR-1002 Spec. for details
Data	DB9 Female
Contacts	DB15 Female

Power **

Card	8 Watts

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
4 - Green	Data Present
14 - Green	C.C Present

Physical

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

Environmental

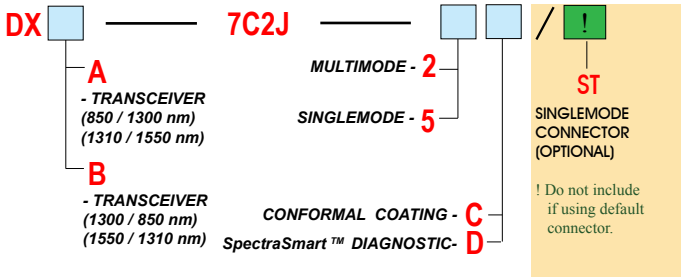
Operating Temperature	-34°C to +74°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

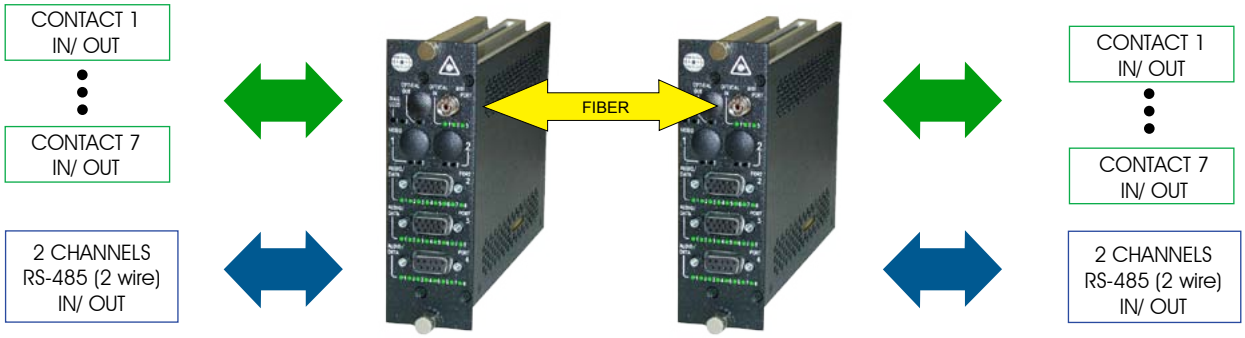
Quality

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

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

Part Numbers:





DXA-7C2J -x
SIDE "A"

DXB-7C2J-x
SIDE "B"

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	2
5	Singlemode (FP Laser) 9 / 125	-3	-24	21	1310 / 1550	ST, FC	24	50

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