

## Digital Full Duplex 4 Channel RS-422 data



### FEATURES:

- 4 Channels of Full Duplex 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.
- DB 9 Type Connectors for Data
- DC to 1 Mb/s Data Rate

### DESCRIPTION:

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

### CONFIGURATIONS:

The DX-4F/4F product family 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. 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  
 Rate. . . . . DC to 1Mb/s  
 Bit Error Rate. . . . .  $10^{-9}$ \*  
 \* measured @ max. optical budget

### Optical

Fiber Data Rate . . . . . 270 Mb/s

### Connectors

Optical . . . . . ST, FC  
 Power . . . . . See SR-1000 Brochure for details  
 Data . . . . . DB9 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  
 2 - Green . . . . . Data Present (per chasnnel)

### 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

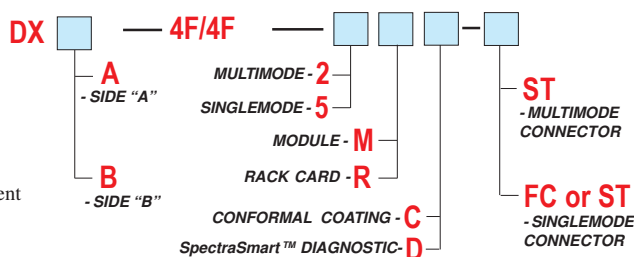
### Enviromental

Operating Temperature. . . . . -40°C to +74°C  
 Storage Temperature. . . . . -55°C to +85°C  
 Relative Humidity. . . . . 0 to 95% Non-condensing

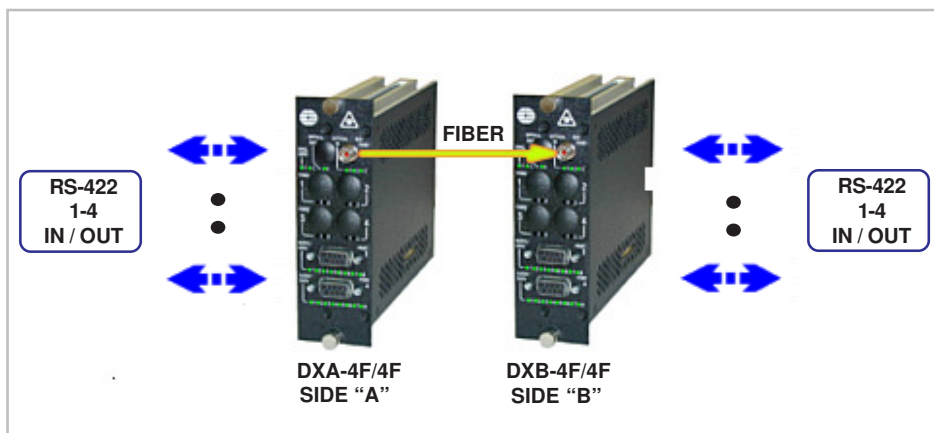
### Quality

MTBF. . . . . >220,000 hours @ Ground Fix  
 35°C per MIL217F

### Part Numbers:



NOTE: ADD THE SUFFIX "D" AT THE END OF THE PART NUMBER FOR DIAGNOSTICS



## 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