MERIDIAN
TECHNOLOGIES
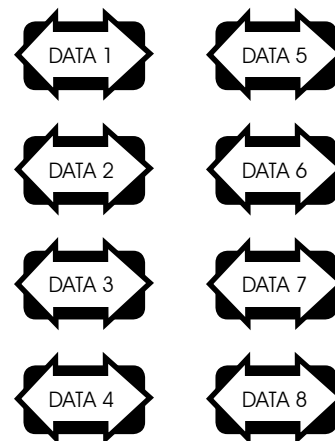
Bi-directional Eight RS-422 Data Channels Transceiver using the Industry Standard Small Form Pluggable (SFP) Optical Device

DATA 1 DATA 5

DATA 2 DATA 6

DATA 3 DATA 7

DATA 4 DATA 8

FEATURES:

- Eight RS-422 Data Channels

- Multimode, Singlemode and CWDM, over one or two fibers via SFP modules

- 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

- LC, SC Optical Connector (SFP dependent)

- 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 Data

- DC to 1Mb/s Data Rate

- Wide Optical Dynamic Range: Optical Attenuators are Never Needed

DESCRIPTION:

The DXA/DXB-8F/8F-SFP series is fiber optic transmission system that takes advantage of Meridian's digital encoding technology and transmits following signals:

- Eight Channels of RS-422 Data

System is employing the industry standard Small Form Pluggable (SFP) optical device. This SFP gives you the option for either singlemode, multimode or CWDM wavelength selections by simply plugging in the appropriate SFP module.

The versatility of this 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 Meridian's card chassis, desk chaises and 19" racking frames. These systems can be configured in either star (module to rack) or trunking (rack to rack) configurations and can be made a standalone system by using the SR-1002, 2 slot desk / wall mount chassis (87VAC-264VAC).

MARKETS:

√ Security and surveillance
√ Access control systems
√ Intelligent transportation systems (ITS)
√ SCADA

SPECIFICATIONS:

Data

Formats	RS-422D
Rate	DC to 1Mb/s* (Per Channel)
Bit Error Rate	10^{-9}**

Power**

Card	7 Watts

Connectors

Data	DB 9 F
Optical	LC, SC - SFP dependent
Power	See SR-1000 Spec. Sheet

Optical

Bandwidth	250 Mb/s.

Environmental

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

Indicators (LEDs)

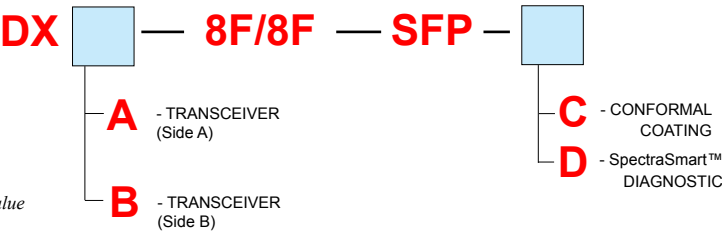|	
1 - Green	Power On
2 - Bi-color	TX Carrier/ Laser Over Current
2 - Bi-color	RX Carrier - Present / Error
2 - Bi-color	RX optical signal - Present / Absent
1 - Green	Data Present (One Per Channel)
1 - Bi-color (Optional)	Card Diagnostics

Physical

Dimensions:

Card	160 mm (6.3") L, 127 mm (5") H 44mm (1.7") W

Weight:

Card	600 g (1.32 lb)
Number of Rack Slots	2

Quality

MTBF	>200,000 hours, @ 35°C Ground Fix as per MIL 217F

Part Number:

DX [A / B] — 8F/8F — SFP — [C / D]

A - TRANSCEIVER (Side A)
B - TRANSCEIVER (Side B)
C - CONFORMAL COATING
D - SpectraSmart™ DIAGNOSTIC

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

8 CHANNELS RS-422 DATA IN/ OUT ⟷ **DXA-8F/8F-SFP** ⟷ FIBER ⟷ **DXB-8F/8F-SFP** ⟷ 8 CHANNELS RS-422 DATA IN/ OUT
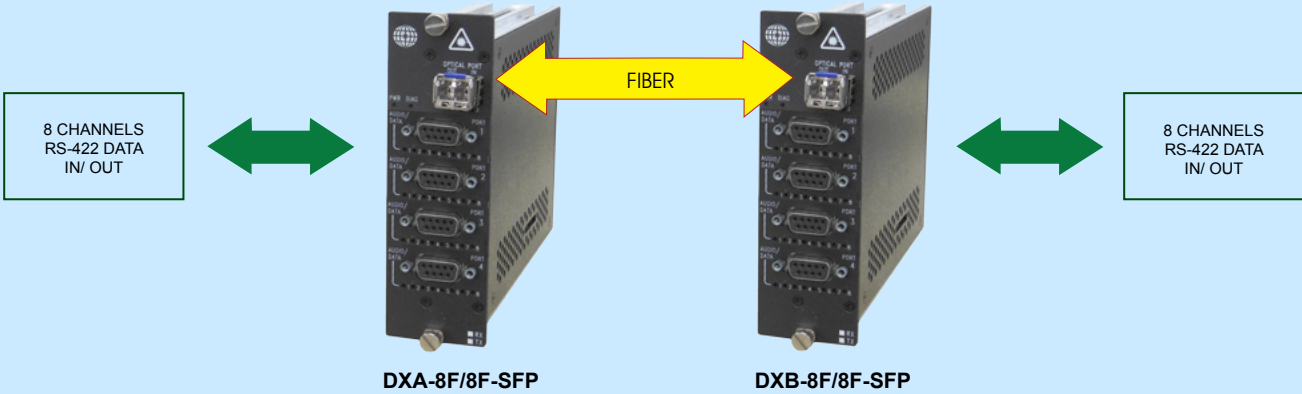
SFP OPTIONS:

The SFP series products are available for both singlemode and multimode fiber applications and ether one or two fiber versions.
Recommended optical speed for this product is 155 Mb/s .

For more specifications on a SFP optical devices go to SFP data sheet clicking   or

go to: **WWW.MERIDIAN-TECH.COM -> PRODUCTS -> ACCESSORIES -> SFP OPTICAL DEVICES**