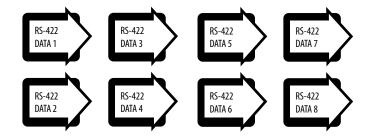


# Digitally Encoded 8 Uni-directional RS-422 Data Channels





## **FEATURES:**

- Real Time Data Transmission
- Eight RS-422 Uni-Directional 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
- 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
- DB-9 Type Connectors for Data Interface

## **DESCRIPTION:**

The DT/DR-8F-x series products incorporate digital encoding technology.

This fiber optic card transmits 8 (eight) simplex RS-422, Manchester, Bi-Phase data channels over one optical fiber. Both Multimode and Singlemode fiber versions are available. Meridian's digital product line incorporates plug-in personality signal cards to easily configure a wide variety of module types. The functionality of the DT/DR-8F-x series products is enhanced by their compatibility with Meridian's PC based SpectraSmart Network Management & Diagnostic Software system. SpectraSmart supervises the operating parameters of the transmission system such as the status on video levels, sync, digital carrier detect, voltages, temperatures, optical levels etc. See SpectraSmart brochure for further details.

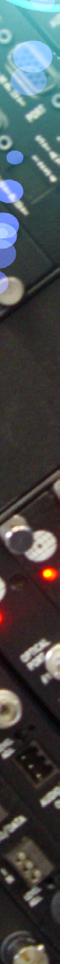
#### **CONFIGURATIONS:**

The DT/DR-8F-x product family is available as rack mount cards and modules that can be installed in either Meridian's desk chassies or in 19" racking frames.

This system can be configured in either star (module to rack) or trunking (rack to rack) configurations. Also it can be made a standalone system by using the SR-1002/S, 2 slot desk / wall mount chassis (87 VAC- 264VAC)

## **MARKETS:**

- √ Intelligent Transportation Systems (ITS)
- √ Security and Surveillance
- √ Access Control



#### **SPECIFICATIONS:**

#### Data

Formats RS-422,
Manchester or Bi-Phase

Data Rate DC to 250 Kb/s
Bit Error Rate 10-9\*

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## **Optical**

Fiber Data Rate 500 Mb/s

## **Connectors**

 Optical
 ST, FC

 Power (module)
 See SR-1000 Brochure for details

 Data
 DB9 Female

#### Power \*\*

Card 5 Watts

## **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
8 - Green	Data Present

## **Physical**

Dimensions (Card) 160 mm (6.3") L, 127 mm (5") H 44mm (0.80")W Weight (Card) 450 gms (16 Oz) No. of Slots 2

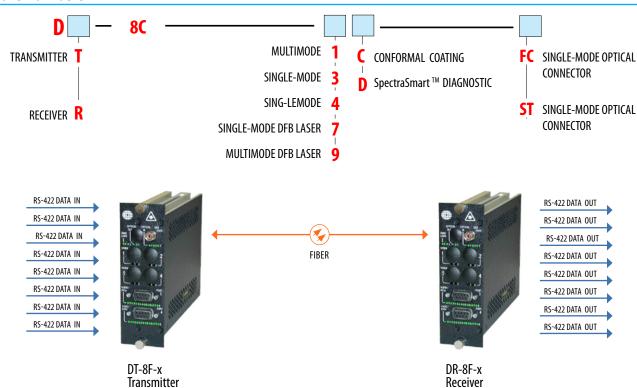
#### **Enviromental**

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

## Quality

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

#### **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)
1	Multimode (VCSEL Laser) 62.5 / 125	-5	-23	18	1300	ST	23	4
3	Singlemode (FP Laser) 9 / 125	-3	-23	20	1310	ST, FC	23	50
4	Singlemode (FP Laser) 9 / 125	-3	-23	20	1550	ST, FC	23	80
7	Singlemode (DFB Laser) 9 / 125	+3	-23	26	1550	ST, FC	23	100
9	Singlemode (DFB Laser) 9 / 125	+3	-23	26	1310	ST, FC	23	70

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