

## Contact Closure Transmitter /Receiver 7-28 Channels



C. C. 7



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### FEATURES:

- Laser Based Systems for Multimode and Singlemode Fiber
- Individually Programmed Contacts for Either Normally-Open or Normally-Closed
- 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
- ST, FC Optical Connector
- 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 15 Type Connectors for Data
- Wide Optical Dynamic Range: Optical Attenuators are Never Needed

### DESCRIPTION:

The DTDR - xC product incorporates a new digital encoding technology. This fiber optic system is available in different configurations ranging from minimum of 7 Channels up to maximum of 28 Channels of Uni-directional Contact Closure signals over one Singlemode or Multimode fiber. Meridian's digital product line incorporates plug-in personality circuit cards to easily configure a wide variety of data channels on this system. The functionality of the DTDR - xC system are further 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 Digital carrier detect, voltages, temperatures, optical levels, Laser currents, Digital Power supply etc. See *SpectraSmart* brochure for further details.

### CONFIGURATIONS:

The DTDR - xC product is available as rack mount cards suitable for mounting in Meridian card chassis and utilizes 2 card slots. These products can easily be converted to a Standalone module with the SR-1000/S, Desk / Wall mount 2-slot chassis (87- 264 VAC). See SR-1000 brochure for further details.

### MARKETS:

- ✓ Security and surveillance
- ✓ Access control systems
- ✓ CCTV Networks
- ✓ IR Illuminations

SPECIFICATIONS:

Data

Formats	Contact Closure
Rate	10 Hz (Per Channel)
Contact Rating	0.3A, 30VAC / DC
Contact Bounce Time	5 msec
Bit Error Rate	10 <sup>-9</sup>

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
1 - Green	C.C Present ( One Per Channel)
1 - Bi-color (Optional)	Card Diagnostics

Power\*\*

Card	5 Watts (1-4 Ch. System)
	8 Watts (16 Ch. System)

Physical

Dimensions:	
Card	160 mm (6.3”) L, 100 mm (4”) W 44mm (1.7”) H
Weight:	
Card	450 g (16 oz.)
Number of Rack Slots	Two

Connectors

Data	DB 15F
Optical	ST , FC
Power	See SR-1000, SR-1000/S Data Sheet

Quality

MTBF	>200,000 hours, @ 35°C Ground Fix as per MIL 217F
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\* measured @ max. optical budget  
\*\* Due to variations of drivers and diagnostic options, power shown @ max value

Optical

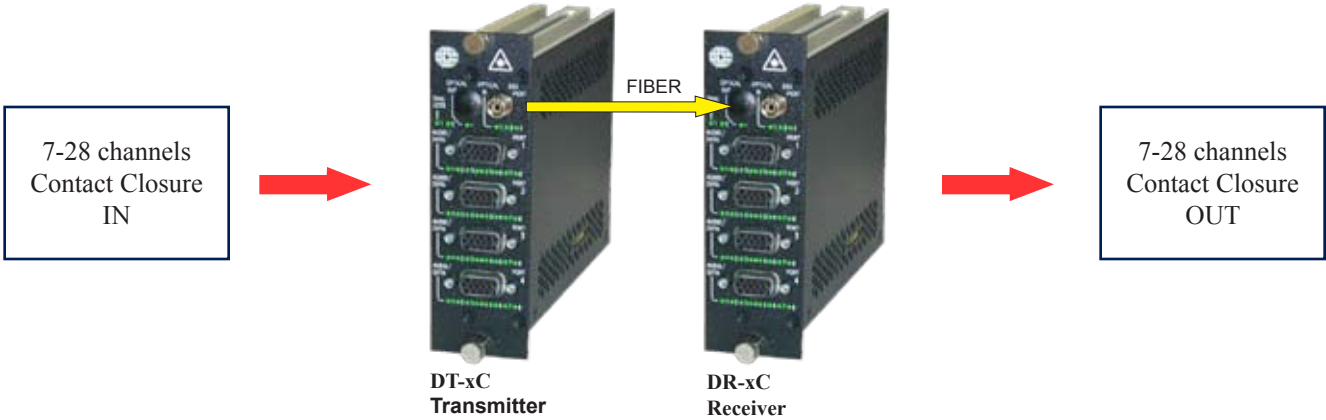
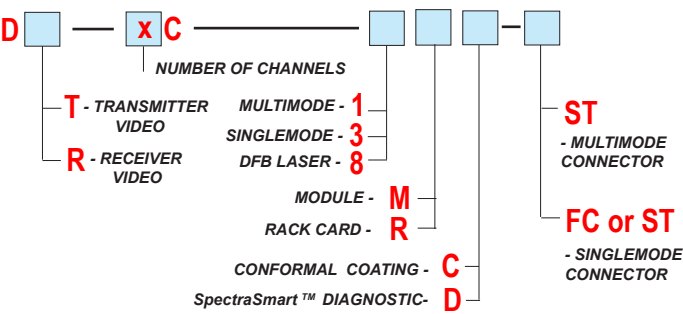
Bandwidth	250 Mb/s.
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NOTE: Standard Systems incorporates Fabry Perot Lasers

Enviromental

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

Part Numbers:



OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
Multimode (FP) 62.5 / 125	-4	-24	20	850 / 1300	ST	24
Singlemode (FP) 9 / 125	-4	-24	20	1310 / 1550	ST , FC	24
Singlemode (DFB) 9 / 125	+3	-24	27	1310 / 1550	ST , FC	24