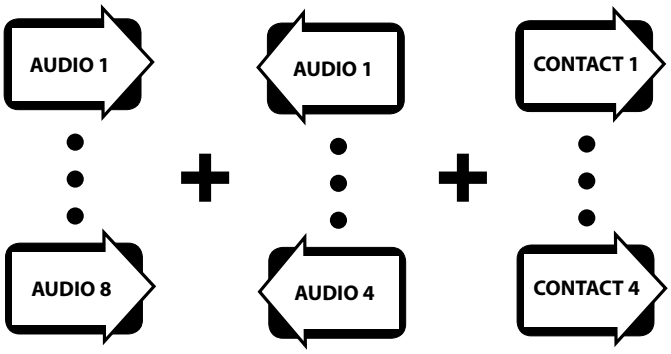
MERIDIAN TECHNOLOGIES

DT/DR-8A4C/4A-x DigiFlex™

Digitally Encoded Eight Simplex 24-Bit Audio plus Four Return 24-Bit Audio with Four Simplex Contact Closure



FEATURES:

- 8 Channels of Simplex 24-Bit Audio plus Four Return 24-Bit Audio and 4 Channels of Unidirectional Contact Closure
- Standard 24 Bit Digital Audio Encoding
- Four User-selectible, Contact Mapping (N.O, N.C)
- Wide Optical Dynamic Range: Eliminates Need For Optical Attenuators
- Laser Based Systems for Multimode and Single-mode
- 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 Audio
- DB 15 Type Connector for Contacts

DESCRIPTION:

The DT/DR-8A4C/4A-x series fiber optic transmission system that using Meridian's new digital encoding technology to transport following signals:

- 8 Simplex 24- Bit Audio Channels
- 4 Return 24-Bit Audio Channels
- 4 Unidirectional Contact Closure Channels

Both Multimode and Single-mode fiber versions are available. The Contact Closure channels can be configured as either Normally Open (N.O.) or Normally Closed (N.C.).
The functionality of DT/DR-8A4C/4A-x system is further enhanced by 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 DT/DR-8A4C/4A-x product is available as rack mount cards and can be installed in all of Meridian's card chassis, desk chassis 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, 2 slot desk / wall mount chassis (87VAC-264VAC).

MARKETS:

√ Security and Surveillance
√ Access Control Systems
√ Intercomms

SPECIFICATIONS:

Audio

I/O Impedance	600 Ohms (Bal. / Un Bal.)
Frequency Responce	10 Hz to 20 KHz
SNR	>90dB (Weighted)@ 1 KHz
In/Out Level	-8 to +8 dBm (4Vp-p max.)
	(+18 dBm available on request)
Total Harmonic Distort	<0.01% @ 1KHz
Resolution	24 Bit

Contact Closure

Formats	Jumper selectable:
	Normally Open (N.O.)
	or Normally Closed (N.C.)
	Contacts
Rate	10 Hz (Per Channel)
Contact Rating	0.3A, 30VAC / DC
Contact Bounce Time	5 msec
Bit Error Rate	10^{-9*}

Optical

Fiber Data Rate	250 Mb/s

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST - MM(default), FC - SM(default)
Power	See SR-1000 Brochure for details
Audio	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	Contact Present
12 - Green	Audio Present
12 - Red	Audio Overload

Physical

Dimensions:	
Card	44 (W) x 127 (H) x 160 (D) mm
	(1.7 x 5.0 x 6.3 inch)
Weight:	
Card	450 gms (16 Oz)
No. of Slots	2

Environmental

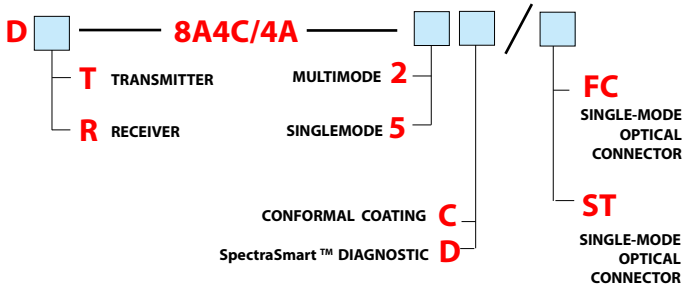
Operating Temperature	-34°C to +74°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

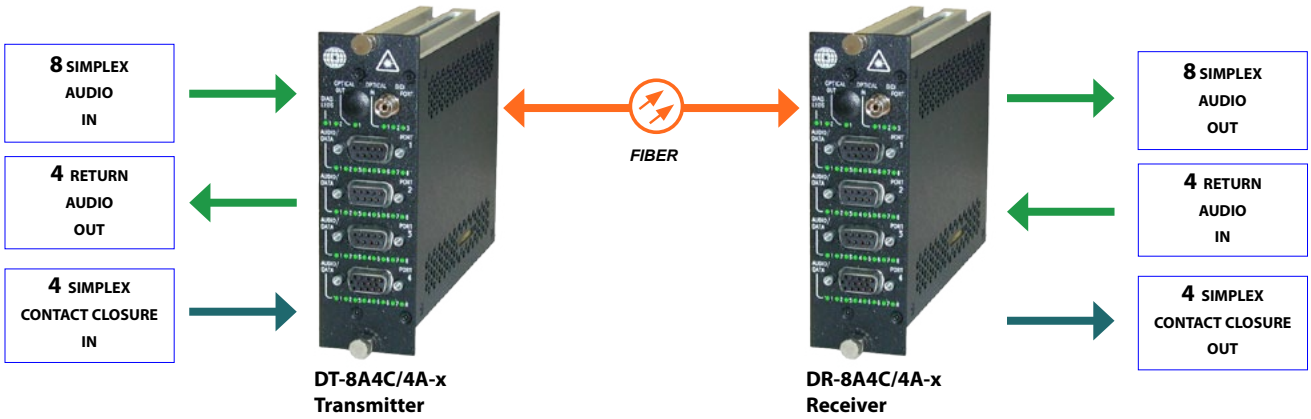
Quality

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:





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 (Laser) 62.5 / 125	-3	-25	22	1300 / 850	ST	25	4
5	Single-mode (FP Laser) 9 / 125	-3	-25	22	1310 / 1550	ST, FC	25	62

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