



8 Channels of Unidirectional, 24-bit Audio over One Fiber



FEATURES:

- 8 Channels of real-time 24-Bit, uni-directional Audio
- Expandable to 16 channels of uni-directional Audio
- 10Hz to 20KHz audio bandwidth
- Greater than 90dB SNR for superb audio quality
- 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 Audio

DESCRIPTION:

The DT/DR-8A series products incorporate digital encoding technology. This fiber optic module transmits 8 channels of 24-Bit quality Audio over one fiber. Userselectable input/output impedances of 600 Ohm, balanced and 47K Ohm, unbalanced are available for each channel. Both multimode and singlemode fiber versions are available. Meridian's digital product line incorporates plugin personality signal cards to easily configure a wide variety of module types. The functionality of the DT/DR-8A series products is enhanced by its compatibility with Meridian's PC based SpectraSmart Network Management & Diagnostic Software system. Spectra Smart 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 Spectra Smart brochure for further details.

CONFIGURATIONS:

The DT/DR-8A product family is available as rack mount cards and modules that can be installed in Meridian's card chassis, desk chaises and 19" racking frames. This 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:

- √ Pro Audio
- √ Courtroom & broadcast audio feeds
- √ Distance Learning

SPECIFICATIONS:

Audio

In/Out Impedance. 600 Ohm (Bal. / Un Bal.)
Frequenct Response 10Hz to 20KHz

 SNR
 > 90 dB (Weighted) @ 1KHz

 In / Out Level
 -6 to +6 dBm (4VP-Pmax.)

(+18dBm availabale on Request)

Total Harmonic Distortion . . < 0.01% @ 1 KHz

Resolution ... 24 Bit Tx-Rx Latency. 1.2 ms

Optical

Connectors

Audio..... BNC

Optical ST - MM (default), FC- SM (default)

Environmental

Operating Temperature. $-34^{\circ}\text{C to } +74^{\circ}\text{C}$ Storage Temperature. $-55^{\circ}\text{C to } +85^{\circ}\text{C}$

Relative Humidity. 0 to 95% Non-condensing

Power*

Card 8 Watts

* Due to variations of drivers and diagnostic options, power shown (a) max value

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	Audio Present (One Per Channel)
1- Red	Audio Overload (One Per Channel)
1- Bi-color (Optional)	Card Diagnostics

Physical

Dimensions:

Cards. 160 mm (6.3") L, 100 mm (4") H

44 mm (1.7") W

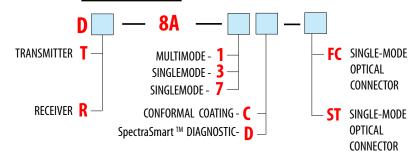
Weight:

Cards 540 g (1.2 lb.)

Number of Rack Slots . . . Two

Quality

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	-3	-23	20	1300	ST	23	4
3	Multimode (FP Laser) 62.5 / 125	-3	-23	20	1310	ST, FC	23	50
7	Singlemode (FP Laser) 9 / 125	+3	-23	26	1550	ST, FC	23	100