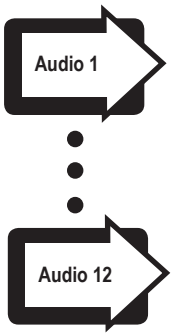
MERIDIAN TECHNOLOGIES

12-Channel, 24-bit Digitally-Encoded Audio Transmitter / Receiver



FEATURES:

- 12 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
- 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 Audio

DESCRIPTION:

The DT/DR-12A series products incorporate digital encoding technology. This fiber optic module transmits 12 channels of 24-Bit quality Audio over one fiber. User-selectalbe 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 plug-in personality signal cards to easily configure a wide variety of module types. The functionality of the DT/DR-12A 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-12A 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 Ohms (Bal. / Un Bal.)
Frequenct Response	10Hz to 20KHz
SNR	>90dB (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

Optical

Fiber Data Rate	250Mbs

Connectors

Optical	ST, FC
Audio	DB9 Female

Power **

Card	8 Watts

Enviromental

Operating Temperature	-40oC to +75oC
Storage Temperature	-55oC to +85oC
Relative Humidity	0 to 95% Non-condensing

Quality

MTBF	>220,000 hours @ Ground Fix
	35oC per MIL217F

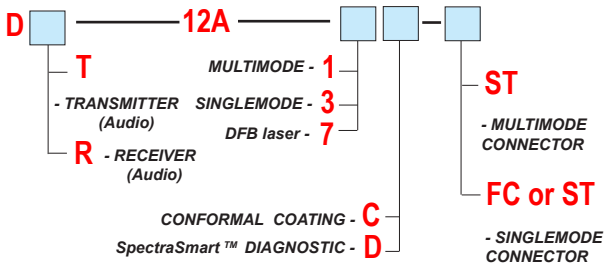
Indicators (LEDs)

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
12- Red	Audio Overload
12 - Green	Audio Present

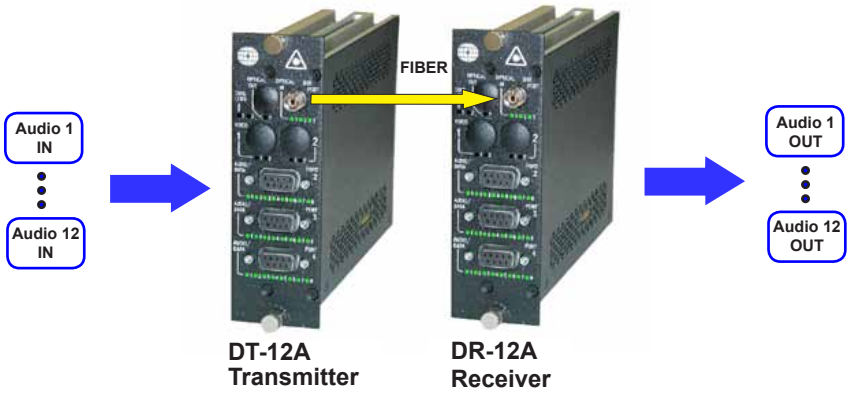
Physical

Dimensions:	
Card	160 mm (6.3") L, 100 mm (4") W
	44 mm (1.7") H
Weight:	
Card	450 gms (16 Oz)
No. of Slots	2

Part Numbers:



** *Due to variations of drivers and diagnostic options, power shown @ max value*



OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
Multimode (FP Laser) 62.5 / 125	-3	-23	20	1300	ST	24
Singlemode (FP Laser) 9 / 125	-3	-23	20	1310	ST, FC	24
Singlemode (DFB Laser) 9 / 125	+3	-23	26	1550	ST , FC	24

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