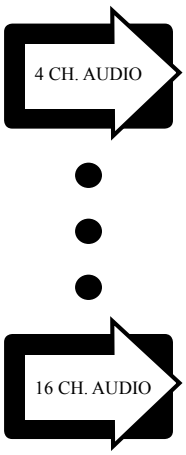
MERIDIAN TECHNOLOGIES

Uni-Directional, One Fiber Audio Multiplexer 4-16 Channels

DT-16A-x card shown



FEATURES:

- Up to 16 Channels of 24 bit Digitally Encoded Audio Channels over One Fiber
- Laser Based Systems for Multimode and Singlemode Fiber
- 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-9F Type Connectors for Audio
- Wide Optical Dynamic Range: Optical Attenuators are Never Needed

DESCRIPTION:

The DT/DR-nA series product incorporates a new digital encoding technology. This fiber optic system is available in different configurations ranging from minimum of 4 Channels up to maximum of 16 Channels of Uni-directional Audio 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 DT/DR-nA series 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 DT/DR-nA product family 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. See SR-1000 brochure for further details.

MARKETS:

√ CCTV Networks
√ Intercoms
√ Security & Surveillance

SPECIFICATIONS:

Audio

In/Out Impedance	600 Ohms (Bal. / Un Bal.)
Frequenct Response	10Hz to 20KHz
SNR	> 90 dB (Weighted) @ 1KHz
In / Out Level	-6 to +6 dBm ($4V_{P-P}$max.)
Total Harmonic Distortion	< 0.01% @ 1 KHz
Resolution	24 Bit

Optical

Bandwidth	250 Mb/s.

Connectors

Audio	DB-9F
Optical	ST - MM (default), FC- SM (default)

Enviromental

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

Power*

Card	8 Watts

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

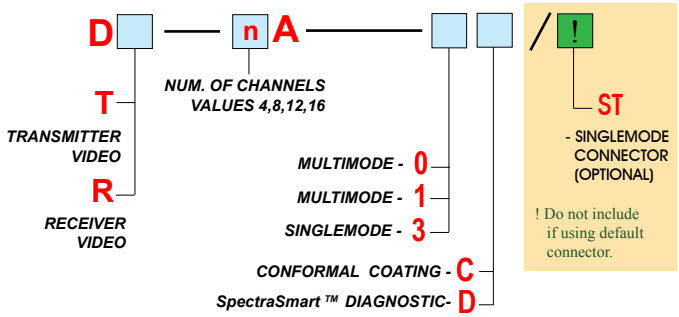
Physical

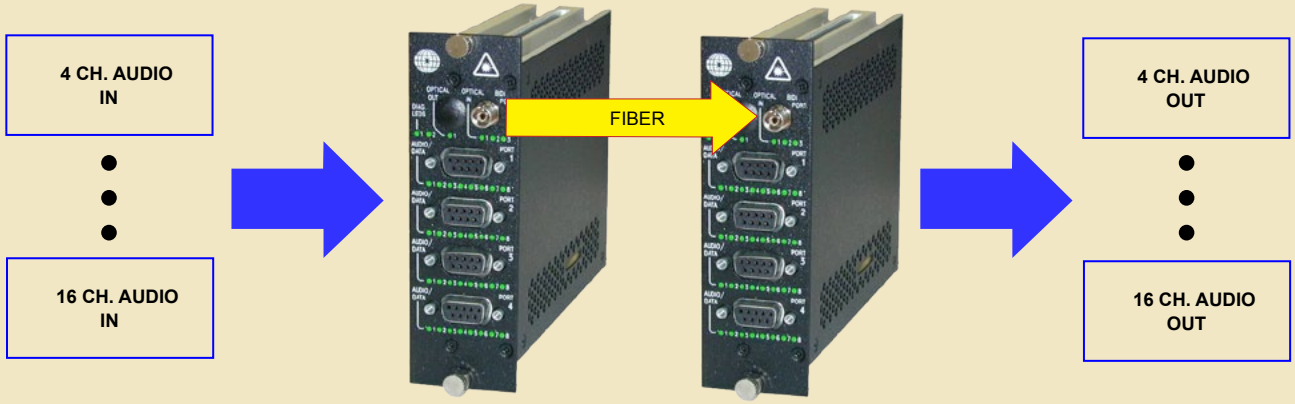
Dimensions:	
Card	160 mm (6.3") L, 100 mm (4") W 44mm (1.7") H
Weight:	
Card	450 g (16 oz.)
Number of Rack Slots	Two

Quality

MTBF	>200,000 hours, @ 35ºC Ground Fix as per MIL 217F

Part Numbers:





DT-16A-x
Transmitter

DR-16A-x
Receiver

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)
0	Multimode (VCSEL Laser) 62.5 / 125	-5	-27	22	850	ST	24	4
1	Multimode (FP Laser) 62.5 / 125	-3	-25	22	1300	ST	24	4
3	Singlemode (FP Laser) 9 / 125	-3	-25	22	1310	ST, FC	24	50

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