



MERIDIAN
TECHNOLOGIES

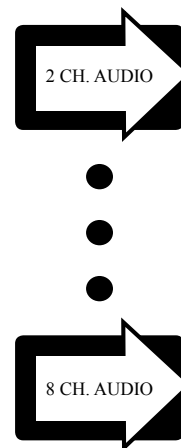
DT/DR-2AH-x DT/DR-4AH-x
DT/DR-6AH-x DT/DR-8AH-x

DigiFlex™



DT-8AH-x
card shown

Unidirectional, 2-8 Channels
One Fiber Audio Multiplexer



FEATURES:

- Up to 8 Channels of 24 bit Digitally Encoded Audio over One Fiber
- Low Signal Latency
- 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
- BNC Type Connectors for Audio
- Wide Optical Dynamic Range: Optical Attenuators are Never Needed

DESCRIPTION:

The DT/DR-nAH-x series product incorporates a new digital encoding technology with Low Signal Latency.

This fiber optic system is available in different configurations and will transmit from minimum 2, to maximum 8 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-nAH-x 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-nAH-x 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-1550, Desk / Wall mount 2-slot chassis. See SR-1002 chassis spec. for further details.

MARKETS:

- ✓ CCTV Networks
- ✓ Intercoms
- ✓ Security & Surveillance

SPECIFICATIONS:

Audio

In/Out Impedance.	600 Ohm (Bal.), 47 KOhm (Un Bal.)
Frequenct Response	10Hz to 20KHz
SNR	> 90 dB (Weighted) @ 1KHz
In / Out Level	-8 to +8 dBm (6V _{p-p} max.)
Total Harmonic Distortion ..	< 0.01% @ 1 KHz
Resolution	24 Bit
Tx-Rx Latency.	0.15 mS

Optical

Bandwidth	250 Mb/s.
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Connectors

Audio.	BNC
Optical	ST - MM (default), FC- SM (default)

Environmental

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

Power*

Card	8 Watts
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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

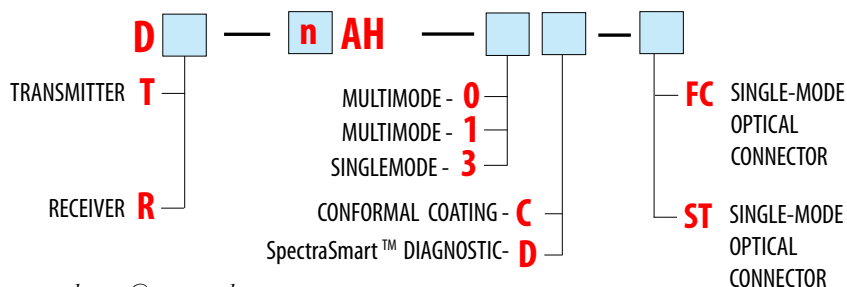
Dimensions:	
Cards	160 mm (6.3") L, 100 mm (4") H 44 mm (1.7") W

Weight:	
Cards	540 g (1.2 lb.)
Number of Rack Slots ...	Two

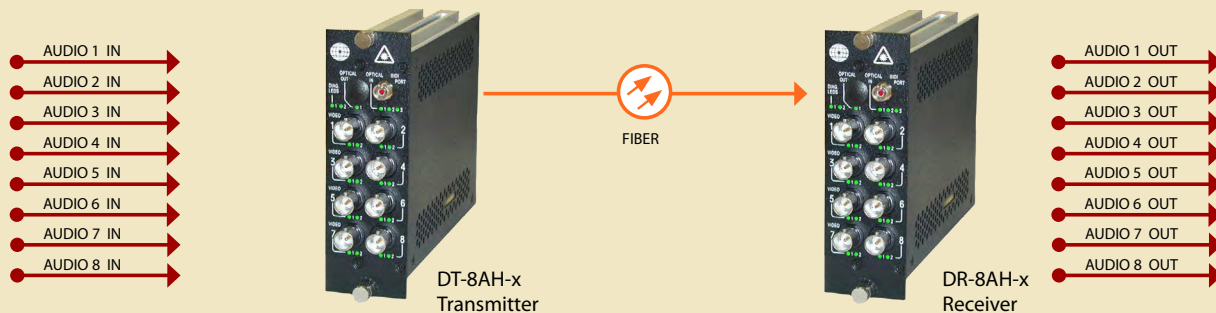
Quality

MTBF.	>200,000 hours, @ 35°C Ground Fix as per MIL 217F
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Part Numbers:



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



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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