

**Digitally Encoded One Unidirectional
24-Bit Audio****AUDIO****FEATURES:**

- Real Time 24-bit Audio Transmission
- Low Power Consumption
- High Efficiency, Isolated Power Supply
- Wide Optical Dynamic Range: Eliminates Need For Optical Attenuators
- Laser Based Systems for both Multimode and Singlemode modules
- Surface Mount Technology (SMT) for High
- Reliability and Repeatability
- Local LED Status Indicators to Monitor Critical System Parameters
- ST, FC Optical Connector
- Laser Back - Biased Photo Detector Circuitry for Stable Optical Output Over Full Temperature Range
- Screw Terminal Connector for Data

DESCRIPTION:

Series NT/NR-1A-x modules incorporate an all-digital encoding technology and can transmit the following signals:

1. One Unidirectional 24 bit Audio channel

This module belongs to **DigiCool™** product family which features very Low Power Consumption an Isolated High Efficiency Power Supply.

Standard 5-pin terminal blocks are used for easy connection of the Audio channel Interface.

Optional conformal coating is available for high humidity and corrosive environments.

See the FT/FR-1A-x data sheet for the complementary rack mount card version of this module.

CONFIGURATIONS:

Series NT/NR-1A-x products are available in small stand-alone modules for easy mounting on walls, shelves and other flat surfaces.

MARKETS:

- ✓ Intelligent transportation systems (ITS)
- ✓ Security and surveillance
- ✓ Access Control

SPECIFICATIONS:

Audio

I/O Impedance	600 Ohm (Bal.), 47 KOhm (Un Bal.)
Frequency Response	10 Hz to 20 KHz
SNR	>90dB (Weighted)@ 1 KHz
In/Out Level	-8 to +8 dBm (4V _{pp} max.)
	(+18 dBm available on request)
Total Harmonic Distortion	<0.01% @ 1KHz
Resolution	24 Bit

Connectors

Optical	ST, FC
Power (module)	See SR-500 Brochure for details
Audio	5-pin Screw Terminals

Optical

Fiber Data Rate	270 Mb/s
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Power

Input Power (default)	12-24VAC / DC @ 2.8 W
	WP-24 wall adapter (not included)
Input Power (optional)	5VDC @ 2.5 W
	WP-5 wall adapter (not included)

Indicators (LEDs)

1 - Green	Power On
1 - Bi-color	TX Carrier/ Laser Over Current
1 - Bi-color	RX Carrier - Present / Error
1 - Bi-Color	Audio Present / Overmodulation

Physical

Dimensions	117(W) x 60 (L) x 25 (H) mm
	(3.5x 2.3 x1 inch)
Weight	213 gms (0.5 lb.)

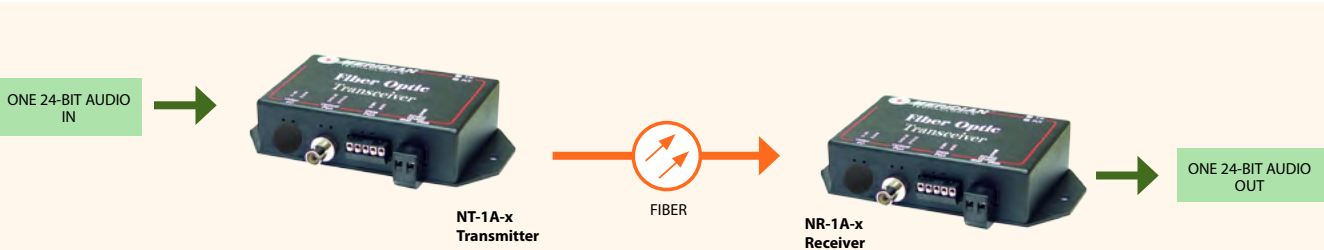
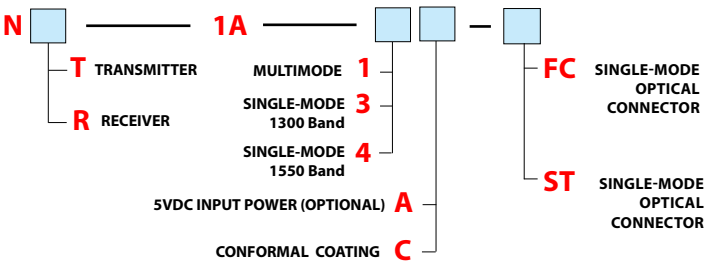
Environmental

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

Quality

MTBF	>170,000 hours @ Ground Fix
	35°C per MIL217F

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 (Laser) 62.5 / 125	-5	-28	23	1300	ST	28	3.5
3, 4	Singlemode (FP Laser) 9 / 125	-5	-28	23	1310, 1550	FC, ST	28	65