

**Digitally Encoded One Unidirectional
24-Bit Audio**

FEATURES

- Real Time 24-bit Audio Transmission
- 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
- SpectraSmart™ PC Based Network Management
- Hot Swappable Cards
- Screw Terminals or DB-25 Connectors for Audio

DESCRIPTION

The FT/FR-1A-x series fiber optic transmission system that takes advantage of Meridian's new digital encoding technology and transmits following signals over one single-mode or multimode fiber:

1. One Unidirectional 24 bit Audio channel

The functionality of this system is enhanced by compatibility with Meridian's PC based SpectraSmart™, Network Management and Remote Diagnostic Software System. SpectraSmart™ supervises the operating parameters of the transmission system. See the SpectraSmart brochure for more details. See the NT/NR-1A-x data sheet for the complementary small module version of this product.

CONFIGURATIONS

The DigiCool™ products are available as rack mount cards that can be installed in Meridian's card chassis, desk chassis 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-500, 1 slot desk / wall mount chassis.

MARKETS

- ✓ Security and Surveillance
- ✓ Intelligent Transportation System (ITS)
- ✓ Access Control Systems
- ✓ Campus Lecture Networks

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 _{P-P} max) (+18 dBm available on request)
Total Harmonic Distortion	<0.01% @ 1KHz
Resolution	24 Bit

Optical

Fiber Data Rate	270 Mb/s
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Power *

Card	5 Watts
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Connectors

Optical	ST for MM fiber (default) FC for SM fiber (default)
Power (standalone module)	See SR-500 Brochure for details
Audio	Screw Terminals (default) or DB-25F

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 / Overload

Physical

Dimensions (Card)	160(L) x 127(H) x 20 (W) mm (6.3 x 5 x 0.8 inch)
Weight (Card)	450g (0.9 lb.)
No of Slots	1
Module	See SR-500 Brochure

Environmental

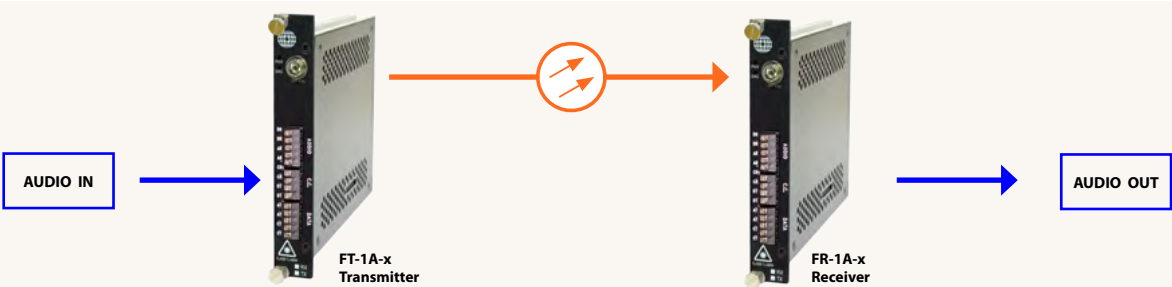
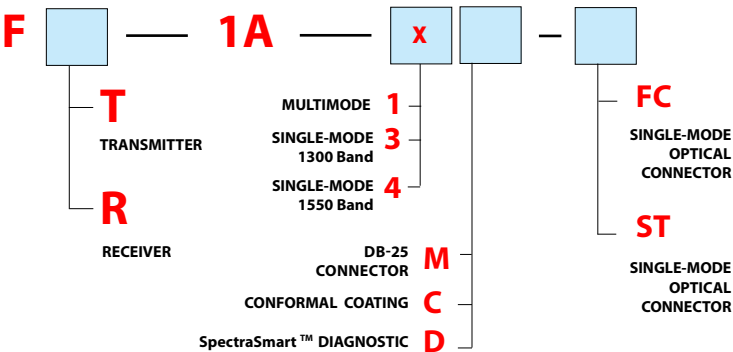
Operating Temperature	-34°C to +74°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

Quality

MTBF	>170,000 hours @ Ground Fix 35°C per MIL217F
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* Due to variations of drivers and diagnostic options, power shown @ max value

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