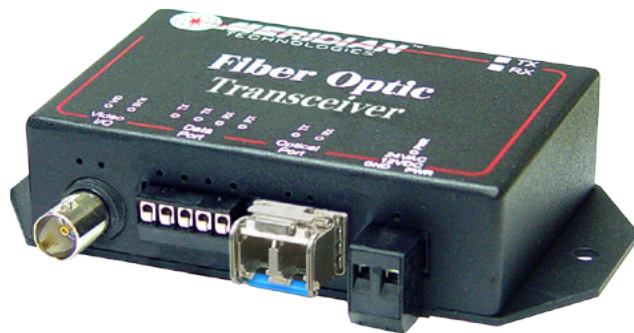




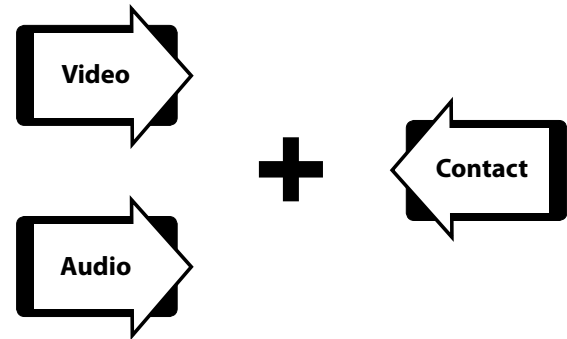
MERIDIAN
TECHNOLOGIES

NT/NR-1U1A/1C-SFP

DigiCool™



Digitally Encoded One 10-Bit 10 MHz Video with
One 24-Bit Audio and One Return Channel
of Contact Closure using Small Form
Pluggable (SFP) Optical Device



FEATURES:

- 10 Bit 10MHz Video Digital Encoding
- Real Time Video and Data Transmission
- Low Power Consumption
- High Efficiency, Isolated Power Supply
- Meets RS-250C Short Haul Transmission Specifications
- NTSC, PAL, SECAM Compatible
- Simplex 24-Bit Audio
- Return Contact Closure Channel
- Multimode, Singlemode and CWDM fiber options via SFP modules
- Surface Mount Technology (SMT) for High
- Local LED Status Indicators to Monitor Critical System Parameters
- LC, SC Optical Connector (SFP dependent)
- 75 Ohm BNC Video Connector (Gold Center Pin)
- Meets EIA RS-170, RS-343A Formats
- Screw Terminal Connector for Data

DESCRIPTION:

This NTNR-1U1A/1C-SFP module incorporates an all-digital encoding technology and transmits following signals:

1. One real-time, high quality, 10-bit 10 MHz video
2. One simplex 24 bit audio
3. One return contact closure channel

This product incorporates the industry standard Small Form Pluggable (SFP) optical device. This SFP gives you the option for either singlemode, multimode or CWDM wavelength selections by simply plugging in the appropriate SFP module.

This module belongs to new **DigiCool™** series 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 & contact channel interfaces.

Note: See the FT/FR-1U1A/1C-SFP data sheet for the complementary rack mount card version of this module.

CONFIGURATIONS:

The NTNR-1U1A/1C-SFP 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:

Video

Format	NTSC, PAL, SECAM
Voltage/Impedance	1 Vp-p, 75 Ohm, 1.5 Vp-p max.
Bandwidth	5 Hz to 10 MHz @ -3 dB
Differential Gain	<0.6%
Differential Phase	<0.3°
SNR	>67 dB (weighted)*
Return Loss	>30 dB
Field Tilt	< 0.5%

Contact Closure

Contact Type	Normally Open (N.O.) or Normally closed (N.C.) - jumper selectable
Rate	10 Hz.(Per Channel)
Contact Rating	0.3A, 30V AC / DC
Contact Bounce Time	5 ms

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	350 Mb/s
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Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	LC, SC - SFP dependent
Power (module)	2-pin Screw Terminal
Data	5-pin Screw Terminal

* measured @ max. optical budget

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

Power **

Input Power.....	12-24VAC / DC
Power Consumption	2.8 W

Indicators

1 - Green	Power On
1 - Bi-color	TX Carrier/ Laser Over Current
1 - Bi-color	RX Carrier - Present / Error
1 - Bi-color	Video Present / Overload
1 - Green	Video Sync. Present
1 - Green	Tx Data Present
1 - Green	Rx Data Present

Physical

Dimensions (Module)	117 mm (H), 61 mm (W) 25.5 mm (D) (4.6 x 2.4 x 1.1 inch) with flanges
Weight (Module)	150 gms (0.34 lb)

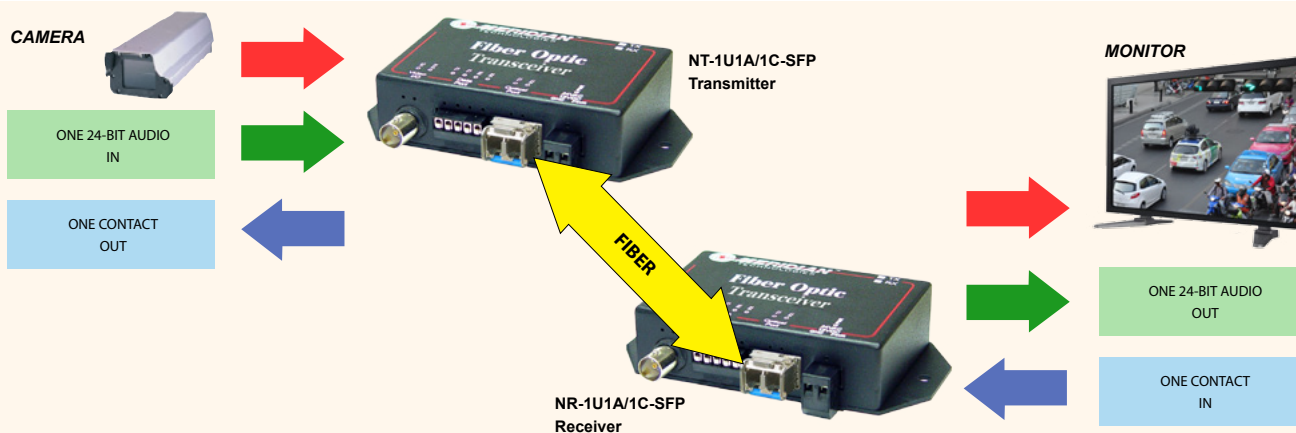
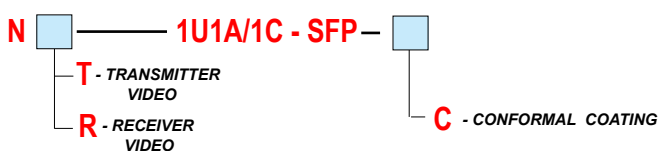
Environmental

Operating Temperature	-40°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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Part Numbers:



SFP OPTIONS:

The SFP series products are available for both singlemode and multimode fiber applications and either one or two fiber versions. Recommended optical speed for this product is 155 Mb/s.

For more specifications on a SFP optical devices go to SFP data sheet clicking

or

go to: WWW.MERIDIAN-TECH.COM -> PRODUCTS -> ACCESSORIES -> SFP OPTICAL DEVICES

Common SFP modules

Part #	Fiber type	# of Fibers
MM1313F2	Multimode	2
MM1315F2 & MM1513F2	Multimode	1
SM1313F20	Single-mode	2
SM1315F20 & SM1513F20	Single-mode	1

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