

Digitally Encoded One 10-Bit 10 MHz Video  
 with One Full Duplex RS 485 (2-wire) Data  
 and One Return Channel of Pelco® Coaxitron  
 or Panasonic® Up-the-coax Control Data



## EXTENDED RANGE CAMERA CONTROL



### FEATURES

- One Digitally Encoded 10-bit 10 MHz Video Signal with One integrated Pelco® Coaxitron or Panasonic® Up-the-coax PTZ camera control data
- Model supports both, Pelco® Coaxitron and Panasonic® Up-the-coax PTZ camera control data
- 10 MHz Video Bandwidth
- Integrated Pelco® Coaxitron or Panasonic® Up-the-coax PTZ camera control data is Time Base Corrected
- Meets RS-250C Short Haul Transmission Specifications
- NTSC, PAL, SECAM Compatible
- One Channel of Bi-Directional RS-485 (2-wire) Data
- Wide Optical Dynamic Range: Eliminates Need For Optical Attenuators
- Laser Based Systems for Multimode and Singlemode
- Surface Mount Technology (SMT) for High Reliability and Repeatability
- SpectraSmart™ PC Based Network Management
- SpectraView™ Fault / Setup Firmware
- Local LED Status Indicators to Monitor Critical System Diagnostics for Performance Parameters
- ST, FC Optical Connector
- Hot Swappable Cards
- Laser Back - Biased Photo Detector Circuitry for Stable Optical Output Over Full Temperature Range
- 75 Ohm BNC Video Connector (Gold Center Pin)
- Meets EIA RS-170, RS-343A Formats
- Screw Terminals Type Connectors for Data and Contact Closure

### DESCRIPTION

The FT/FR-1U1J/1M1J-x series fiber optic transmission system that takes advantage of Meridian's new digital encoding technology transmits following signals on permanent bases:

1. One real-time, high quality, 10-bit 10 MHz video
2. One full duplex RS-485 (2 wire)
3. One integrated Pelco® Coaxitron or Panasonic® Up-the-coax PTZ camera control data

Time Base Correction feature aloud achieve distances:

- up to 3Km for multimode
- up to 50Km for singlemode

Both, multimode and singlemode, one fiber versions are available. The functionality of FT/FR-1U1J/1M1J-x series is further enhanced by its compatibility with Meridian's PC based SpectraSmart, Network Management and Remote Diagnostic Software System. SpectraSmart supervises the operating parameters of the transmission system such as status on video levels, sync, carrier detect, voltage, temperature, optical levels, data present etc. See the SpectraSmart brochure for more details.

### CONFIGURATIONS

The FT/FR-1U1J/1M1J-x 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/s, 1 slot desk / wall mount chassis (87VAC-264VAC).

### MARKETS

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

# 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%

## Data

Formats .....	RS-485
Data Rate .....	DC to 250 Kb/s
Bit Error Rate .....	10 <sup>-9</sup> *

## Optical

Fiber Data Rate .....	350 Mb/s
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## Connectors

Video .....	75 Ohm BNC (Gold Center Pin)
Optical .....	ST - MM(default), FC - SM(default)
Power (module) .....	See SR-500 Brochure for details
Data/Audio/Contact closure ...	Screw Terminals Connector

## Power \*\*

Card .....	5 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 .....	Video Present / Overload
1 - Bi-color .....	Sync. Present / Load Absent
2 - Green .....	Data Present

## Physical

Dimensions (Card) .....	20 (W) x 127 (H) x 160 (D) mm (0.8 x 5.0 x 6.3 inch)
Weight (Card) .....	450 gms (16 Oz)
No. of Slots .....	1
Module .....	See SR-500 Brochure

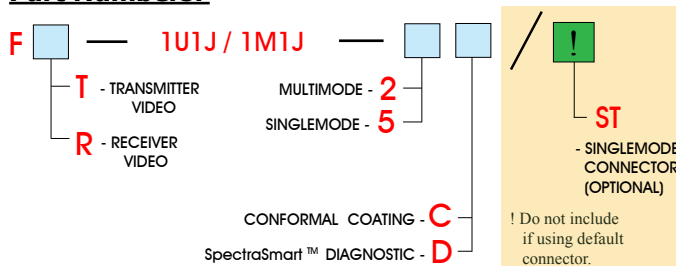
## Enviromental

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

## Quality

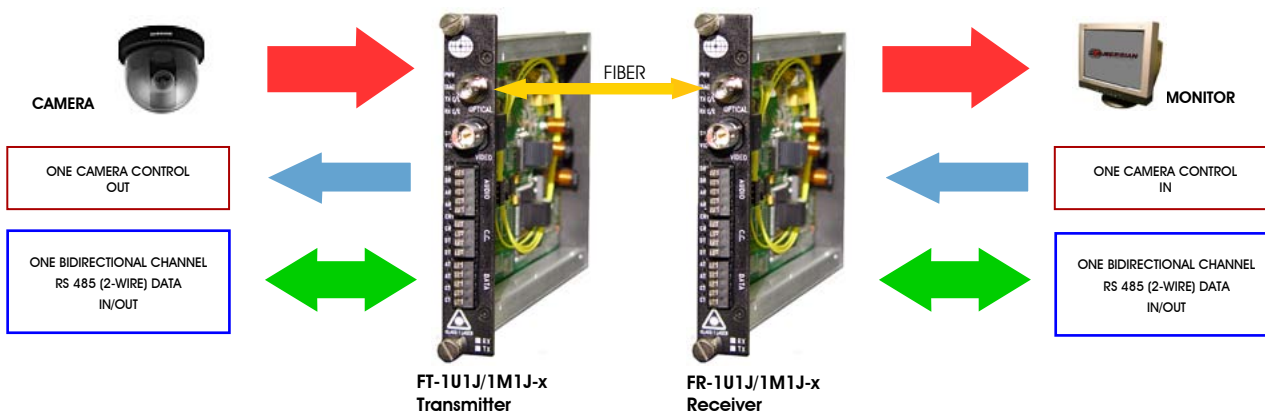
MTBF .....	>170,000 hours @ Ground Fix 35°C per MIL217F
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## Part Numbers:



\* measured @ max. optical budget

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



## OPTICAL:

Meridian optic 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)
2	Multimode (FP Laser) 62.5 / 125	-5	-25	20	1300 / 850	ST	25	3
5	Singlemode (FP Laser) 9 / 125	-5	-25	20	1310 / 1550	ST, FC	25	50

Singlemode DFB lasers available on request.

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