



EXTENDED RANGE CAMERA CONTROL

Digitally Encoded One 10-Bit 10MHz Video Mux
with One Bi-directional Contact Closure,
One Full Duplex Multiprotocol Data
and One Return Channel of Pelco® Coaxitron
or Panasonic® Up-the-coax Control Data

Full Duplex or
Combination of:
RS 232
RS 422
RS-485 (2 OR 4 wire)
BI-PHASE
MANCHESTER



OR



FEATURES

- One Digitally Encoded 10-bit 10 MHz Video Signal with One Integrated Pelco® Coaxitron or Panasonic® Up-the-coax PTZ Camera Control
- Model supports both Pelco® Coaxitron and Panasonic® Up-the-coax PTZ Camera Control
- 10 MHz Video Bandwidth
- Integrated Pelco® Coaxitron or Panasonic® Up-the-coax PTZ Camera Control is Time Base Corrected
- Meets RS-250C Short Haul Transmission Specifications
- NTSC, PAL, SECAM Compatible
- One Channels of Bi-Directional Multi-protocol Data and Contact Closure
- 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-1U1C1G/1P1C1G-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 user selectable, full duplex RS-232, RS-485 (2 or 4 wire), RS-422, Manchester, Bi-Phase or in combination

In addition, following signals are optionable and interchangeable:

3. One integrated Pelco® Coaxitron or Panasonic® Up-the-coax PTZ camera control data
4. One full duplex contact closure channels

Each camera's PTZ can be individually controlled.

Time Base Correction feature aloud achive 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-1U1C1G/1P1C1G-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-1U1C1G/1P1C1G-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-232 w/ full speed handshake, RS-485, RS-422, Manchester or Bi-Phase
Data Rate (RS-232).....	DC to 125 Kb/s
Data Rate (RS-422, RS-485)...	DC to 250 Kb/s
Bit Error Rate	10 ⁻⁹ *

Contact Closure

Rate	10 Hz.(Per Channel)
Contact Rating	0.3A, 30V AC / DC
Contact Bounce Time	5 ms

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

* measured @ max. optical budget

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

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
2 - Green	Contact Closure Present

Physical

Dimensions (Card)	160 mm (6.3") L, 127 mm (5") W 20mm (0.80") W
Weight (Card)	450 gms (16 Oz)
No. of Slots	1
Module	See SR-500 Brochure

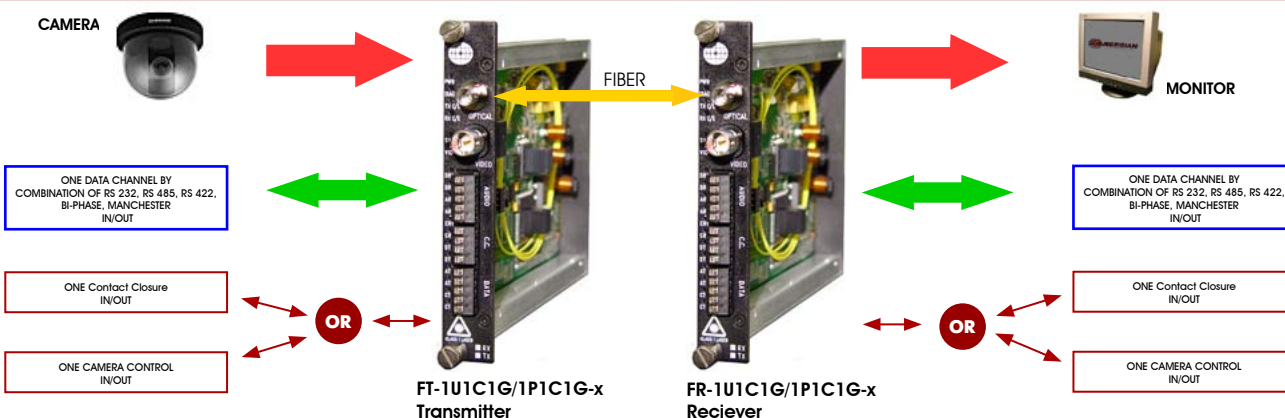
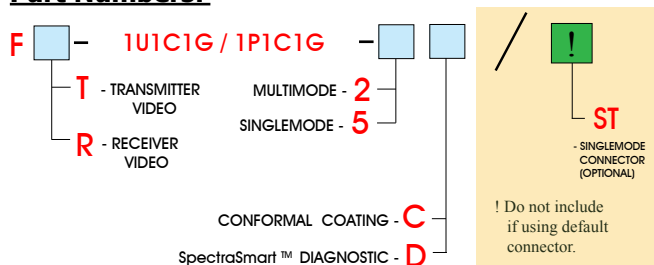
Enviromental

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:



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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