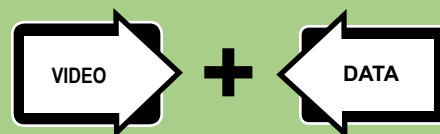


Extended Range Fiber  
 Transmitter/Receiver for  
 Panasonic® Up-the-Coax® Data


**FEATURES:**

- Supports long distances for Panasonic Up-the-Coax video systems - up to the loss budget of the fiber link
- One Digitally Encoded 10-bit 10 MHz Video Signals with one Integrated Up-the-Coax PTZ Camera Control
- Model supports Panasonic Video & Up-the-Coax PTZ Camera Control
- 10 MHz Video Bandwidth
- Meets RS-250C Transmission Specifications
- Wide Optical Dynamic Range: Eliminates Need For Optical Attenuators
- SpectraSmart™ Network Management Compatible
- 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
- Meets NEMA TS1 / TS2 & CALTRANS Specs.
- 75 Ohm BNC Video Connector (Gold Center Pin)
- Meets EIA RS-170, RS-343A Formats

**DESCRIPTION:**

The FT/FR-1U/1P-x Extended range Panasonic Up-the-Coax fiber optic transport system transmits one real-time, high quality, 10-bit 10 MHz video signals with integrated PTZ camera control data for Panasonic telemetry systems. This product extends the operating range out to the limitations of the link loss budget. In the case of singlemode operation, this estimated operating distance can be in excess of 70km. Both, multimode and singlemode, one fiber versions are available. The functionality of the FT/FR-1U/1P-x series is further enhanced by its compatibility with Meridian's PC based SpectraSmart™, Network Monitoring 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-1U/1P-x product is available as rack mount card 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.

**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 .....	Panasonic ***
Bit Error Rate .....	10 <sup>-9</sup> *

### Connectors

Video .....	75 Ohm BNC (Gold Center Pin)
Optical .....	ST - MM (default), FC - SM (default)
Power .....	See SR-500 Brochure for details

### Enviromental

Operating Temperature .....	-40°C to +75°C
Storage Temperature .....	-55°C to +85°C
Relative Humidity .....	0 to 95% Non-condensing

### Optical

Fiber Data Rate .....	350 Mb/s
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### Power \*\*

Card .....	4 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 - Green	Video Sync. Present
1 - Bi-Color	Video Present / Overload
1 - Green	Data 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

### Quality

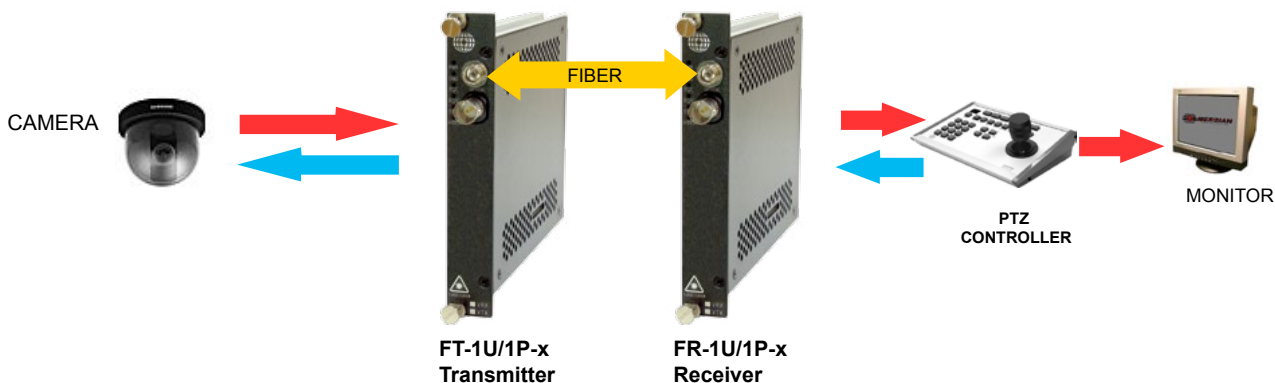
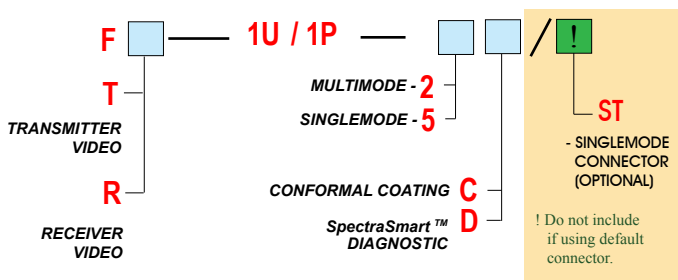
MTBF .....	>220,000 hours @ Ground Fix
	35°C per MIL217F

\* measured @ max. optical budget

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

\*\*\* Panasonic is a registered trademark of Panasonic Corporation

### 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)	Estimated Maximum Transmission Distance (km)
2	Multimode (FP Laser) 62.5 / 125	-5	-30	25	1300 / 850	ST	30	5.7
5	Singlemode (FP Laser) 9 / 125	-5	-30	25	1310 / 1550	ST, FC	30	70

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