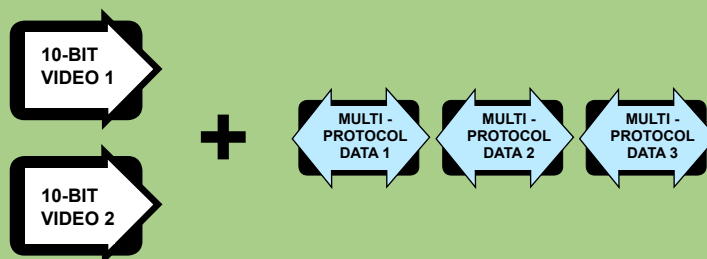


Digitally Encoded Two 10-Bit 7MHz Video Mux with Three Full Duplex Multiprotocol Data



FEATURES

- 10 Bit 7 MHz Video Digital Encoding
- Real Time Video and Data Transmission
- Low Power Consumption
- Meets RS-250C Short Haul Transmission Specifications
- NTSC, PAL, SECAM Compatible
- Full Duplex Multiprotocol Data Channel Supports RS-232, RS-422 and RS-485 (2 & 4-wire)
- Wide Optical Dynamic Range: Eliminates Need For Optical Attenuators
- 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 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
- High Density DB-15 Connector for Data

DESCRIPTION

The FT/FR-2W3G/3G-x series fiber optic transmission system that takes advantage of Meridian's new digital encoding technology transmits following signals:

1. Two real-time, high quality, 10-bit 7MHz video
2. Three channel of user selectable, full duplex RS-232, RS-485 (2 or 4 wire), RS-422, Manchester, Bi-Phase or in combination

System transmits over one single-mode or multimode fiber. The versatility of the FT/FR-2W3G/3G-x system is enhanced by *SpectraView*, an On-Screen Video Diagnostic / Setup firmware system and *SpectraSmart*, an optional PC Based Network Diagnostic System. *SpectraView* monitors the integrity of the video signal and the fiber link. A break in the fiber path will cause a loss of fiber alarm to be displayed on an associated monitor. *SpectraView* is easy to use, always active and eliminates the need for additional test equipment.

If greater diagnostic capability is required, the functionality of FT/FR-2W3G/3G-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-2W3G/3G-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:

10-BIT Video

Format	NTSC, PAL, SECAM
Voltage/Impedance	1 Vp-p, 75 Ohm, 1.5 Vp-p max.
Bandwidth	5 Hz to 7 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

Optical

Fiber Data Rate	900 Mb/s
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Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST, FC
Power (module)	See SR-500 Brochure for details
Data	High Density DB-15 Connector

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
2 - Bi-color	Video Present / Overload
2 - Bi-color	Sync. Present / Load Absent
6 - 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

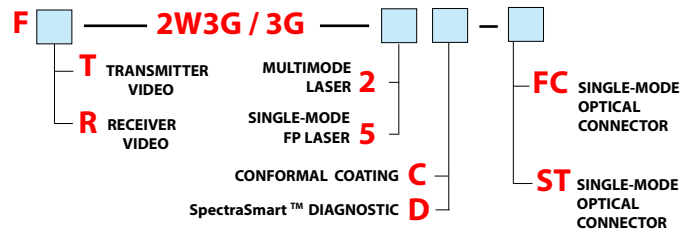
Environmental

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

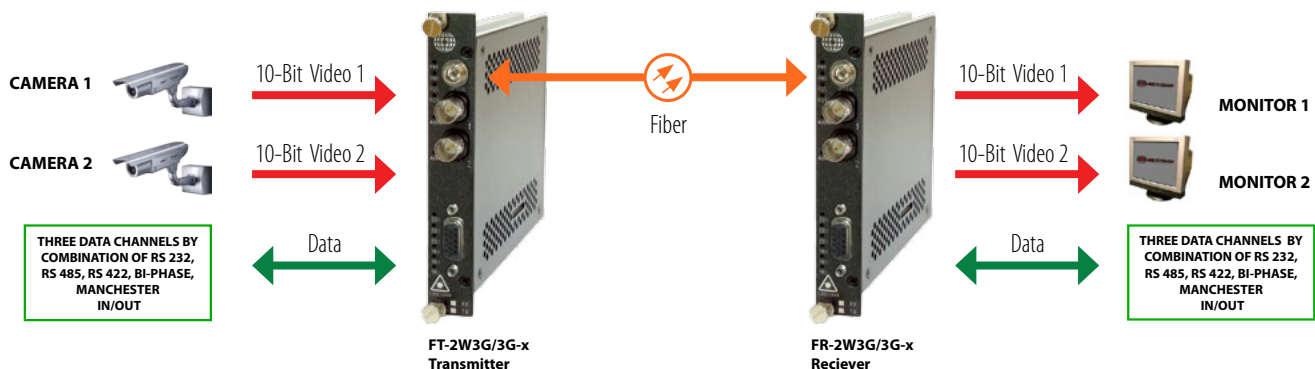
Quality

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



* measured @ max. optical budget
** Due to variations of drivers and diagnostic options, power shown @ max value



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)
2	Multimode (Laser) 62.5 / 125	-5	-25	20	1300 / 850	ST	24	2
5	Singlemode (FP Laser) 9 / 125	-5	-25	20	1310 / 1550	FC, ST	25	55

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