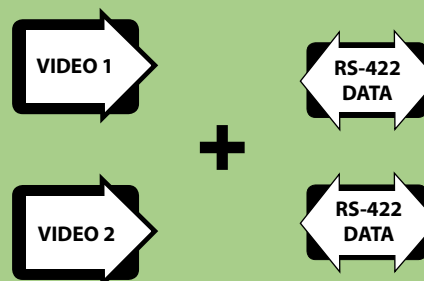


Digitally Encoded Two 10-Bit 7MHz Video Mux with Two Full Duplex RS-422 Data



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
- Bi-directional RS-422 Data
- Wide Optical Dynamic Range: Eliminates Need For Optical Attenuators
- Laser Based Systems for both Multimode and Singlemode modules
- 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-2W2F/2F-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. Two full duplex channels of RS-422 Data

Both, multimode and singlemode, one fiber versions are available. The versatility of the FT/FR-2W2F/2F-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.

SpectraView diagnostic is easy to use, always active and eliminates the need for additional test equipment. *SpectraView* also includes a selectable on-board audio & data test signal generator with built-in local and remote loop-back functions.

If greater diagnostic capability is required, Meridian's PC based SpectraSmart™, Network Management and Remote Diagnostic Software System is available. 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-2W2F/2F-x product 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 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-422, Manchester, Bi-Phase
Data Rate	DC to 250 Kb/s
Bit Error Rate	10 ⁻⁹ *

Optical

Fiber Data Rate	450 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	High Density DB-15 Connector

* measured @ max. optical budget

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

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
4 - 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

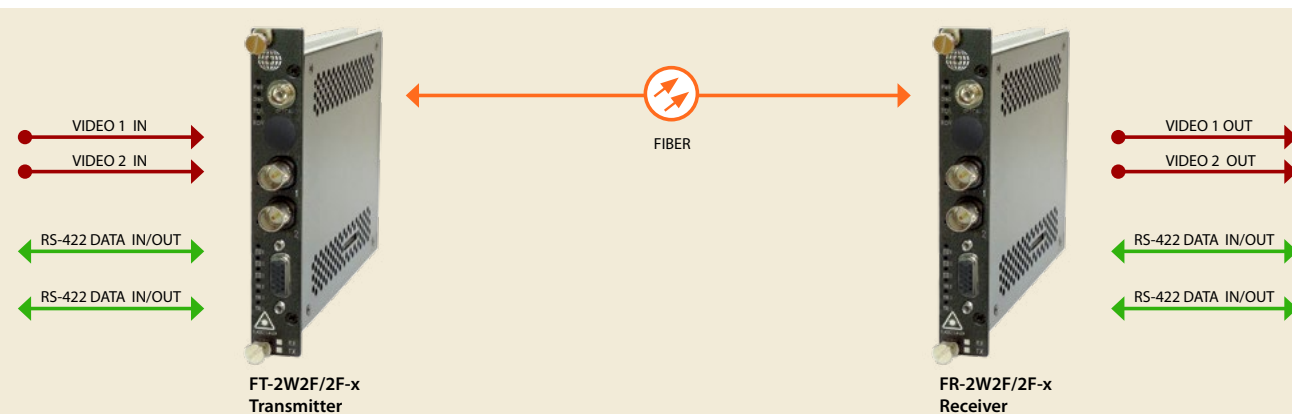
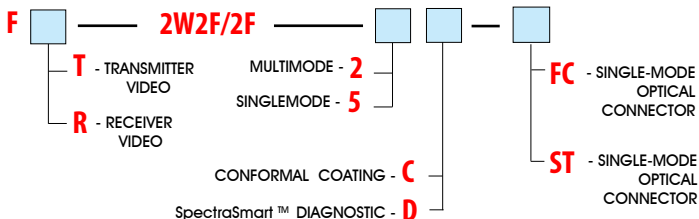
Enviromental

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:



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

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