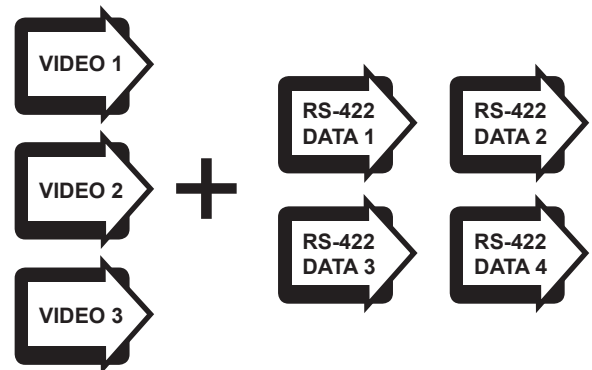


Digital Three Channels 10-Bit S-Video Multiplexer with Four Uni-directional RS-422 Data Channels



FEATURES:

- 10 Bit Video Digital Encoding
- Real Time S-Video & Data Transmission
- 7 MHz Video Bandwidth
- Meets RS-250C Short Haul Transmission Specifications
- NTSC, PAL, SECAM Compatible
- Four RS-422 Uni-Directional data channels
- 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™ 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
- S-Video Connector
- Meets EIA RS-170, RS-343A Formats
- DB 9 Type Connectors for Data

DESCRIPTION:

The DT/DR-3S4F-x series products incorporate digital encoding technology. This fiber optic module transmits three real-time, simplex 10-bit S-Video & and four simplex RS-422, Manchester, Bi-Phase data channels over one optical fiber. Both Multimode and Singlemode fiber versions are available. Meridian's digital product line incorporates plug-in personality signal cards to easily configure a wide variety of module types. The functionality of the DT/DR-3S4F-x series products is enhanced by their compatibility with Meridian's PC based SpectraSmart Network Management & Diagnostic Software system. SpectraSmart supervises the operating parameters of the transmission system such as the status on video levels, sync, digital carrier detect, voltages, temperatures, optical levels etc. See SpectraSmart brochure for further details.

CONFIGURATIONS:

The DT/DR-3S4F-x product family is available as rack mount cards and modules that can be installed in either Meridian's desk chassis or in 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-1000/s, 2 slot desk / wall mount chassis (87 VAC- 264VAC)

MARKETS:

- ✓ Intelligent Transportation Systems (ITS)
- ✓ Security and Surveillance
- ✓ Access Control

SPECIFICATIONS:

Video

Format	NTSC, PAL, SECAM
Voltage/Impedance	1 Vp-p, 75 Ohm, 1.5 Vp-p max.
Bandwidth	5 Hz to 6.8 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 or Bi-Phase
Data Rate	DC to 125 Kb/s
Bit Error Rate	10 ⁻⁹ *

Optical

Fiber Data Rate	500 Mb/s
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Connectors

Video	S-Video
Optical	ST, FC
Power (module)	See SR-1000 Brochure for details
Data	DB9 Female

Power **

Card	8 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	RX Optical Signal -Present/Absent
3 - Bi-color	Video Present / Overload
3 - Green	Video Sync. Present
4 - Green	Data Present

Physical

Dimensions (Card)	160 mm (6.3") L, 127 mm (5") H 44mm (0.80")W
Weight (Card)	450 gms (16 Oz)
No. of Slots	2

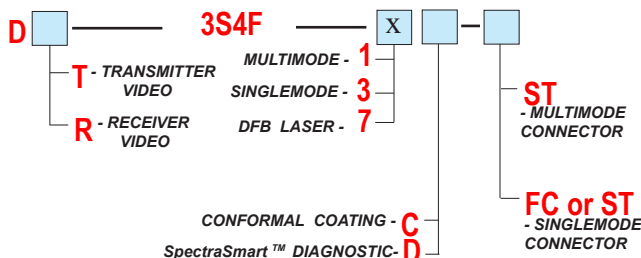
Environmental

Operating Temperature	-40°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:



CAMERA 1

CAMERA 2

CAMERA 3

4 SIMPLEX
CHANNELS OF
RS-422 DATA
IN



DT-3S4F-x
Transmitter



DR-3S4F-x
Receiver



MONITOR

MONITOR

MONITOR

4 SIMPLEX
CHANNELS OF
RS-422 DATA
OUT

OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
Multimode (FP Laser) 62.5 / 125	-3	-24	21	1300	ST	24
Singlemode (FP Laser) 9 / 125	-3	-24	21	1310	ST, FC	24
Singlemode (DFB Laser) 9 / 125	+3	-24	27	1550	ST, FC	24

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