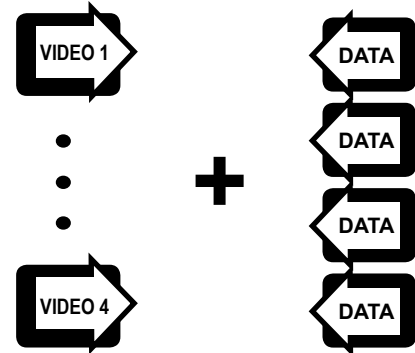


## Digital 4 Channels 8-Bit or 10-Bit Video Multiplexer with 4 Channels Return RS-422, Manchester or Bi-Phase



### FEATURES:

- 8-Bit or 10-Bit Video Digital Encoding
- 4 Real-Time Video Signals with 4 Channels of Return Data
- RS-422, Manchester or Bi-Phase
- 7 MHz Video Bandwidth
- Meets RS-250C Transmission Specifications
- NTSC, PAL, SECAM Compatible
- Wide Optical Dynamic Range: Eliminates Need For Optical Attenuators
- Laser Based Systems for Multimode and Single-mode
- 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
- Meets NEMA TS1 / TS2 & CALTRANS Specs.
- 75 Ohm BNC Video Connector (Gold Center Pin)
- Meets EIA RS-170, RS-343A Formats
- DB 9 Type Connector for Data
- DC to 1 Mb/s Data Rate

### DESCRIPTION:

The DT/DR-4V(W)/4F product are reliable, cost effective, state-of-the-art, one fiber, Bi-directional Digital Video and Data transmission system. This fiber optic system transmits four channels of real-time 8-bit or 10-bit Video with a return four channels of RS-422, Manchester or Bi-Phase data over one Singlemode or Multimode fiber. The DT/DR-4V(W)/4F accepts PAL, SECAM, or NTSC formats. The functionality of DT/DR-4V(W)/4F system are further enhanced by their 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 activity etc.. See the SpectraSmart brochure for more details.

### CONFIGURATIONS:

The DT/DR-4V(W)/4F system are available as rack mount cards and modules that can be installed in all of 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-1000/s, 2 slot desk / wall mount chassis (87VAC-264VAC)

### MARKETS:

- ✓ Security and Surveillance
- ✓ Intelligent Transportation System (ITS)
- ✓ Access Control Systems
- ✓ Campus Lecture Networks
- ✓ Pro. Video / Audio

# 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 for 8-Bit Video	>60 dB (weighted)*
SNR for 10-Bit Video	>67 dB (weighted)*
Return Loss	>30 dB
Field Tilt	< 0.5%

## Indicators (LEDs)

1 - Green	Power On
1 - Bi-color	TX Carrier/ Laser Over Current
1 - Bi-color	RX Carrier - Present / Error
1 - Bi-color	RX optical signal - Present / Absent
4 - Bi-color	Video Present / Overload
4 - Green	Sync. Present
4 - Green	Data Present

## Data

Formats	RS-422, Manchester, Bi-Phase
Rate	DC to 1Mb/s
Bit Error Rate	10 <sup>-9</sup> *

## Physical

Dimensions:	
Card	160 mm (6.3") L, 100 mm (4") W 44 mm (1.7") H
Weight:	
Card	450 gms (16 Oz)
No. of Slots	2

## Optical

Fiber Data Rate	500 Mb/s
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## Environmental

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

## Connectors

Video.	75 Ohm BNC (Gold Center Pin)
Optical	ST, FC
Power	See SR-1000 Brochure for details
Data	DB9 Female

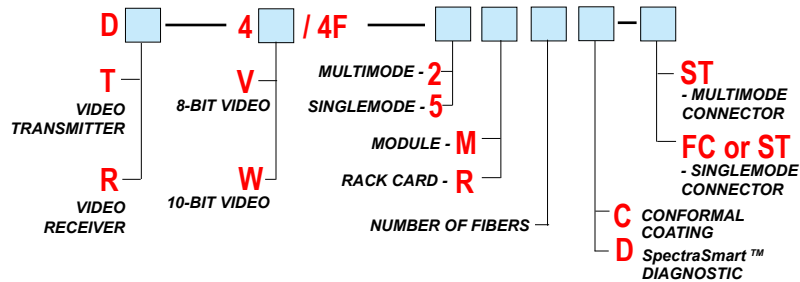
## Quality

MTBF	>240,000 hours @ Ground Fix 35°C per MIL217F
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## Power \*\*

Card	9 Watts
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### Part Numbers:



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



## 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	-23	20	1300 / 850	ST	23
Singlemode (FP Laser) 9 / 125	-3	-23	20	1310 / 1550	ST, FC	23
Singlemode (DFB Laser) 9 / 125	+3	-23	26	1310 / 1550	ST, FC	23

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