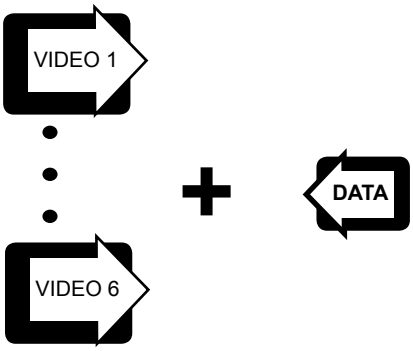
MERIDIAN TECHNOLOGIES

DT/DR-6V-1F

DigiFlex™

Digital 6 Channel Video Multiplexer with Return Manchester, RS-422 or Bi-Phase



FEATURES:

- Standard 8 Bit Video Digital Encoding
- Transmits 6 Real-Time Video Signals w/ 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 Singlemode
- Surface Mount Technology (SMT) for High Reliability and Repeatability
- SpectraSmartTM 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-6V/1F series is a reliable, cost effective, state-of-the–art, one fiber Bi-Directional Digital Video and Data transmission system. This fiber optic system transmits six channels of real-time 8 bit video with a return channel of RS 422, Manchester or Bi-Phase data over one Singlemode or Multimode fiber. The DT/DR-6V/1F accepts PAL, SECAM, or NTSC formats. The functionality of DT/DR-6V /1F series 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, etc.. See the SpectraSmart brochure for more details.

Note: 10 bit version available. See DV-6W/1F series.

CONFIGURATIONS:

The DT/DR-6V/1F product family is available as rack mount cards and modules that can be installed in all of Meridian's card chassis, desk chaises 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 (87V/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	<0.3o
SNR	>60 dB (weighted)*
Return Loss	>30 dB
Field Tilt	<0.5%

Data

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

Optical

Fiber Data Rate	1 Gb/s

Connectors

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

Power **

Card	8 Watts

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

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

Enviromental

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

Quality

MTBF	>180,000 hours @ Ground Fix 35ºC per MIL217F

* *measured @ max. optical budget*

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

Part Numbers:

DT-6V / 1F-2. . . . . Transmitter, 850nm/ 1300nm, MM, Laser
DT-6V / 1F-5. . . . . Transmitter, 1310nm/1550nm,SM, Laser
DT-6V / 1F-8. . . . . Transmitter, 1310nm/1550nm,SM, DFB Laser

DR-6V / 1F-2. . . . . Receiver, 1300nm/ 850nm, MM, Laser
DR-6V / 1F-5. . . . . Receiver, 1550nm/1310nm,SM, Laser
DR-6V / 1F-8. . . . . Receiver, 1550nm/1310nm,SM, DFB Laser

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	-22	19	1300 / 850	ST	22
Singlemode (FP Laser) 9 / 125	-3	-22	19	1310 / 1550	ST, FC	22
Singlemode (DFB Laser) 9 / 125	+3	-22	25	1310 / 1550	ST , FC	22

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