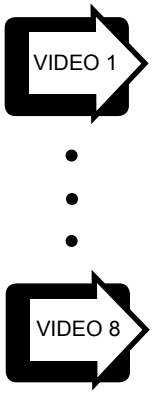
MERIDIAN TECHNOLOGIES

DT/DR-8V

DigiFlex™

Digital 8 Channel Video Multiplexer



FEATURES:

- Standard 8 Bit Video Digital Encoding
- Transmits 8 Real-Time Video Signals Over One Optical Fiber
- 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 (optional)
- Local LED Status Indicators to Monitor Critical System Diagnostics
- STTM, 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

DESCRIPTION:

The DT/DR-8V series is a reliable, cost effective, state-of-the–art, one fiber one wavelength Digital Video transmission system. This fiber optic system transmits eight channels of real-time 8 bit Video over one Singlemode or Multimode fiber. The DT/DR-8V accepts PAL, SECAM, or NTSC formats. The functionality of DT/DR-8V 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., and external equipment which are attached to the Meridian equipment.See the SpectraSmartTM brochure for more details

NOTE: *A 10 bit system is also available, see DT-8W series.*

CONFIGURATIONS:

The DT/DR-8V product family is available as rack mount cards that can be installed in all of Meridian's card chassis. This system can be configured in either star (module to rack) or trunking (rack to rack) configurations. These products can be easily converted to a Standalone module with the SR-1000/S - 2 Slot Chassis. See SR-1000 data sheet for further details.

MARKETS:

√ Security and Surveillance
√ Intelligent Transportation System (ITS)
√ 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%

Optical

Fiber Data Rate	500 Mb/s

Connectors

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

Power **

Card	12 Watts

Quality

MTBF	>120,000 hours @ Ground Fix 35ºC per MIL217F

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
8 - Green	Sync. Present
8 - Bi-color	Video Present / Overload

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

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

Model No.

DT-8V-0. . . . . Transmitter, 850nm, MM, Laser
DT-8V-1. . . . . Transmitter, 1300nm, MM, Laser
DT-8V-3. . . . . Transmitter, 1310nm, SM, Laser
DT-8V-4. . . . . Transmitter, 1550nm, SM, Laser
DT-8V-6. . . . . Transmitter, 1310nm, SM, High output Laser
DT-8V-7. . . . . Transmitter, 1550nm, SM, DFB Laser

DR-8V-0. . . . . Receiver, 850nm, MM
DR-8V-1. . . . . Receiver,1300nm, MM
DR-8V-3. . . . . Receiver, 1310nm, SM
DR-8V-4. . . . . Receiver, 1550nm, SM

For SrectraSmart Diagnostics option add "D" suffix. For example : DR - 8V -1D
Must be used with SpectraSmart compatible subrack.

DT-8V Transmitter **DR-8V Receiver**

OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
Multimode (Laser) 62.5 / 125	-3	-22	19	850	ST	22
Multimode (Laser) 62.5 / 125	-3	-22	19	1300	ST	22
Singlemode (Laser) 9 / 125	-3	-22	19	1310	ST, FC	22
Singlemode (Laser) 9 / 125	+2	-22	24	1310 DFB	ST , FC	22
Singlemode (Laser) 9 / 125	+3	-22	25	1550 DFB	ST , FC	22

Meridian Technologies Inc.
700 Elmont Road. •Elmont, NY 11003 • 516. 285. 1000 • FAX 516. 285. 6300 • E-mail sales@meridian-tech.com
Visit our web side: www.meridian-tech.com or www.meridian-tech.tv

ver 12/05