# DT/DR-xV DT/DR-xW DigiFlex<sup>TM</sup>

Digitally-Encoded Video Multiplexer with 5 to 8 Channels of 8 or 10-bit Unidirectional Video





#### FEATURES:

- 8 and 10-Bit Video Digital Encoding available
- 2-slot module/rack card design
- Transmits up to 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
- 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:**

As part of Meridian's DigiFlex product portfolio, the DT/DR-xV and DT/DR-xW series products can be configured to transmit and receive from 5 to 8 one-way video channels. This fiber optic system transmits from five to eight channels of real-time, 8 or 10-bit digitall-encoded Video over one Singlemode or Multimode fiber. The DT/DR-xV and DT/DR-xW modules accept PAL, SECAM, or NTSC formats. The functionality of DT/DRxV and DT/DR-xW series products 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 SpectraSmart<sup>™</sup> brochure for more details.

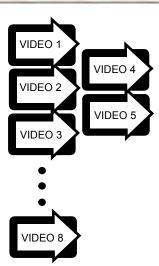
NOTES: See ST/SR-xV series product for 1-4 video channel transmission

#### **CONFIGURATIONS:**

The DT/DR-xV and DT/DR-xW product families are available as 2-slot 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 (87-264VAC). See SR-1000 brochure for further details.

#### MARKETS:

- √ Security and Surveillance
- √ Video Transport Systems
- √ Intelligent Transportation System (ITS)



# **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
Differential Gain	<0.6%
Differential Phase	<0.3°
SNR	>60 dB (weighted)* (8-bit)
	>67 dB (weighted)* (10-bit)
Return Loss	_>30 dB
Field Tilt	<0.5%

# **Optical**

Fiber Data Rate	1.25Gb/s (max for		
	8, 10-bit channels)		

# **Connectors**

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

## Quality

MTBF

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>100,000 hours @ Ground Fix
35°C per MIL217F
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### Power \*\*



# 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
x - Green	Sync. Present(one per video channel)
x - Bi-color	Video Present / Overload
	(one per video channel)

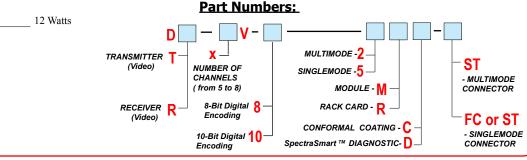
## **Physical**

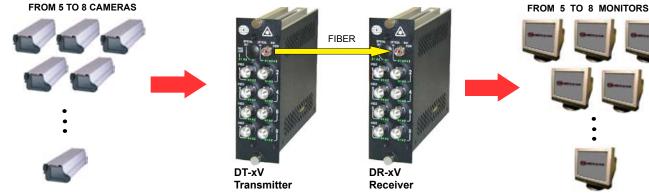
Dimensions:	
Card	160 mm (6.3") L, 100 mm (4") W
	44 mm (1.7") H
Weight:	
Card	450 gms (16 Oz)
No. of Slots	2

## Enviromental

Operating Temperature	-40°C to +74°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

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 (Laser) 62.5 / 125	-3	-22	19	850	ST	22
62.5 / 125 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	+3	-22	25	1310	ST , FC	22
Singlemode (Laser) 9 / 125	+3	-22	25	1550 DFB	ST , FC	22
Singlemode (DFB Laser APD Receiver 9/125	) +3	-30	33	1310 or 1550	ST, FC	27