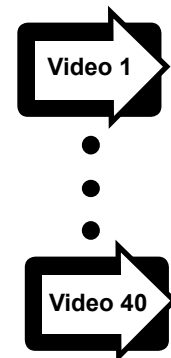# 40 Channel Video Multiplexer and De-Multiplexer Systems

Video 1

Video 40

FEATURES:

- 40 Independent Real Time Digitally Encoded Video Signals on a Single Fiber

- 1470 - 1610 nm Wavelenghts Supported.

- 7 MHz Video Bandwidth

- Meets RS-250C Short Medium and Long Haul Transmission Specifications

- NTSC, PAL, SECAM Compatible

- Wide Optical Dynamic Range: Eliminates Need For Optical   Attenuators

- Surface Mount Technology (SMT) for High Reliability and Repeatability

- *SpectraSmart*™ Network ManagementCompatible

- Local LED Status Indicators to Monitor Critical System Diagnostics for Perrformance Parameters

- ST, FC Optical Connector

- Laser Back - Biased Photo Detector Circuitry For Stable Optical Output Over Full Temperature Range.

- 75 Ohm BNC Video Connector (Gold Center Pin)

- Meets EIA RS-170, RS-343A Formats

DESCRIPTION:

The Series DT/DR-40V Video Transport System is capable of transmitting up to 40 independent real-time video signals over one, singlemode fiber. The DT/DR-40V utilizes CWDM (Coarse Wavelength Division Multiplexing) technology and can manage up to 8 independent standard ITU wavelengths. Each of these wavelengths can transmit 8 real-time video signals over a distance of up to approximately 100km. In addition to transporting real-time video signals, the system can also support supplemental data signals for camera PTZ and access control   requirements. The DT/DR-40V series systems requires only one, singlemode fiber and can be outfitted with either ST or FC optical connectors. For special system requirements, please call Meridian's application engineers to configure a system to meet your specific needs. The DV series video transport systems are completely compatible with Meridian's SpectraSmart Network Management System.

CONFIGURATIONS:

The DT/DR-40V Series   product's are available as rack mount units that are suitable for mounting in the following Meridian card chassis: SR-2001/AS1 - 18 Slot Rack with 1 Power Supply, SR-2001/AR1 - 14 Slot Rack with 2 Redundant Power Supply or SR-2000/S1-PC - the Meridian Spectra Smart PC Based Diagnostic Rack for Remote Network Management.See Subrack Spec. Sheets for further details.

MARKETS:

- √ Security and surveillance - Campuses / Cluster Video
- √ Intelligent transportation systems (ITS)
- √ Video Transports for City Police monitoring networks
- √ Audio Banks - concerts/ Auditoriums
- √ Access Control - Data Banks

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%
No. of Video Channels	40

Connectors

Video	75 OHM BNC (Gold Center Pin)
Optical	ST, FC
Power	IEC (3 - Prong)

Quality

MTBF	>100,000 hours @ Ground Fix 35oC per MIL217F

Power

System	87VAC ~ 264VAC

Indicators (LEDs)

6 - Green	Power On
5 - Bi-color	TX Carrier/ Laser Over Current
5 - Bi-color	RX Carrier - Present / Error
5 - Bi-color	RX optical signal - Present / Absent
40 - Red	Sync. Present
40 - Green	Video Present / Overload

Physical

Dimensions	19" L X 11" D, 5.25" H (483 mm,X 279 mm X 133mm)
Weight	<20 Lbs / 9.1 Kg
No. of Rack Slots	12

Standard Systems comes Packaged in 19" rack, 3U High
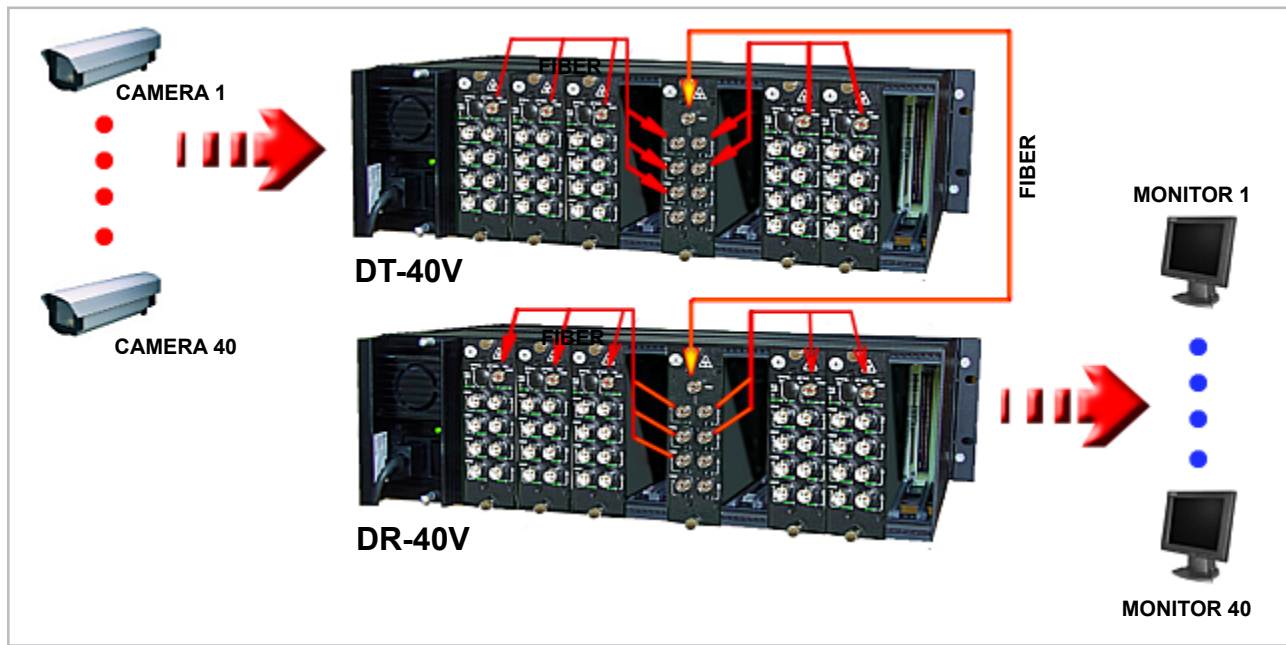
Enviromental

Operating Temperature	-0 oC to +70oC
Storage Temperature.	-55oC to +85oC
Relative Humidity	0 to 95% Non-condensing

Model Numbers

DT-40V-5 . . . . 40 Ch. CWDM Transmitter, SM   **DR-40V-5 . . . . 40 Ch, CWDM Receiver, SM**

NOTE: **1)** CWDM - MUX / DE-MUX are 2 Slot wide each. **2)** Specify FC or ST at the time of the order, Default connector on the System is FC.

CAMERA 1
CAMERA 40
FIBER
DT-40V
DR-40V
FIBER
FIBER
MONITOR 1
MONITOR 40

OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
Singlemode (Laser) 9 / 125	0	-28	28	1470 - 1610	ST / FC	28

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