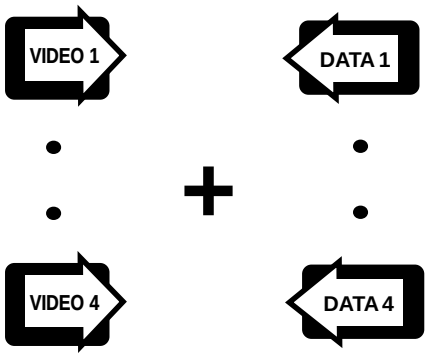
MERIDIAN TECHNOLOGIES

SERIES DV-4V / 4Q

Digital 4 Channel Video Multiplexer with 4 Return Channels of Panasonic Control Data (SX-150)



FEATURES:

- Four Digitally Encoded 8 bit Video Signals with Four Integrated "up-the-coax" PTZ Camera Controls
- Designed specifically for the SX-150 contoller
- Model supports Panasonic Video, PTZ and VD2 pulse
- 7 MHz Video Bandwidth
- Meets RS-250C Transmission Specifications
- 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
- *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

MARKETS:

Security and Surveillance
Access Control Systems
Campus Lecture Networks

DESCRIPTION:

The DV-4V/4Q series fiber optic transmission system takes advantage of Meridian's new digital encoding technology to transmit four real-time, high quality, 8 bit video signals with integrated up-to-coax PTZ camera control data for Panasonic telemetry systems. This module is designed specifically for the Panasonic SX-150 controller. Each camera's PTZ can be individually controlled. Both, multi-mode and singlemode, one fiber versions are available. The functionality of DV-4V/4Q 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, data present, data sync lock (VD2) etc. See the SpectraSmart brochure for more details.

Note: *1. 10 bit version available. See DV-4W/4Q series.*
2. Due to controller protocol limitations, distance on multimode or singlemode systems limited to 2 Km

CONFIGURATIONS:

The DV-4V/4Q product family is available as rack mount cards and modules that can be installed in 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)

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	<0.3º
SNR	>60 dB (weighted)*
Return Loss	>30 dB
Field Tilt	<0.5% max.

Data

Formats	Panasonic
Bit Error Rate	10^{-9}*

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

Power **

Card	10 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
4 - Green	Data Present
4 - Green	Data Sync Lock (VD2)

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 +74ºC
Storage Temperature	-55ºC to +85ºC
Relative Humidity	0 to 95% Non-condensing

Quality

MTBF	>200,000 hours @ Ground Fix 35ºC per MIL217F

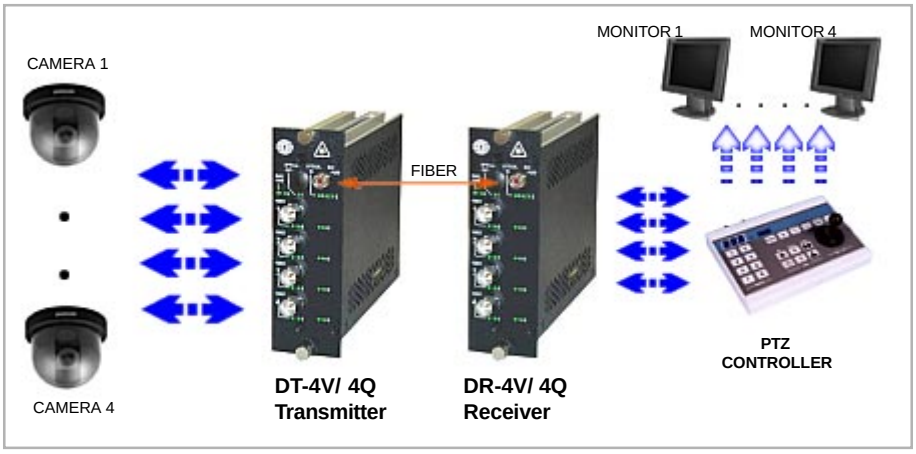
* *measured @ max. optical budget*

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

Part Numbers:

DT-4V / 4Q-2. . . . . Transmitter, 850nm/ 1300nm, MM, Laser
DT-4V / 4Q-5. . . . . Transmitter, 1310nm/1550nm,SM, Laser
DT-4V / 4Q-8. . . . . Transmitter, 1310nm/1550nm,SM, DFB Laser

DR-4V / 4Q-2. . . . . Receiver, 1300nm/ 850nm, MM, Laser
DR-4V / 4Q-5. . . . . Receiver, 1550nm/1310nm,SM, Laser
DR-4V / 4Q-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	-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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