

Digitally-Encoded 32-Channel Video System



FEATURES:

- Standard 8 Bit Video Digital Encoding
- Transmits 32 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 System 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
- ST Optical Connector
- Hot Swappable Cards
- Laser Back - Biased Photo Detector Circuitry for Stable Optical Output Over Full Temperature Range.
- 75 Ohm BNC Video Connector (Gold Center Pin)

DESCRIPTION:

The DT/DR-32V-31/37 series product incorporate new digital encoding technology. This fiber optic module transmits 32 channels of uncompressed 8-bit NTSC, PAL or SECAM video signals over one Multimode fiber using CWDM technology. Meridian's digital product line incorporates plug-in personality circuit cards. The functionality of the DT/DR-32V-31/37 series are further enhanced by their compatibility with Meridian's PC based SpectraSmart Network Management & Diagnostic Software System. SpectraSmart supervises the operating parameters of the transmission system such as the status on video levels, sync, digital carrier detect, voltages, temperatures, optical levels etc. See SpectraSmart brochure for further details.

Tx side:

DT-8V-31 (8-ch video Tx @ 1310nm)
 DT-8V-33 (8-ch video Tx @ 1330nm)
 DT-8V-35 (8-ch video Tx @ 1350nm)
 DT-8V-37 (8-ch video Tx @ 1370nm)
 CWDM-4 (4-ch CWDM mux/demux, 1310 & 1370nm)

Rx side:

DR-8V-3 (8-ch video Rx, standard) – qty 4)
 CWDM-4 (4-ch CWDM mux/demux, 1310 & 1370nm)

CONFIGURATIONS:

The DT/DR-32V-31/37 product family is available as rack mount cards suitable for mounting in Meridian card chassis and utilizes 9 card slots.

MARKETS:

- ✓ Security and surveillance
- ✓ Intelligent transportation systems (ITS)
- ✓ Pro video

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% (10-90%)
Differential Phase	<0.3°
SNR	>60 dB weighted*
Return Loss	>30 dB
Field Tilt	<0.5%

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST, FC
Power	IEC (3- Prong) (see SR-2001 chassis)

Power**

System	24 W
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Quality

MTBF	>100,000 hours @ Ground Fix 35°C per MIL217F
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Optical

Bandwidth	1 GB / s (per wavelength)
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Model No.

DT-32V-31/37. . . . Transmitter, 1310 + 1370nm, MM, DFB Laser
DR-16V-3. Receiver, 1310 + 1370nm, MM

Indicators (LEDs)

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

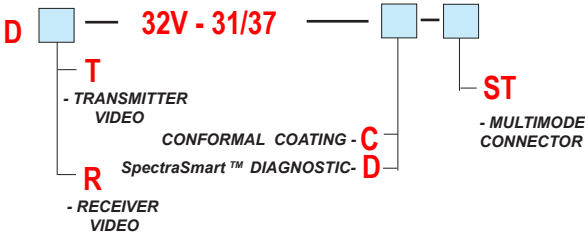
Physical

Dimensions:	
System	483 mm (19")L x 322 mm (12.67")D x 133 mm (5.22 ")H
Weight:	8 Kg. (18 lbs.)
No. of slots occupied	9

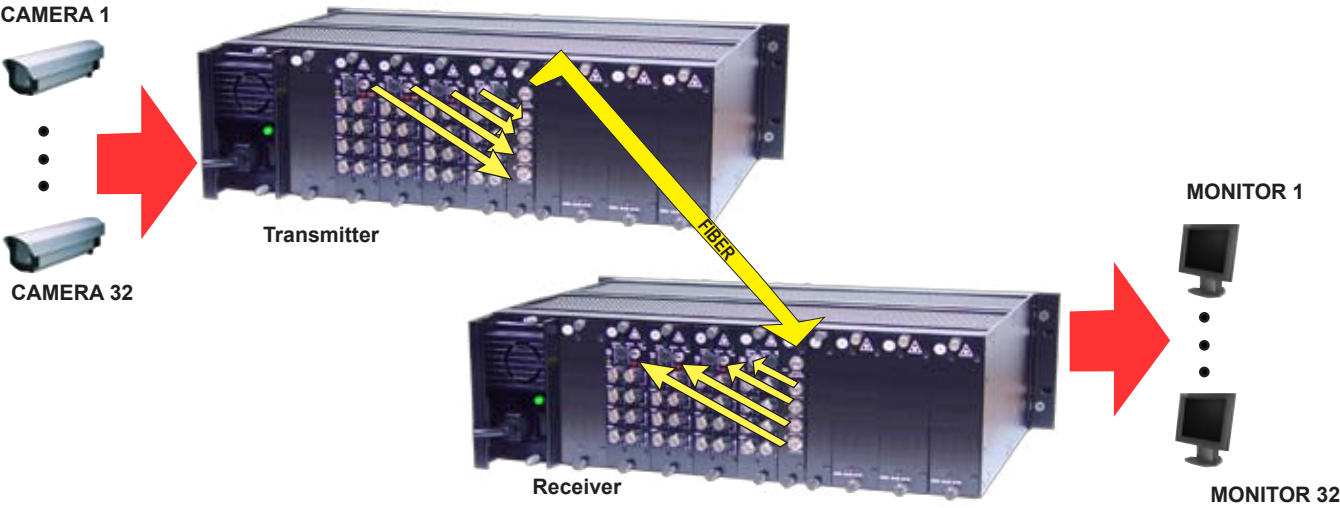
Enviromental

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

Part Numbers:



* 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 (DFB Laser) 9 / 125	+3	-20	23	1300	ST	22