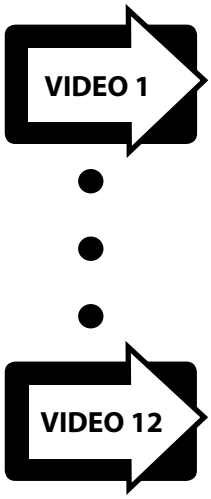
MERIDIAN TECHNOLOGIES

8-Bit Digitally-Encoded 12-Channel Video Multiplexing System



FEATURES:

- Standard 8 Bit Video Digital Encoding
- Transmits 12 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, 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)
- Class 1 Laser Safety Rating

DESCRIPTION:

The DT/DR-12V-x series product incorporate new digital encoding technology. This fiber optic module transmits 12 channels of uncompressed 8-bit NTSC , PAL or SECAM video signals over one Singlemode or Multimode fiber. Meridian's digital product line incorporates plug-in personality circuit cards. The functionality of the DT/DR-12V-x series is further enhanced by its 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.

Note: *10 bit version available. See FT/FR-12W-x series.*

CONFIGURATIONS:

The DT/DR-12V-x product family is available as rack mount cards suitable for mounting in Meridian card chassis and utilizes 5 card slots. These products can be easily converted to a Standalone module with the SR-1500/S, Desk / Wall mount 7-slot chassis (87- 264 VAC). See SR-1500 brochure for further details.

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
Differential Gain	<0.6%
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 - MM(default), FC - SM(default)
Power	IEC (3- Prong)

Power **

Card	24 W

Quality

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

Optical

Bandwidth	1 Gb / s

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
12- Red	Sync. Present
12 - Green	Video Present / Overload

Physical

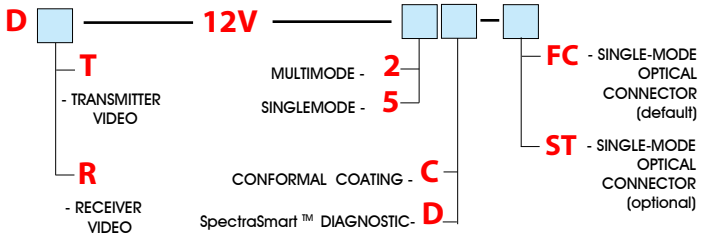
Dimensions	
Cards	160 mm (6.3") L, 100 mm (4") H 105 mm (4.2") W
Weight	
Cards	1600gms. (56 oz.)
No. of Slots	4

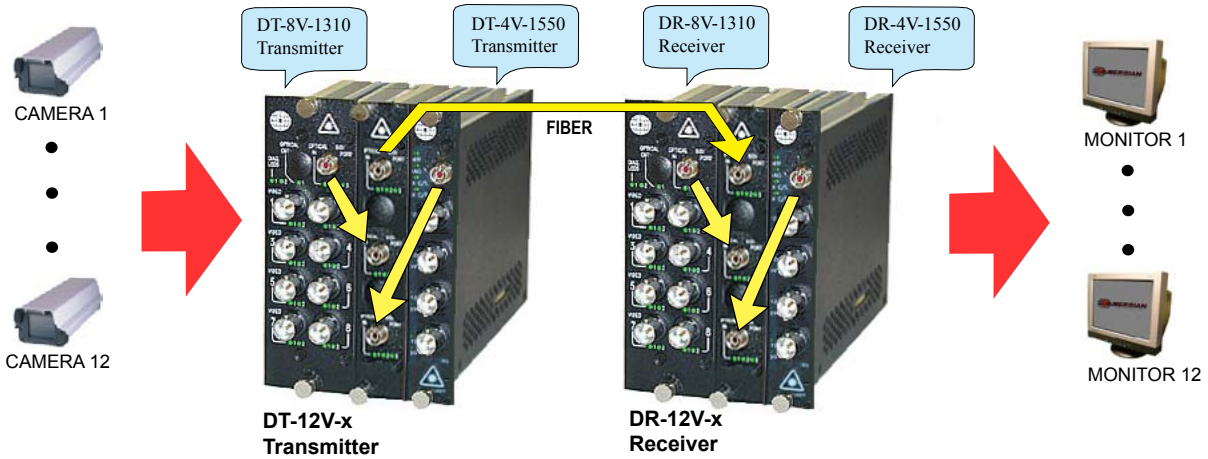
Environmental

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*

Part Numbers:





OPTICAL:

* Meridian Optical Code	Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)	Max Distance (Km)
2	Multimode (FP Laser) 62.5 / 125	-4	-22	18	850+1300	ST	22	1
5	Singlemode (FP Laser) 9 / 125	-4	-22	18	1310+1550	ST, FC	22	50
18	Singlemode (DFB Laser) 9 / 125	+2	-22	24	1310+1550	ST, FC	22	65

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