Digital One Channel Component Video

VIDEO ▷

FEATURES:

- 24-Bit Video Digital Encoding

- 1 Channel of Real-Time Component Video

- 10 MHz Video Bandwidth

- Meets RS-250C Short Haul 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

- 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

- 75 Ohm BNC Video Connectors (Gold Center Pin)

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

DESCRIPTION:

The DT/DR-1Y-x system incorporates digital encoding technology. This fiber optic module   transmits one real-time, simplex 24-bit 10MHz Component Video over one optical fiber. Both Multimode and Singlemode fiber versions are available. Meridian's digital product line incorporates plug-in personality signal cards to easily configure a wide variety of module types. The functionality of the   DT/DR-1Y-x   series products is 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.

CONFIGURATIONS:

The DT/DR -1Y-x product is available as rack mount cards and   modules   that can   be installed in either Meridian's desk chaises or in 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 (87 VAC- 264VAC)

MARKETS:

√   Security and Surveillance
√   Access Control

SPECIFICATIONS:

Video

Format	NTSC, PAL, SECAM
Voltage/Impedance	1 Vp-p, 75 Ohm, 1.5 Vp-p max.
Bandwidth	5 Hz to 10 MHz @ -3 dB
Differential Gain	<0.6%
Differential Phase	<0.3º
SNR	>60 dB
Return Loss	>30 dB
Field Tilt	< 0.5%
Resolution Range	640x480x60Hz
Resolution Support	480p, 480i
Processing	24-Bit, no compression or scaling

Optical

Fiber Data Rate	1 Gb/s

Connectors

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

Power **

Card	8 Watts

* measured @ max. optical budget
** Due to variations of drivers and diagnostic options, power shown @ max value

Indicators (LEDs)

|	
1 - Green	Power On
1 - Bi-color	TX Carrier/ Laser Over Current
1 - Bi-color	RX Carrier - Present / Error
1 - Green	RX Optical Signal -Present/Absent
3 - Bi-color	Video Present / Overload
3 - Green	Video Sync. Present

Physical

Dimensions (Card)	160 mm (6.3") L, 127 mm (5") H 44mm (0.80")W
Weight (Card)	450 gms (16 Oz)
No. of Slots	2

Enviromental

Operating Temperature	-34ºC to +74ºC
Storage Temperature	-55ºC to +85ºC
Relative Humidity	0 to 95% Non-condensing

Quality

MTBF	>170,000 hours @ Ground Fix 35ºC per MIL217F

Part Numbers:

D ☐ — 1Y — X ☐ / !

- T - TRANSMITTER VIDEO
- R - RECEIVER VIDEO
- MULTIMODE - 1
- SINGLEMODE - 3
- SINGLEMODE - 9 DFB LASER
- CONFORMAL COATING - C
- SpectraSmart ™ DIAGNOSTIC- D
- ST - SINGLEMODE CONNECTOR (OPTIONAL)

! Do not include if using default connector.

CAMERA → DT-1Y-x Transmitter → FIBER → DR-1Y-x Receiver → MONITOR
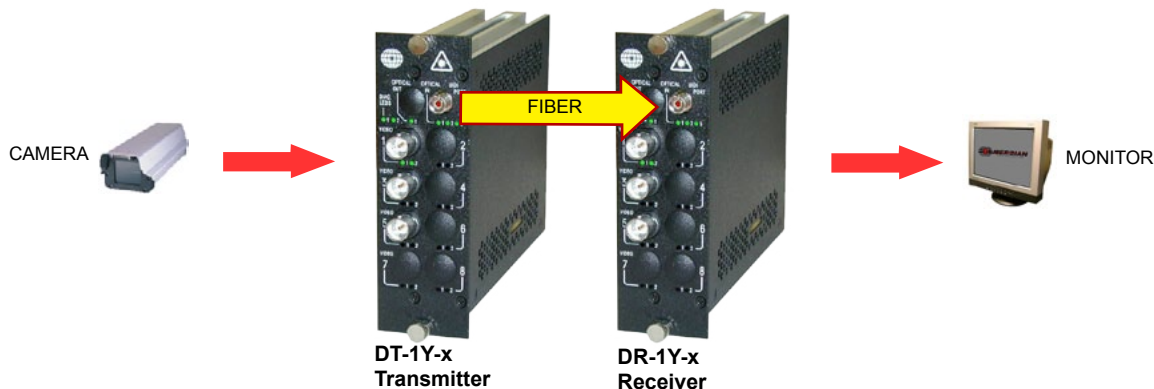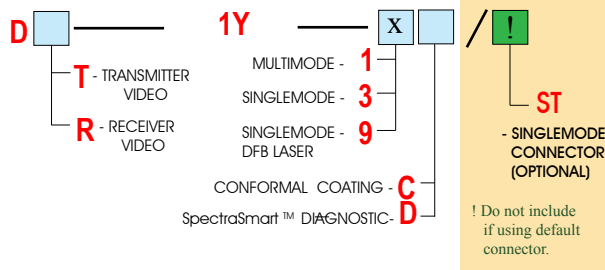
OPTICAL:

* 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)
1	Multimode (FP Laser) 62.5 / 125	-3	-23	20	1300	ST	24	1
3	Singlemode (FP Laser) 9 / 125	-3	-23	20	1310	FC, ST	24	55
9	Singlemode (DFB Laser) 9 / 125	+3	-23	26	1310	FC, ST	24	72