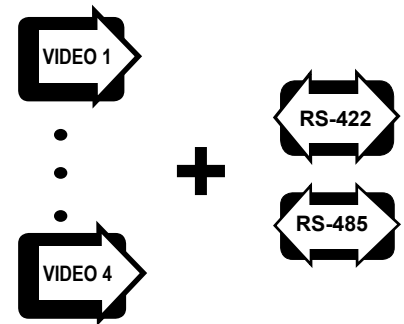


Digital 4 Channel 10 Bit Video Multiplexer with One Full Duplex RS-422 & RS 485 Data Channels



FEATURES:

- Standard 10-Bit Video Digital Encoding
- 4 Real-Time Video Signals with full-duplex RS 422 & RS 485 Data
- RS-422 and RS 485 (4-wire) data formats supported
- 7 MHz Video Bandwidth
- Meets RS-250C 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
- Meets NEMA TS1 / TS2 & CALTRANS Specs.
- 75 Ohm BNC Video Connector (Gold Center Pin)
- Meets EIA RS-170, RS-343A Formats
- DB 9 Type Connector for Data
- DC to 1 Mb/s Data Rate



DESCRIPTION:

The DT/DR-4W1F1K/1F/1K series is a reliable, cost effective, state-of-the-art, one fiber, Bi-directional Digital Video and Data transmission system. This fiber optic system transmits four channels of 10-bit, real-time Video with One full-duplex RS 422 & RS 485 data channels over one Singlemode or Multimode fiber. The DT/DR-4W1F1K/1F/1K accepts PAL, SECAM, or NTSC video formats. The functionality of DT/DR-4W1F1K/1F/1K series is 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 activity etc. See the SpectraSmart brochure for more details.

CONFIGURATIONS:

The DT/DR-4W1F1K/1F/1K product family is available as rack mount cards and modules that can be installed in all of 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)

MARKETS:

- ✓ Security and Surveillance
- ✓ Intelligent Transportation System (ITS)
- ✓ Access Control Systems
- ✓ Campus Lecture Networks
- ✓ Pro. Video / Audio

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	<0.3°
SNR	>67 dB (weighted)*
Return Loss	>30 dB
Field Tilt	<0.5%

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
8 - Green	Data Present

Data

Formats	RS-422, RS-485
Rate	DC to 1Mb/s
Bit Error Rate	10 ⁻⁹ *

Optical

Fiber Data Rate	1Gb/s
-----------------	-------

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST, FC
Power	See SR-1000 Brochure for details
Data	DB9 Female

Power **

Card	10 Watts
------	----------

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

Environmental

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

Quality

MTBF	>180,000 hours @ Ground Fix 35°C per MIL217F
------	---

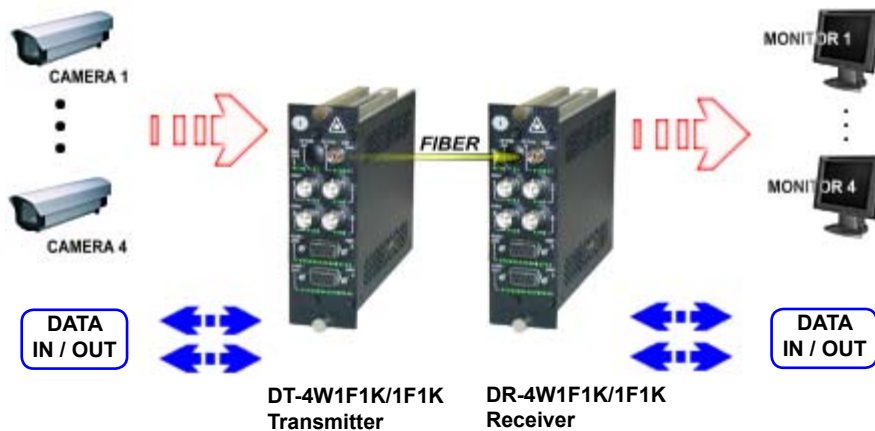
* measured @ max. optical budget

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

Part Numbers:

DT-4W1F1K/1F1K-2 . . Transmitter, 850nm/1300nm,MM, Laser	DR-4W1F1K/1F1K-2. . .Receiver, 1300nm/ 850nm, MM, Laser
DT-4W1F1K/1F1K-5 . . Transmitter, 1310nm/1550nm,SM, Laser	DR-4W1F1K/1F1K-5. . .Receiver, 1550nm/1310nm,SM, Laser
DT-4W1F1K/1F1K-8 . . Transmitter, 1310nm/1550nm,SM, DFB Laser	DR-4W1F1K/1F1K-8. . .Receiver, 1550nm/1310nm,SM, DFB Laser

NOTE: **ADD THE SUFFIX "D" AT THE END OF THE PART NUMBER FOR DIAGNOSTICS**



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

Meridian Technologies Inc.

700 Elmont Road. • Elmont, NY 11003 • 516. 285. 1000 • FAX 516. 285. 6300 • E-mail sales@meridian-tech.com
www.meridian-tech.com

ver 02/05