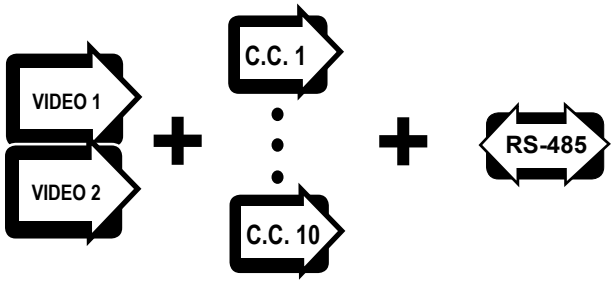
MERIDIAN TECHNOLOGIES

DT/DR-2V10C1K-1K

DigiFlex™

Digitally-Encoded One Way Two Channel Video, Ten Channel Contact Closure with One Full Duplex RS 485 Data Channel



FEATURES:

- 8 bit Digitally Encoded Video (10 bits available)
- Transmits 2 Real-Time Video and 10 Real Time
- Contact Closure Channel with One Full Duplex Channel of RS 485 Data
- 7 MHz Video Bandwidth
- Meets RS-250C Medium Haul Transmissions 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
- SpectraSmartTM 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
- HD15F Connectors for Contact Closure
- DB9F Connector for Data

DESCRIPTION:

The DT/DR-2V10C1K / 1K series products incorporate digital encoding technology. This fiber optic module transmits Two real-time, video signal, 10 channels of one directional contact closure with one full duplex channel of RS 485 data over one 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-2V10C1K / 1K series products are 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 Spectra Smart brochure for further details.

CONFIGURATIONS:

The DT/DR-2V10C1K / 1K product family is available as rack mount cards and modules that can be installed in Meridian's card chassis, desk chaises 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:

√ Intelligent Transportation Systems (ITS)
√ Security and Surveillance
√ Campus Security
√ Access Control

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

Data

Formats	Contact Closure, RS-485
Rate	10 Hz.(Per Channel)
Contact Rating	0.3A, 30V AC / DC
Contact Bounce Time	5 ms
Bit Error Rate	10-9
Data Rate	DC to 1 Mb/s

Optical

Fiber Data Rate	250Mbs

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST, FC
Contact Closure	HD 15 Female
Data	DB 9 Female

Power **

Card	12 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
2 - Green	Sync. Present
2 - Bi-color	Video Present / Overload
2 - Green	Data Present
10- Green	Contact Active

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 +75oC
Storage Temperature	-55oC to +85oC
Relative Humidity	0 to 95% Non-condensing (98% with Conformal Coating)

Quality

MTBF	>220,000 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-2V10C1K/1K-2. Transmitter, 850nm/ 1300nm, MM, Laser — DR-2V10C1K/1K-2. . Receiver, 1300nm/ 850nm, MM, Laser
DT-2V10C1K/1K-5. Transmitter, 1310nm/1550nm,SM, Laser — DR-2V10C1K/1K-5. . Receiver, 1550nm/1310nm,SM, Laser
DT-2V10C1K/1K-8. Transmitter, 1310nm/1550nm,SM, DFB — DR-2V10C1K/1K-8. . .Receiver, 1550nm/1310nm,SM, DFB

ADD THE SUFFIX "C" FOR CONFORMAL COATING AND / OR "D" FOR DIAGNOSTIC OPTIONS AT THE END OF THE PART NUMBER

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	-24	21	1300 / 850	ST	24
Singlemode (FP Laser) 9 / 125	-3	-24	21	1310 / 1550	ST, FC	24
Singlemode (DFB Laser) 9 / 125	+3	-24	27	1310 / 1550	ST , FC	24

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