DT/DR-1W4C-x

Digitally Encoded One Channel 10-Bit Video Multiplexer with Four Contact Closure



FEATURES:

- 10 Bit Video Digital Encoding
- Real Time Video & Data Transmission
- 7 MHz Video Bandwidth
- NTSC, PAL, SECAM Compatible
- User selectible, Contact Mapping (N.O, N.C)
- Wide Optical Dynamic Range: Eliminates Need For Optical Attenuators
- Laser Based Systems for Multimode and Single-mode
- 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 Specifications
- 75 Ohm BNC Video Connector (Gold Center Pin)
- DB 15 Type Connectors for Contacts

DESCRIPTION:

The DT/DR-1W4C-x product incorporates digital encoding technology. This fiber optic module transmits One Real-time, Simplex 10-bit Video channel and Four Unidirectional Contact Closure channels over one optical fiber.

Both Multimode and Single-mode fiber versions are available. The Contact Closure channels can be configured as either

Normally Open (N.O.) or Normally Closed (N.C.). 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-1W4C-x series products is enhanced by their compatibility with Meridian's PC based SpectraSmart[™] Network Management & Diagnostic Software system. SpectraSmart monitors 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-1W4C-x cards can be mounted in either a small, 2-slot stand-alone chassis for shelf or wall mounting or in one of Meridian's 3RU desk chassis or rack mounting in our 19" racking frames. The small stand-alone chassis (SR-1002) with its AC power supply (87 VAC - 164 VAC) is used for shelf or wall mounting.

MARKETS:

- $\sqrt{}$ Intelligent Transportation Systems (ITS)
- $\sqrt{}$ 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 6.8 MHz @ -3 dB
Differential Gain	<0.6%
Differential Phase	<0.30
SNR	>67 dB (weighted)*
Return Loss	>30 dB
Field Tilt	< 0.5%

Contact Closure

Formats	Normally Open (N.O.) or Normally
	Closed (N.C.) - jumper selectable
Rate	10 Hz.(Per Channel)
Contact Rating	0.3A, 30V AC / DC
Contact Bounce Time	5 ms

Optical

Fiber Data Rate 250 Mb/s

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST - MM(default), FC- SM
Power (module)	See SR-1000 Brochure for details
Contact Closure	DB15 Female Connector

Power **

Card

7 Watts

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
1 - Bi-color	Video Present / Overload
1 - Green	Video Sync. Present
4 - Green	Contact Closure 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

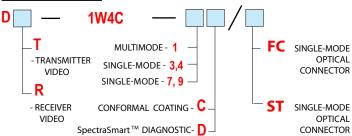
Environmental

Operating Temperature	-40°C to +74°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

Quality

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

Part Numbers:



* measured @ max. optical budget

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





OPTICAL:



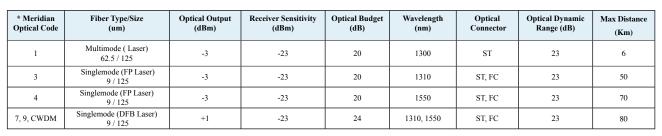
Transmitter





FOUR CONTACT CLOSURE OUT

DR-1W4C Receiver



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