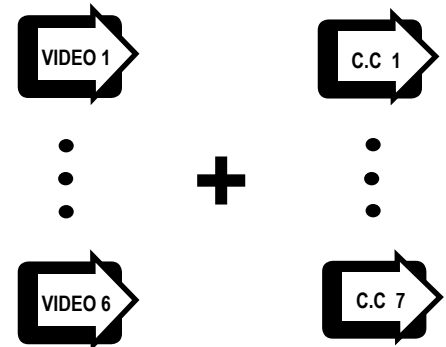


## Digitally-Encoded Six Channel Video with Seven Channel Contact Closure



### FEATURES:

- Digital Encoding on Video
- Transmits 6 Real-Time Video and 7 Real Time Contact Closure Channel
- 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
- 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
- HD15 Type Connectors for Contact Closure



### DESCRIPTION:

The DT/DR-6V 7C series products incorporate digital encoding technology. This fiber optic module transmits 6 real-time, high performance digitally-encoded video signals & 7 Channels of one directional Contact Closure 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-6V 7C series products are enhanced by their compatibility with Meridian's PC based Spectra Smart Network Management & Diagnostic Software system. Spectra Smart 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-6V 7C product family is available as rack mount cards and modules that can be installed in either Meridian's desk chassis or 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	<0.3°
SNR	>60 dB (weighted)*
Return Loss	>30 dB
Field Tilt	< 0.5%

### Data

Formats	Contact Closure
Rate C.C	10 Hz
Bit Error Rate	10 <sup>-9</sup>

### Optical

Fiber Data Rate	1 Gb/s
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### Connectors

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

### Power \*\*

Card	12 Watts
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### 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
6 - Green	Sync. Present
6 - Bi-color	Video Present / Overload
7 - Green	Data Present

### 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 (98% with Conformal Coating)

### Quality

MTBF	>180,000 hours @ Ground Fix 35°C per MIL217F
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\* measured @ max. optical budget

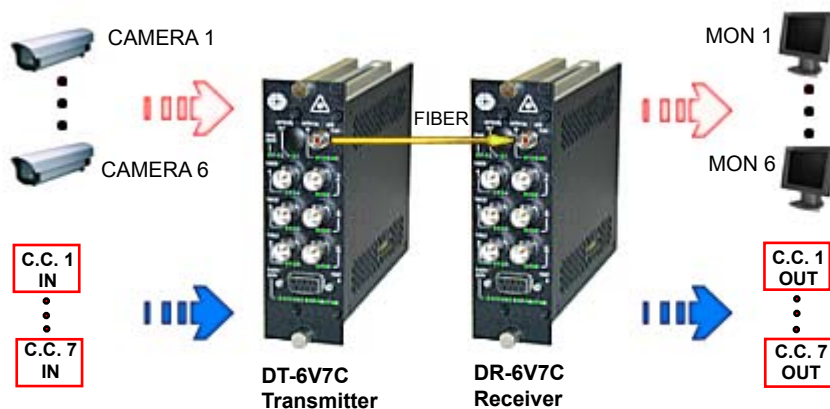
\*\* Due to variations of drivers and diagnostic options, power shown @ max value

### Part Numbers:

DT-6V7C-1. Transmitter, 1300nm, MM, Laser  
DT-6V7C-3. Transmitter, 1310nm, SM, Laser  
DT-6V7C-4. Transmitter, 1550nm, SM, Laser  
DT-6V7C-7. Transmitter, 1550nm, SM, Laser, DFB

DR-6V7C-1. . Receiver, 1300nm, MM  
DR-6V7C-3. . Receiver, 1310nm, SM  
DR-6V7C-4. . Receiver, 1550nm, SM  
DR-6V7C-7. . Receiver, 1550nm, SM

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

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