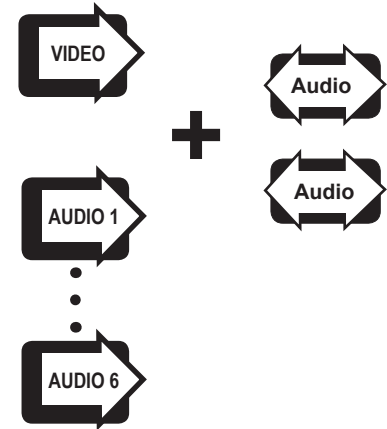


One Channel Digital Video Transmitter  
with Six Simplex Audio Channels  
and Two Full Duplex Audio Channels



#### FEATURES:

- 10-Bit Video Digital Encoding
- Real Time Video / Audio
- 24-Bit Audio
- 7 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 Connector (Gold Center Pin)
- Meets EIA RS-170, RS-343A Formats
- DB 9 Type Connectors for Audio

#### DESCRIPTION:

The DT/DR-1W8A/2A series products incorporate digital encoding technology. This fiber optic module transmits one, real-time, high performance, 10-bit digitally-encoded Video signals, four simplex 24-bit audio channels and two bi-directional (full-duplex) 24-bit Audio channels over one multimode or singlemode fiber. 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-1W8A/2A 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-1W8A/2A product family is available as rack mount cards and modules that can be installed in 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:

- ✓ Access control
- ✓ Security and surveillance
- ✓ Intelligent transportation systems (ITS)

## 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
Differential Gain/Phase	<0.6% / <0.3deg
SNR	>67 dB (weighted)*
Return Loss	>30 dB
Field Tilt	< 0.5%

### Audio

I/O Impedance	600 Ohms (Bal. / Un Bal.)
Frequency Response	10 Hz to 20 KHz
SNR	>90dB (Weighted)@ 1 KHz
In/Out Level	-8 to +8 dBm (4V <sub>p-p</sub> max.) (+18 dBm available on request)
Total Harmonic Distort	<0.01% @ 1KHz
Resolution	24 Bit

### Optical

Fiber Data Rate	750 Mb/s
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### Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST, FC
Power	See SR-1000 Brochure for details
Audio	DB9 Female (3 total)

### Quality

MTBF	>200,000 hours @ Ground Fix 35°C per MIL217F
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### Power \*\*

Card	8 Watts
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\* 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 - Bi-color	RX optical signal - Present / Absent
1 - Bi-color	Video Present / Overload
1 - Green	Video Sync. Present
10 - Green	Audio Present
10 - Green	Audio Overload

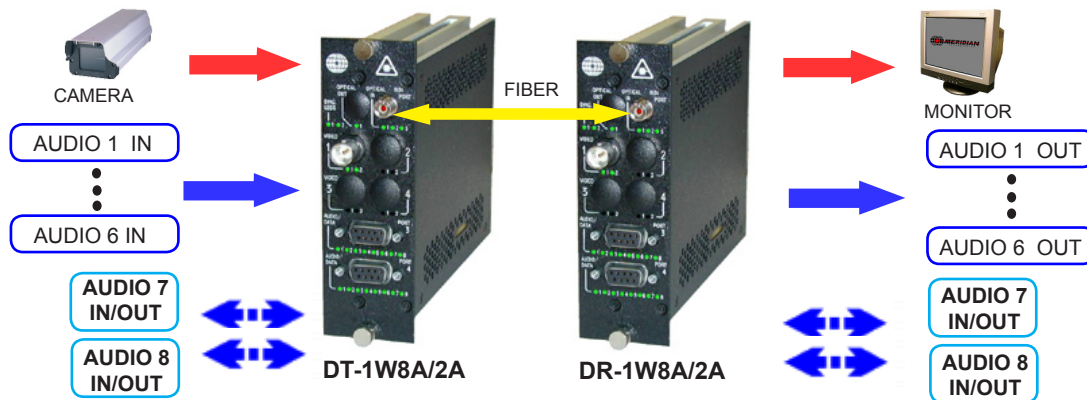
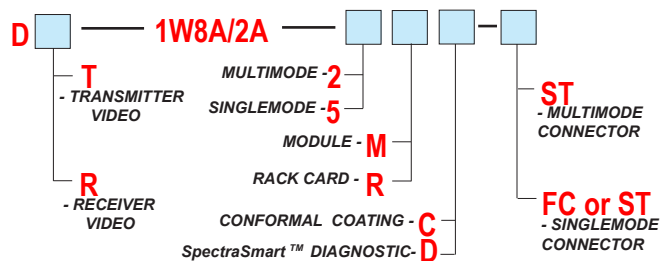
### Physical

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

### Part Numbers:



## 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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