



#### **FEATURES:**

- 10 Bit Video Digital Encoding
- Transmits 2 Real-Time Video Signals Over One Optical Fiber
- 7 MHz Video Bandwidth
- Meets RS-250C Transmission Specifications NTSC 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
- STTM, FC Optical Connector
- Hot Swappable Cards
- Laser Back Biased Photo Detector Circuitry for Stable Optical Output Over Full Temperature Range
- S-Video Connector
- Meets EIA RS-170, RS-343A Formats

#### **DESCRIPTION:**

The DT/DR-2S series is a reliable, cost effective, state-of-the—art, one fiber one wavelength Digital Video transmission system. This fiber optic system transmits real-time 10 bit S-Video over one Singlemode or Multimode fiber. The DV-2S accepts NTSC video format. The functionality of DT/DR-2S series are 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, etc., and external equipment which are attached to the Meridian equipment. See the SpectraSmart™ brochure for more details.

#### **CONFIGURATIONS:**

The DT/DR-2S product family is available as rack mount cards that can be installed in all of Meridian's card chassis. This system can be configured in either star (module to rack) or trunking (rack to rack) configurations. These products can be easily converted to a Standalone module with the SR-1000/S-2 Slot Chassis (87-264VAC). See SR-1000 brochure for further details.

### **MARKETS:**

- √ Security and Surveillance
- √ Campus Lecture Networks
- √ Pro. Video / Audio

## SPECIFICATIONS: -

### **Video**

Format	NTSC
Voltage/Impedance	1 Vp-p, 75 Ohm, 1.5 Vp-p max.
Bandwidth	5Hz 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%

# **Optical**

Fiber Data Rate 500 Mb/s

## **Connectors**

Video	S-Video
Optical	ST , FC
Power	See SR-1000 Brochure for details

# Power \*\*

Card 8 Watts

### \_ . . . .

Indicators (LEDs)

1 - Green

1 - Bi-color

1 - Bi-color

 $\frac{1 - \text{Bi-color}}{2 - \text{Green}}$ 

2 - Bi-color

Card

Weight

 $\frac{Card}{No. of Slots}$ 

Physical Dimensions

**Enviromental** 

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

Power On

Sync. Present

44 mm (1.7") H

450 gms (16 Oz)

TX Carrier/ Laser Over Current

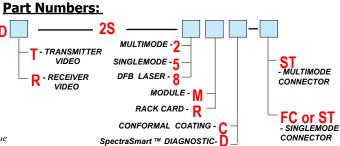
160 mm (6.3") L, 100 mm (4") W

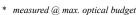
RX Carrier - Present / Error RX optical signal - Present / Absent

Video Present / Overload

# Quality

MTBF >120,000 hours @ Ground Fix 35°C per MIL217F





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



# **OPTICAL:**

HOAL.							
Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)	
Multimode (Laser) 62.5 / 125	-3	-22	19	1300	ST	22	
Singlemode (Laser) 9 / 125	-3	-22	19	1310	ST, FC	22	
Singlemode (Laser) 9 / 125	+2	-22	24	1310 DFB	ST, FC	22	
Singlemode (Laser) 9 / 125	+3	-22	25	1550 DFB	ST, FC	22	
	Multimode (Laser) 62.5 / 125  Singlemode (Laser) 9 / 125  Singlemode (Laser) 9 / 125  Singlemode (Laser)	Fiber Type/Size (um) Optical Output (dBm)  Multimode (Laser) -3 62.5 / 125  Singlemode (Laser) 9 / 125  Singlemode (Laser) +2 Singlemode (Laser) +3	Fiber Type/Size (um)         Optical Output (dBm)         Receiver Sensitivity (dBm)           Multimode (Laser) 62.5 / 125         -3         -22           Singlemode (Laser) 9 / 125         -3         -22           Singlemode (Laser) 9 / 125         +2         -22           Singlemode (Laser) 9 / 125         +2         -22           Singlemode (Laser) 9 / 125         +3         -22	Fiber Type/Size (um)         Optical Output (dBm)         Receiver Sensitivity (dBm)         Optical Budget (dB)           Multimode (Laser) 62.5 / 125         -3         -22         19           Singlemode (Laser) 9 / 125         -3         -22         19           Singlemode (Laser) 9 / 125         +2         -22         24           Singlemode (Laser) 9 / 125         +3         -22         25	Fiber Type/Size (um)         Optical Output (dBm)         Receiver Sensitivity (dBm)         Optical Budget (dB)         Wavelength (nm)           Multimode (Laser) 62.5 / 125         -3         -22         19         1300           Singlemode (Laser) 9 / 125         -3         -22         19         1310           Singlemode (Laser) 9 / 125         +2         -22         24         1310 DFB           Singlemode (Laser) 9 / 125         +3         -22         25         1550 DFB	Fiber Type/Size (um) Optical Output (dBm) Receiver Sensitivity (dBm) Optical Budget (dB) Wavelength (nm) Connector $ \begin{array}{ccccccccccccccccccccccccccccccccccc$	