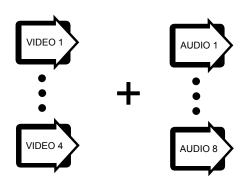


Digital Four Channel 10-Bit Video and Eight Channels Audio with SFP Optical Interface





### **FEATURES:**

- Real-Time, Standard 10-Bit Video Digital Encoding
- Transmits 4 Real-Time Video Signals and 8 channels 24-Bit Audio Over One Optical Fiber
- 7 MHz Video Bandwidth
- Meets RS-250C Transmission Specifications
- NTSC, PAL, SECAM Compatible
- Multimode, Singlemode and CWDM fiber options via SFP modules
- SpectraSmart Network Management Compatible (optional)
- Local LED Status Indicators to Monitor Critical System Diagnostics
- LC, SC Optical Connector (SFP dependent)
- Hot Swappable Cards
- Meets NEMA TS1 / TS2 & CALTRANS Specs.
- 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-4W8A-SFP series are Meridian's newest products incorporating industry standard SFP optical modules for exceptional product versatility and performance.

DT/DR-4W8A-SFP is a cost effective, state-of-the—art, one fiber, one wavelength Digital Video transmission system. This fiber optic system transmits four channels of real-time 10-Bit Video and eight channels of 24-bit Audio using the industry standard Small Form Pluggable (SFP) optical device.

This SFP gives you the option for either singlemode, multimode or CWDM wavelength selections by simply plugging-in the appropriate SFP module.

The DT/DR-4W8A-SFP accepts PAL, SECAM, or NTSC formats. The functionality of this product is further enhanced by its 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-4W8A 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-1002, 2 slot desk / wall mount chassis (87VAC-264VAC).

## **MARKETS:**

- √ Security and Surveillance
- √ Intelligent Transportation System (ITS)
- √ Campus Lecture Networks
- √ Pro. Video / Audio
- √ Video transport systems

# **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	>67 dB (weighted)*
Return Loss	>30 dB
Field Tilt	< 0.5%

### **Audio**

In/Out Impedance	600 Ohms (Bal. / Un Bal.)
Frequenct Response	10Hz to 20KHz
SNR	>90dB (Weighted) @ 1KHz.
In / Out Level	-6 to +6 dBm (4VP-Pmax.)
	(+18dBm availabale on Request)
Total Harmonic Distortion	< 0.01% @ 1 KHz
Resolution	24 Bit

# **Optical**

Fiber Data Rate	1 Gb/s
Fiber Type and Wavelength	SFP dependent

#### **Connectors**

Video	75 Ohm BNC (Gold Center Pin)
Optical	LC. SC
Power	See SR-1002 Brochure for details

# Power \*\*

12 Watts Card

# Quality

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

## **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
4 - Green	Sync. Present
4 - Bi-color	Video Present / Overload
8 - Red	Audio Overload
8 - Green	Audio Present

# **Physical**

Dimensions:	
Card	44 (W) x 127 (H) x 160 (D) mm
	$(1.7 \times 5.0 \times 6.3 \text{ inch})$
Weight:	
Card	450 gms (16 Oz)
No. of Slots	2

### **Enviromental**

Operating Temperature	40°C to +75°C
	(0° to +70°C for CWDM units)
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

- \* measured @ max. optical budget \*\*Due to variations of drivers and diagnostic options, power shown @ max value

### Part Numbers:





# **SFP** OPTIONS:

The SFP series products are available for both single-mode and multimode fiber applications and ether one or two

For more specifications on a SFP optical devices go to SFP data sheet or visit:

fiber versions. Recommended optical speed for this product is 1.25 Gb/s.

WWW.MERIDIAN-TECH.COM -> PRODUCTS -> ACCESSORIES -> SFP OPTICAL DEVICES

ver. 03/2017 A