

Digital 4 Channel 10-Bit Video Multiplexer with SFP Optical Fiber Interface





#### **FEATURES:**

- Standard 10-Bit Video Digital Encoding
- Transmits 4 Real-Time Video Signals 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

#### **DESCRIPTION:**

The DT/DR-4W-SFP series are Meridian's newest products incorporating industry standard SFP optical modules for exceptional product versatility and performance. DT/DR-4W-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 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-4W-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 DigiFlex™ product family is available as rack mount cards and can be installed in all of Meridian's card chassis. These products can be easily converted to a Standalone module with the SR-1000 - 2 Slot chassis. See SR-1000 data sheet for further details.

#### **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%

## **Optical**

Fiber Data Rate	_ 500 Mb/s
Fiber Type and Wavelength	SFP dependent

#### **Connectors**

Video	75 Ohm BNC (Gold Center Pin)
Optical	LC. SC
Power	See SR-1000 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
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# **Physical**

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

#### **Enviromental**

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

## **Part Numbers:**





## **SFP** OPTIONS:

The SFP series products are available for both single-mode and multimode fiber applications and ether one or two fiber versions. Recommended optical speed for this product is 1.25 Gb/s.

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

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

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