

# Digital 8 Channel Video Multiplexer with SFP Optical Fiber Interface



#### FEATURES:

- Standard 8 Bit Video Digital Encoding
- Transmits 8 Real-Time Video Signals Over One Optical Fiber
- 7 MHz Video Bandwidth
- Meets RS-250C Transmission Specifications NTSC, PAL, SECAM Compatible
- Wide Optical Dynamic Range: Eliminates Need For Optical Attenuators
- Multimode, Singlemode and CWDM fiber options via SFP modules
- SpectraSmart Network Management Compatible (optional)
- Local LED Status Indicators to Monitor Critical System Diagnostics
- Optical Connector LC, SC
- 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
- Also available in CWDM wavelengths



#### **DESCRIPTION:**

The DT/DR-8V-SFP series are Meridian's newest products incorporating industry standard SFP optical modules for exceptional product versatility and performance. DT/DR-8V-SFP is a cost effective, state-of-the-art, one fiber, one wavelength Digital Video transmission system. This fiber optic system transmits eight channels of real-time 8-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-8V-SFP accepts PAL, SECAM, or NTSC formats. The functionality of DT/DR-8V-SFP series 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 SpectraSmartTM brochure for more details . This card is also available in CWDM wavelengths for high-density video transport systems.

NOTE: A 10-Bit system is also available, see DT-8W-SFP series. (for non CWDM units)

#### **CONFIGURATIONS:**

The DT/DR-8V-SFP product family is available as rack mount cards that can be installed in all of Meridian's card chassis. These products can be easily converted to a Standalone module with the SR-1000/S - 2 Slot Chassis. See SR-1000 data sheet for further details.

#### MARKETS:

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

# SPECIFICATIONS:

### Video

Format	NTSC, PAL, SECAM
Voltage/Impedance	<sup>1</sup> 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%

## **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-1000 Brochure for details

12 Watts

### Power \*\*

### Quality

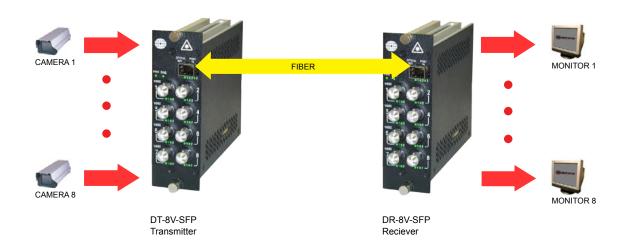
MTBF

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

### Model No.

DT-8V-SFP	Transmitter
DR-8V-SFP	Receiver

For SrectraSmart Diagnostics option add "D" suffix. For example : DR-8V-SFP-D Must be used with SpectraSmart compatible subrack.



Indicators (LEDs)

Power On

Sync. Present

44 mm (1.7") H

450 gms (16 Oz)

-40°C to +75°C

-55°C to +85°C

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

2

TX Carrier/ Laser Over Current

RX optical signal - Present / Absent

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

(0° to +70°C for CWDM units)

0 to 95% Non-condensing

RX Carrier - Present / Error

Video Present / Overload

1 - Green

1 - Bi-color

1 - Bi-color

1 - Bi-color

8 - Bi-color

**Physical** Dimensions:

Enviromental

Operating Temperature

Storage Temperature

\* measured @ max. optical budget

Relative Humidity

Card

Card No. of Slots

Weight:

8 - Green

# SFP OPTIONS:

The SFP series products are available for both singlemode 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 clicking

or

# go to: WWW.MERIDIAN-TECH.COM -> PRODUCTS -> ACCESSORIES -> SFP OPTICAL DEVICES

