



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 Meridian's newest products incorporating industry standard SFP optical modules for exceptional product versatility and performance. DT/DR-8V-SFP 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
- √ 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	>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

75 Ohm BNC (Gold Center Pin)
LC, SC
See SR-1000 Brochure for detail

Power **

Card	12 Watts

Quality

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

Model No.

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

Indicators (LEDs)

Power On
TX Carrier/ Laser Over Current
RX Carrier - Present / Error
RX optical signal - Present / Absent
Sync. Present
Video Present / Overload

Physical

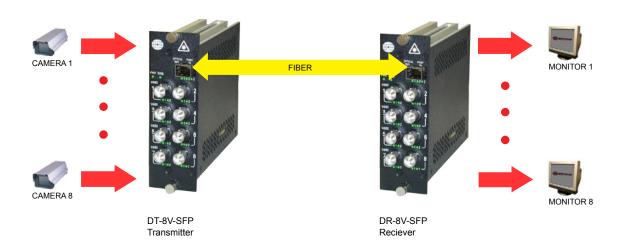
160 mm (6.3") L, 100 mm (4") W
44 mm (1.7") H
450 gms (16 Oz)
2

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

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



Typical SFP options:

Part #	Fiber Type	Wavelength	Max Distance
SM1313G20	Singlemode	1310nm	20km
MM1315G	Multimode	1310nm	550m
MM8585G	Multimode	850nm	(for use with OM2, OM3 or OM4 fiber only)

^{**} Due to variations of drivers and diagnostic options, power shown @ max value