MERIDIAN
T E C H N O L O G I E S
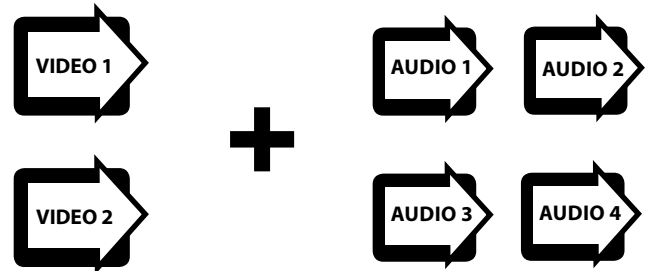
Digitally-Encoded Two 10-Bit Video Channels
with Four Audio Channels using Standard
Small Form Pluggable (SFP) Optical Module

VIDEO 1

VIDEO 2

+

AUDIO 1   AUDIO 2

AUDIO 3   AUDIO 4

FEATURES

- Two Real-Time 10-Bit Video Digital Encoding

- Four Channels 24 Bit Audio

- 7 MHz Video Bandwidth

- Meets RS-250C Short Haul Transmission Specifications

- NTSC, PAL, SECAM Compatible

- Multimode, Singlemode and CWDM, over one or two fibers via SFP modules

- Surface Mount Technology (SMT) for High Reliability and Repeatability

- *SpectraSmart*™ Network Management Compatible

- Local LED Status Indicators to Monitor Critical System Diagnostics for Performance Parameters

- LC, SC Optical Connector (SFP dependent)

- Hot Swappable Cards

- 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-2W4A-SFP series products incorporate digital encoding technology. This fiber optic card transmits Two real-time, high performance 10-bit digitally-encoded Video signals and 4 channels of 24-Bit Audio using the industry standard Small Form Pluggable (SFP) optical module.

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

Both Multimode and Singlemode fiber versions are available. Meridian's digital product line incorporates plug-in personality signal cards to easily configure a wide variety of module types. The functionality of the DT/DR-2W4A-SFP   series products is enhanced by their compatibility with Meridian's PC based SpectraSmart Network Management & Diagnostic Software system.   Spectra Smart   supervises the operating parameters of the transmission system such as the status on Video levels, Sync,   Digital   carrier   detect,   Voltages, Temperatures, Optical levels etc.   See Spectra Smart brochure for further details.

CONFIGURATIONS

The DigiFlex family products are available as rack mount cards and can be installed in Meridian's card chassis, desk chaissis or 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-1000/s, 2 slot desk / wall mount chassis (87VAC-264VAC).

MARKETS

- √ Pro Video
- √ Distance Learning
- √ Editing Studios
- √ Tele-Conferencing

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	<0.3º
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	500 Mb/s
Fiber Type and Wavelength	SFP dependent

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	LC, SC
Audio	DB9 Female

Power **

Card	6 Watts

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
2- Green	Sync. Present
2- Bi-color	Video Present / Overload
4- Red	Audio Overload
4 - Green	Audio Present

Physical

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

Enviromental

Operating Temperature	-34ºC to +74ºC
Storage Temperature	-55ºC to +85ºC
Relative Humidity	0 to 95% Non-condensing

Quality

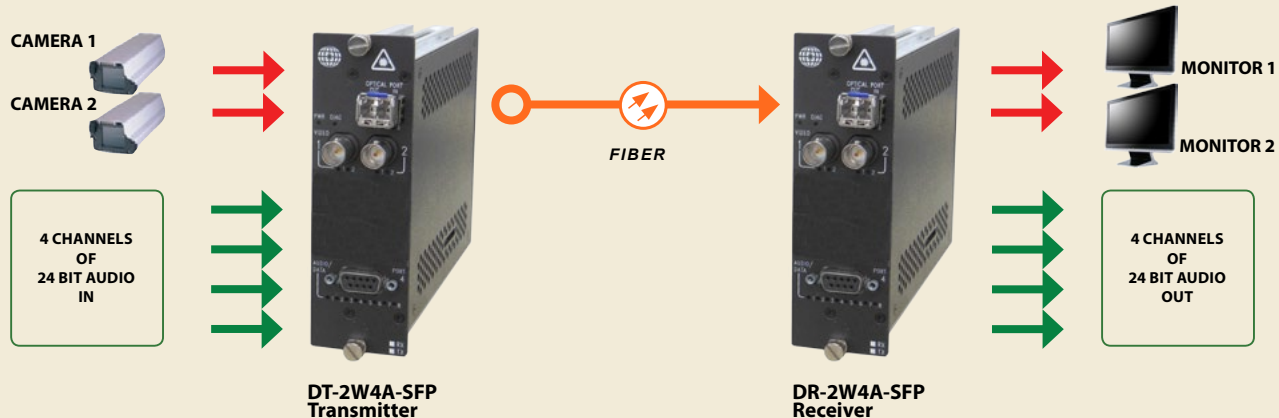|	
MTBF	>200,000 hours @ Ground Fix 35ºC per MIL217F

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

Part Number:

D ☐ — **2W4A** — **SFP** — ☐

- **T** TRANSMITTER
- **R** RECEIVER

- **C** CONFORMAL COATING
- **D** SpectraSmart™ DIAGNOSTIC

CAMERA 1
CAMERA 2

4 CHANNELS OF 24 BIT AUDIO IN

FIBER

DT-2W4A-SFP
Transmitter

DR-2W4A-SFP
Receiver

MONITOR 1
MONITOR 2

4 CHANNELS OF 24 BIT AUDIO OUT

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

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