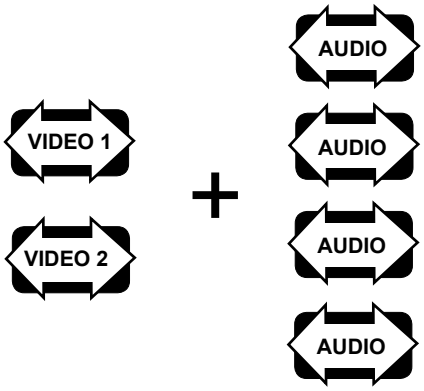
MERIDIAN TECHNOLOGIES

DX-2V4A DX-2W4A **DigiFlex™**

Digitally-Encoded Two Bi-directional 8-Bit or 10-Bit Video and Four Bi-directional 24-Bit Audio



FEATURES:

- 8-Bit or 10-Bit Video Digital Encoding
- Real Time Video / Audio
- 7 MHz Video Bandwidth
- Meets RS-250C Short Haul Transmission Specifications
- NTSC, PAL, SECAM Compatible
- Wide Optical Dynamic Range: Eliminates Need For Optical Attenuators
- Laser Based Systems for Multimode and Singlemode
- 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
- ST, FC Optical Connector
- Hot Swappable Cards
- Laser Back - Biased Photo Detector Circuitry for Stable Optical Output Over Full Temperature Range
- 75 Ohm BNC Video Connector (Gold Center Pin)
- Meets EIA RS-170, RS-343A Formats
- DB 9 Type Connectors for Audio
- One or Two Fiber Versions Available

DESCRIPTION:

The DX-2V4A, DX-2W4A series products incorporate digital encoding technology. This fiber optic module transmits the following bi-directional (full duplex) signals: two real-time, 8-bit digitally encoded Video channels or high performance 10-bit digitally encoded Video channels and four 24-Bit Audio channels over one fiber. 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 DX-2V4A, DX-2W4A series products are enhanced by their compatibility with Meridian's PC based SpectraSmart Network Management & Diagnostic Software system. SpectraSmart 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 SpectraSmart brochure for further details.

CONFIGURATIONS:

The DX-2V4A, DX-2W4A product family is available as rack mount cards and modules that can be installed in Meridian's card chassis, desk chaises 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-1000/s, 2 slot desk / wall mount chassis (87VAC-264VAC)

MARKETS:

√ Video conferencing
√ Intelligent transportation systems (ITS)
√ Security and surveillance
√ Access Control

SPECIFICATIONS:

Video

Format	NTSC, PAL, SECAM
Voltage/Impedance	1 Vp-p, 75 Ohm, 1.5 Vp-p max.
Bandwidth	5 Hz to 10 MHz @ -3 dB
Differential Gain	<0.6%
Differential Phase	<0.3º
SNR for 8-Bit Video	>60 dB (weighted)*
SNR for 10-Bit Video	>67 dB (weighted)*
Return Loss	>30 dB
Field Tilt	< 0.5%

Audio

I/O Impedance	600 Ohms (Bal. / Un Bal.)
Frequency Responce	10 Hz to 20 KHz
SNR	>90dB (Weighted)@ 1 KHz
In/Out Level	-8 to +8 dBm (4Vp-p max.) (+18 dBm available on request)
Total Harmonic Distort	<0.01% @ 1KHz
Resolution	24 Bit

Optical

Fiber Data Rate for 8-Bit Video	500Mb/s
Fiber Data Rate for 10-Bit Video	800Mb/s

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST, FC
Power	See SR-1000 Brochure for details
Audio	DB9 Female

Power **

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

Physical

Dimensions:	
Card	160 mm (6.3") L, 100 mm (4") W 44 mm (1.7") H
Weight:	
Card	450 gms (16 Oz)
No. of Slots	2

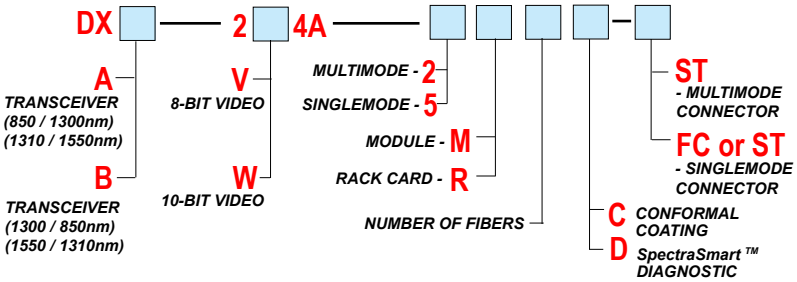
Enviromental

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

Quality

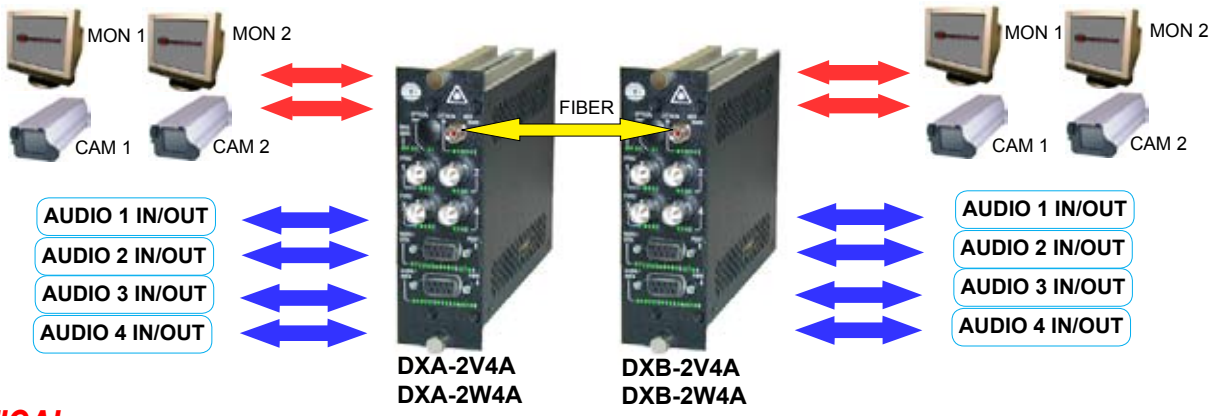
MTBF	>240,000 hours @ Ground Fix 35ºC per MIL217F

Part Numbers:



* *measured @ max. optical budget*

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



OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
Multimode (FP Laser) 62.5 / 125	-3	-24	21	1300 / 850	ST	24
Singlemode (FP Laser) 9 / 125	-3	-24	21	1310 / 1550	ST, FC	24
Singlemode (DFB Laser) 9 / 125	+3	-24	27	1310 / 1550	ST , FC	24

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