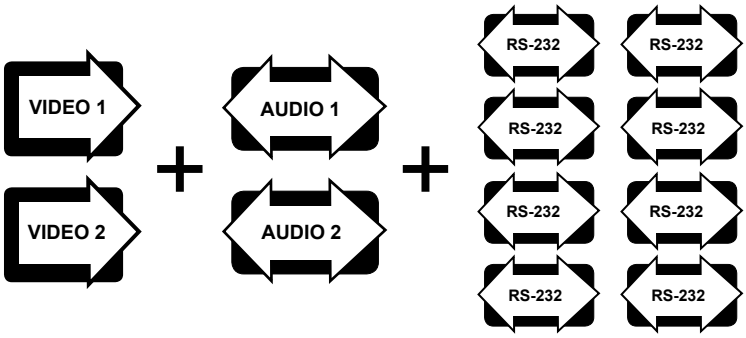
MERIDIAN TECHNOLOGIES

Digitally-Encoded Two Channels 8-bit Video with Two Bi-directional Unbalanced Audio and Eight Bi-directional RS-232 Data



FEATURES:

- 8-Bit Video Digital Encoding
- Real Time Video, Audio and Data Transmission
- 2 Bi-Directional Unbalanced Audio Channels
- 8 Bi-Directional RS-232 Data Channels
- 7 MHz Video Bandwidth
- Laser Based Systems for Multimode and Single-mode
- Meets RS-250C Short Haul Transmission Specifications
- NTSC, PAL, SECAM Compatible
- Wide Optical Dynamic Range: Eliminates Need For Optical Attenuators
- 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
- 75 Ohm BNC Video Connector (Gold Center Pin)
- Meets EIA RS-170, RS-343A Formats
- DB 9 Type Connectors for Audio and Data

DESCRIPTION:

The DT/DR-2V2AB8D/2AB8D-x series incorporates digital encoding technology. This fiber optic card transmits two real-time, simplex 8-bit video, two Bi-Directional channels of Unbalanced Audio and eight Bi-directional RS-232 data.
Both Multimode and Single-mode 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 this product series is 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 DigiFlex products are available as rack mount cards and modules that can be installed in either Meridian's desk chassis or in 19" racking frames. This system can be configured in either star (module to rack) or trunking (rack to rack) configurations. This product requires two standard single slots and can be made into a stand-alone system with the addition of the SR-1000/s, 2 slot desk/wall mount chassis (87VAC- 264VAC).

MARKETS:

√ 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 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%

Audio

I/O Impedance	47 kohms, unbalanced
Frequency Responce	10 Hz to 20 KHz
SNR	>90dB (Weighted)@ 1 KHz
In/Out Level	-8 to +8 dBm ($4V_{p-p}$ max.)
Total Harmonic Distort	<0.01% @ 1KHz
Resolution	24 Bit

Data

Formats	RS-232
Data Rate	DC to 125 Kb/s
Bit Error Rate	10^{-9*}

Connectors

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

Optical

Fiber Data Rate	500 Mb/s

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

Power **

Card	7 Watts

Indicators (LEDs)

1 - Green	Power On
1 - Bi-color	TX Carrier/ Laser Over Current
1 - Bi-color	RX Carrier - Present / Error
1 - Green	RX Optical Signal -Present/Absent
2 - Bi-color	Video Present / Overload
2 - Green	Video Sync. Present
16 - Green	Data Present
4 - Green	Audio Present
4 - Red	Audio Overload

Physical

Dimensions (Card)	44 (W) x 127(D) x 160 (H) mm
	(1.7 x 5.0 x 6.3 inch)
Weight (Card)	540 gms (1.2 lb.)
No. of Slots	2

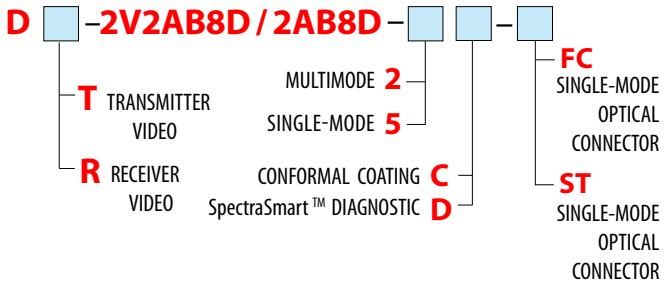
Enviromental

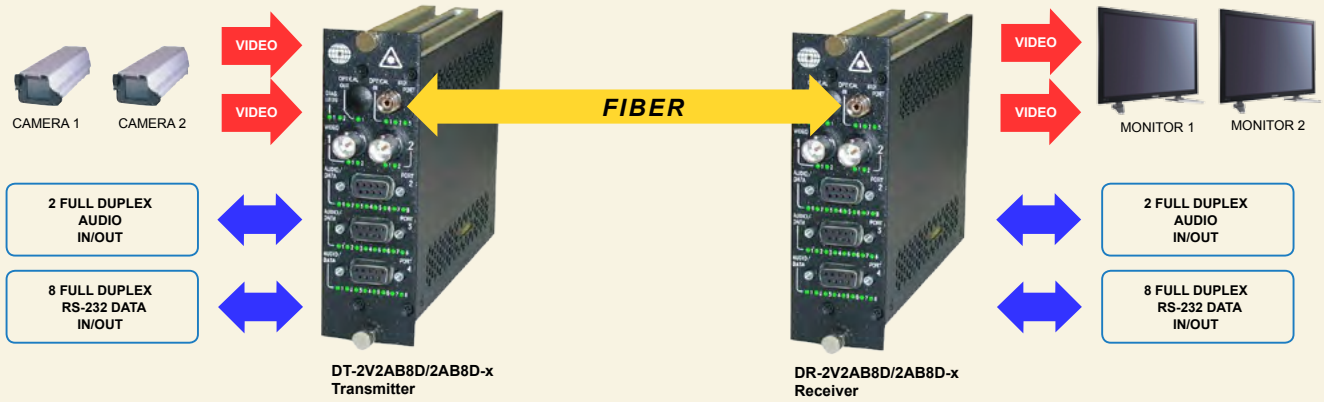
Operating Temperature	-40°C to +74°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

Quality

MTBF	>170,000 hours @ Ground Fix
	35°C per MIL217F

Part Numbers:





OPTICAL:

Meridian Optical Code	Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)	Max Distance (Km)
2	Multimode (FP Laser) 62.5 / 125	-3	-24	21	1300 / 850	ST	23	1
5	Single-mode (FP Laser) 9 / 125	-3	-24	21	1310 / 1550	ST, FC	23	60

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