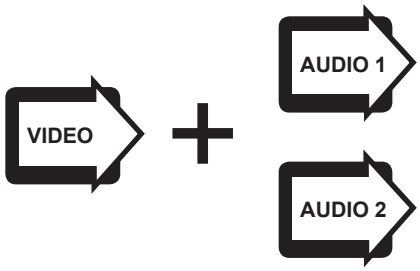
MERIDIAN TECHNOLOGIES

DT/DR-1S2A-x

DigiFlex™

Digital One Channel 10-Bit S-Video with Two 24-Bit Audio Channels



FEATURES:

- 10 Bit Video Digital Encoding
- Real Time S-Video & Audio Transmission
- 7 MHz Video Bandwidth
- Meets RS-250C Short Haul Transmission Specifications
- NTSC Compatible
- Real -Time 24 Bit Audio
- 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
- S-Video Connector
- Meets EIA RS-170, RS-343A Formats
- DB 9 Type Connectors for Audio

DESCRIPTION:

The DT/DR-1S2A series products incorporate digital encoding technology. This fiber optic module transmits one real-time, simplex 10-bit S-Video & 2 simplex channels of 24 Bit quality Audio over one optical 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 DT/DR-1S2A series products 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 DT/DR - 1S2A product family is available as rack mount cards and modules that can be installed in either Meridian's desk chaises or in 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 (87 VAC- 264VAC)

MARKETS:

√ Security and Surveillance
√ Access Control

SPECIFICATIONS:

Video

Format	NTSC
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	>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

Connectors

Video	S-Video
Optical	ST, FC
Power (module)	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 - Green	RX Optical Signal -Present/Absent
1 - Bi-color	Video Present / Overload
1 - Green	Video Sync. Present
2 - Red	Audio Overload
2 - Green	Audio Present

Physical

Dimensions (Card)	160 mm (6.3") L, 127 mm (5") H 44mm (0.80")W
Weight (Card)	450 gms (16 Oz)
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

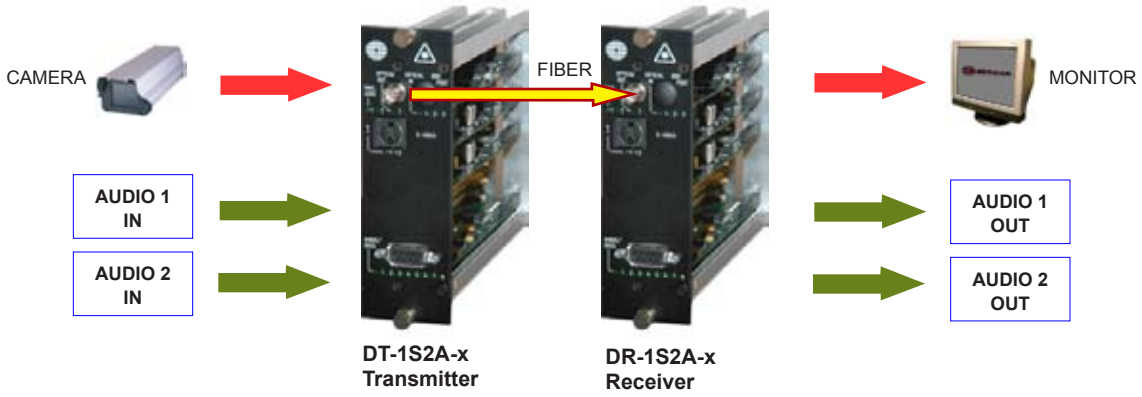
MTBF	>170,000 hours @ Ground Fix 35°C per MIL217F

Part Numbers:

D [ ] — 1S2A — X [ ] [ ]

- [ ]: T - TRANSMITTER VIDEO; R - RECEIVER VIDEO
- X: MULTIMODE - 1; SINGLEMODE - 3; DFB LASER - 7,9
- [ ]: CONFORMAL COATING - C; SpectraSmart™ DIAGNOSTIC - D
- [ ]: ST - MULTIMODE CONNECTOR; FC or ST - SINGLEMODE CONNECTOR

* *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 (Laser) 62.5 / 125	-3	-22	19	1300	ST	22
Singlemode (Laser) 9 / 125	-3	-22	19	1310	ST, FC	22
Singlemode (Laser) 9 / 125	+2	-22	24	1310 DFB	ST , FC	22
Singlemode (Laser) 9 / 125	+3	-22	25	1550 DFB	ST , FC	22

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