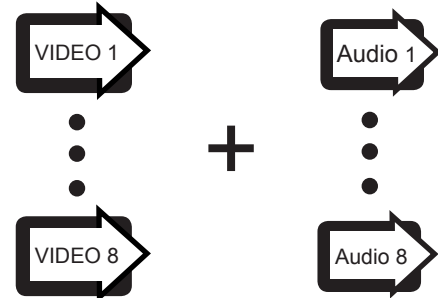


Digitally-Encoded Eight Channel Video with Eight Channels Audio



FEATURES:

- Digital Video Encoding
- 8 Channels of Real-Time Video Signals with 8 Channels of Real-Time 24 Bit Audio
- 7 MHz Video Bandwidth
- Meets RS-250C Medium 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

CONFIGURATIONS:

The DT/DR-8V8A product family is available as rack mount cards and modules that can be installed in Meridian's card chassis, desk chassis 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-1200/s, 4 slot desk / wall mount chassis (87VAC-264VAC).

MARKETS:

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

DESCRIPTION:

The DT/DR-8V8A series products incorporate digital encoding technology. This fiber optic module transmits 8 real-time, high performance digitally-encoded Video signal and 8 channels of 24 Bit quality Audio over one fiber. Both multimode and singlemode fiber versions are available.

OPTION 2

Multimode (62.5/125 & 50/125um fiber (standard))

Transmit side:	Receiver side:
DT-8V-1 (8-ch video Tx @ 1300nm)	DR-8V-1 (8-ch video Rx @ 1300nm)
DT-8A-0 (8-ch audio Tx @ 850nm)	DR-8A-0 (8-ch audio Rx @ 850nm)
SM-2-62MM (850/1300nm WDM) for 62.5um fiber - mux Or SM-2-50MM (850/1300nm WDM) for 50um fiber - mux	SD-2-62MM (850/1300nm WDM) for 62.5um fiber - demux Or SD-2-50MM (850/1300nm WDM) for 50um fiber - demux

OPTION 2

Multimode (50/125um fiber (laser-optimized))

Transmit side:	Receiver side:
DT-8V-0 (8-ch video Tx @ 850nm)	DR-8V-0 (8-ch video Rx @ 850nm)
DT-8A-1 (8-ch audio Tx @ 1300nm)	DR-8A-1 (8-ch audio Rx @ 1300nm)
SM-2-50MM (850/1300nm WDM) - mux	SD-2-50MM (850/1300nm WDM) - demux

OPTION 3

Singlemode

Transmit side:	Receiver side:
DT-8V-3 (8-ch video Tx @ 1300nm)	DR-8V-3 (8-ch video Rx @ 1300nm)
DT-8A-7 (8-ch audio Tx @ 1550nm) (DFB laser)	DR-8A-3 (8-ch audio Rx @ 1550nm)
SM-2-62MM (1310/1550nm WDM) for 62.5um fiber - mux Or SM-2-50MM (1310/1550nm WDM) for 50um fiber - mux	SD-2-SM (1310/1550nm WDM) - demux

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-8V8A series products are 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.

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

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 available on Request)
Total Harmonic Distortion	< 0.01% @ 1 KHz
Resolution	24 Bit

Optical

Fiber Data Rate	1.25 Gbs
-----------------	----------

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST, FC
Audio	DB9 Female

Power **

Card	15 Watts
------	----------

Quality

MTBF	>110,000 hours @ Ground Fix 35°C per MIL217F
------	---

* measured @ max. optical budget

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

Indicators (LEDs)

1 - Green	Power On
1 - Bi-color	TX Carrier/ Laser Over Current
1 - Bi-color	RX Carrier - Present / Error RX
1 - Bi-color	Optical signal - Present / Absent
8 - Green	Sync. Present
8 - Bi-color	Video Present / Overload
8 - Red	Audio Overload
8 - Green	Audio Present

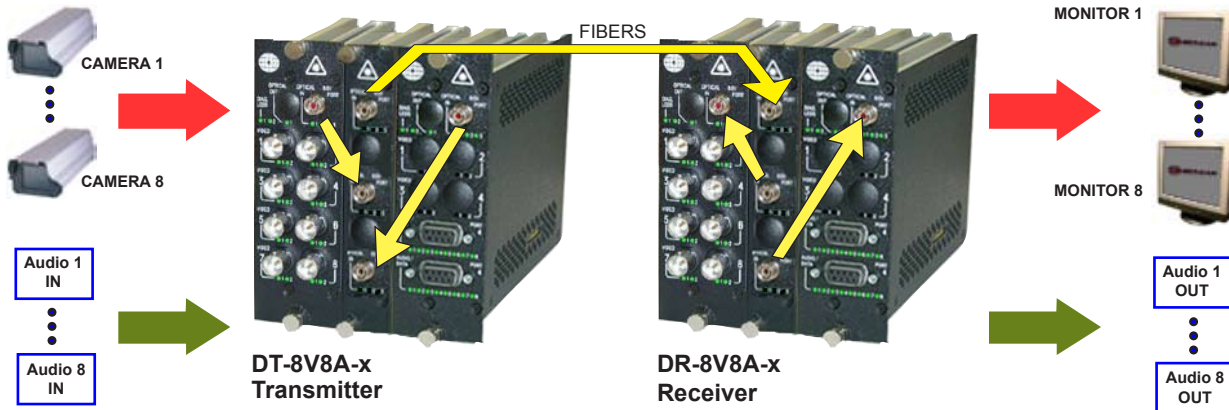
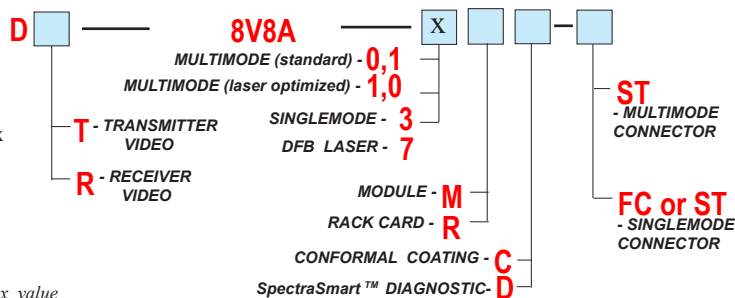
Physical

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

Part Numbers:



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	-20	17	1300	ST	24
Singlemode (FP Laser) 9 / 125	-3	-20	17	1310	ST, FC	24
Singlemode (DFB Laser) 9 / 125	+3	-20	23	1550	ST, FC	24

Meridian Technologies Inc.

700 Elmont Road. • Elmont, NY 11003 • 516. 285. 1000 • FAX 516. 285. 6300 • E-mail sales@meridian-tech.com
Visit our web side: www.meridian-tech.com or www.meridian-tech.tv

ver 04/04