



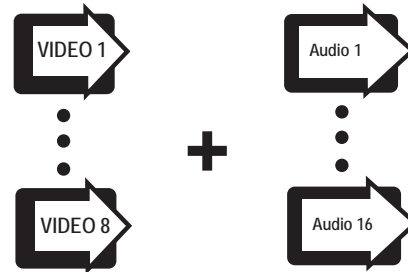
MERIDIAN
TECHNOLOGIES



DT/DR-8W16A

DigiFlex

**8-Channel, 10-bit Video &
16-Channel, 24-bit Digitally-Encoded
Video/Audio Transmitter / Receiver**



FEATURES:

- 10-Bit Video Digital Encoding
- Transmits 8 Real-Time Video Signals & 16 Audio channels over one optical fiber
- 7 MHz Video Bandwidth
- Meets RS-250C Transmission Specifications NTSC, PAL, SECAM Compatible
- 16 Channels of real-time 24-Bit, uni-directional Audio
- 10Hz to 20KHz audio bandwidth
- Greater than 90dB SNR for superb audio quality
- Wide Optical Dynamic Range: Eliminates Need For Optical Attenuators
- Laser Based Systems for Multimode & Singlemode fiber operation
- 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
- DB 9 Type Connectors for Audio
- 75 Ohm BNC Video Connector (Gold center pin)
- Meets EIA RS-170, RS-343A Formats

DESCRIPTION:

The DT/DR-8W16A series products incorporate digital encoding technology. This fiber optic module transmits 8 channels of 10-bit video & 16 channels of 24-Bit digitized Audio over one fiber. The DT/DR-8W16A accepts PAL, SECAM, or NTSC video formats. User-selectable input/output impedances of 600 Ohm, balanced and 47K Ohm, unbalanced are available for each audio channel. This product transmits the video & audio signals over one multimode or singlemode fiber using WDM technology. 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-8W16A series products is enhanced by its compatibility with Meridian's optional 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 DT/DR-8W16A product family is available as rack mount cards and modules that can be installed in various Meridian's chassis. This system can be configured in either star (module to rack) or trunking (rack to rack) configurations. This product requires 5 standard slots and can be mounted in Meridian's SR-1500, SR-2001 & SR-2000 chassis systems.

MARKETS:

Video/Audio transport
Pro Audio/Video
Courtroom & broadcast audio/video feeds
Distance Learning

SPECIFICATIONS:

Audio

In/Out Impedance.....	600 Ohms (Bal. / Un Bal.)
Frequencet Response.....	10Hz to 20KHz
SNR	>90dB (Weighted) @ 1KHz.
In / Out Level	-6 to +6 dBm (4V _p max.)
	(+18dBm available on Request)
Total Harmonic Distortion...	< 0.01% @ 1 KHz
Resolution	24 Bit

Video

Format	NTSC, PAL, SECAM
Voltage/Impedance	1 Vp-p, 75 Ohm, 1.5 Vp-p max.
Bandwidth	5 Hz to 6.8 MHz
Differential Gain	<0.6%
Differential Phase	<0.3°
SNR	>67 dB (weighted)*
Return Loss	>30 dB
Field Tilt	<0.5%

Optical

Fiber Data Rate.....	1.2Gbs
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Connectors

Optical	ST, FC
Audio.....	DB9 Female

Enviromental

Operating Temperature.....	-40°C to +75°C
Storage Temperature.....	-55°C to +85°C
Relative Humidity.....	0 to 95% Non-condensing

** 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
16- Red	Audio Overload
16 - Green	Audio Present
8 - Green	Sync. Present
8 - Bi-Color	Video Present/Overload

Power **

Card	14 Watts
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Quality

MTBF.....	>220,000 hours @ Ground Fix 35°C per MIL217F
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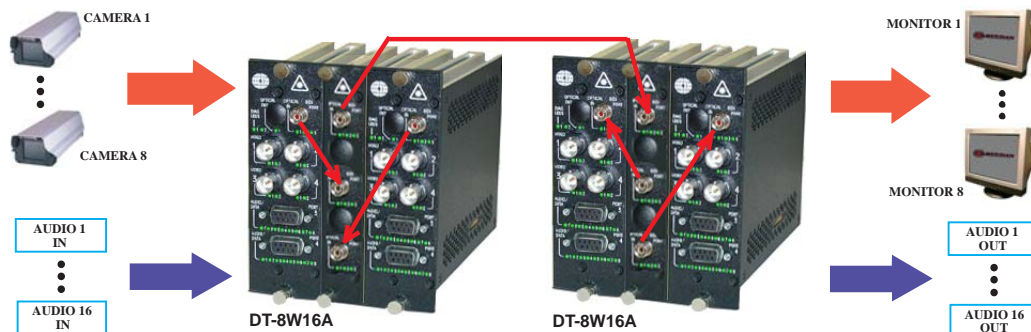
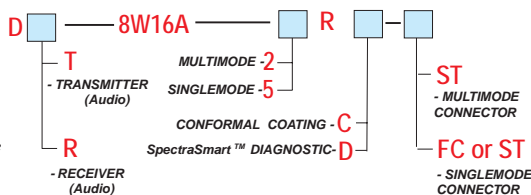
Physical

Dimensions:	160 mm (6.3") L, 133 mm (5.25") W 110 mm (4.3") H
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Weight:

Card.....	450 gms (16 Oz)
No. of Slots.....	5

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 (Laser) (62.5/125)	-5	-22	17	850/1300	ST	24
Singlemode (FP Laser) 9 / 125	-5	-22	17	1310/1550	ST, FC	24
Singlemode (DFB Laser) 9 / 125	+1	-22	23	1310/1550	ST, FC	24

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