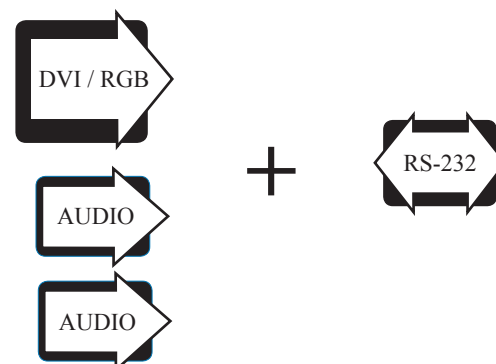


**Digitally-Encoded DVI / RGB
Video / Audio / Data
Transmission System**

FEATURES:

- Digital transmission of DVI / RGBHV / RGsB over one multimode fiber
- 2-ch 24-bit Audio + 1-ch bi-directional RS-232 data
- Supports VGA, SVGA, XGA, SXGA & UXGA formats (640x480x60Hz to 1600x1200x75Hz)
- HDTV resolutions of 480p, 720p, and 1080i (RGB/DVI)
- H & V Sync Frequency range of 60 to 150Hz (vertical), 30 to 130kHz (horizontal)
- Uses all-digital processing & transmission for crystal-clear signals and no color skewing
- Real-time video transmission for exceptional quality & resolution – no video compression
- Requires no adjustments, equalization or de-skewing during setup
- Data throughput in excess of 6 Gbps (uncompressed). Most systems have 1.25 Gbps throughput with significant compression
- DDC (Data Display Channel) optional
- Standard DVI-I video connector with dongle included for RGB interface
- USB interface for remote monitor adjustments
- Wide optical dynamic range: Eliminates need for optical attenuators
- Multimode Laser Based System
- SpectraSmart™ Network Management Compatible

DESCRIPTION:

Meridian's RGB-T/R-110 product is part of Meridian's DigiView product family and is a state-of-the-art, cost-effective, high performance Video/Audio/Data transmission system that transports the following signals: 1-ch fully-compliant DVI, RGsB or RGBHV signal over one multimode fiber and 2 one-way audio and 1 bi-directional RS-232 data channel over a second, multimode fiber. The supplied adapters (dongles) allow easy interface to standard RGBHV connectors on computers and monitors. The two audio channels provides professional-grade transmission of line level stereo audio while the data channel will transmit standard RS-232 data such as that from document scanners, computer mouse, touch-screen display information, etc. The RGB-T/R-110 provides real-time, digitized transmission of the RGB and H&V sync signals. Because it transmits signals in real-time, no video information is lost and is a perfect solution for dynamic video signals with crystal clear video and no color pixel skewing.

The user can further enhance the video performance with the use of the computer USB interface. This data channel allows the user to adjust brightness, contrast, H&V position, picture sharpness, color, etc.

As with all of Meridian's DigiView products, this unit has a 10-year warranty

CONFIGURATIONS:

This RGB-T/R-110 product is available as rack mount cards and modules that can be installed in either Meridian's desk chassis or in 19" racking frames. 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 (87 VAC- 264VAC)

MARKETS:

- ✓ Courtrooms
- ✓ Medical & MRI displays
- ✓ Air traffic control
- ✓ Military information displays
- ✓ Stock exchanges
- ✓ Concert & sporting event video displays
- ✓ Video walls
- ✓ CAD / CAM

SPECIFICATIONS:

Video

Number of Video Channels	1 of DVI, RGsB (sync-on-green) or RGBHV (TTL H & V sync)
Horizontal Scan Rate	30kHz to 130kHz (auto sensing)
Vertical Scan Rate	60-150Hz (auto sensing)
SNR	>60dB
Resolution Range.....	640x480x60 to 1600x1200x75
HDTV Resolution supported ..	480p, 720p, 1080i (RGB/DVI)
RGB Processing	24-bits, no compression or scaling
Input Impedance/Level	RGB: 75 Ω / 714 mV p-p, H&V 3-5V p-p, 1V p-p w/S.O.G

Data

Formats	RS-232
Rate RS-232	DC to 125 Kb/s
Bit Error Rate.....	10 ⁻⁹ *

Audio

In/Out Impedance	600 Ohms (Bal. / Un Bal.)
Frequenct Response	10Hz to 20KHz
SNR	>90dB (Weighted) @ 1KHz.
In / Out Level	-8 to +8 dBm (4VP-Pmax.) (+18dBm available on Request)
Total Harmonic Distortion	< 0.01% @ 1 KHz
Resolution	24 Bit

Optical

Number of fibers	2
Fiber type	Multimode (62.5 or 50um)
Wavelength	850nm band
Operating distance	Up to 1km (50um fiber)* Up to 500m (62.5um fiber)*

Enviromental

Operating Temperature	-10°C to +50°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

Part Numbers:

RGB-	<div><div>T</div><div>R</div></div>	-	<div><div>1-YES</div><div>0-NO</div></div>	<div><div>1-YES</div><div>0-NO</div></div>	<div><div>1-YES</div><div>0-NO</div></div>	-	<div><div>1-SM</div><div>0-MM</div></div>	-	<div><div>M</div><div>R</div></div>	-	<div><div>B</div></div>	<div><div>C</div></div>	<div><div>D</div></div>
	Transmitter / Reciever Video		2 channels Uni-Directional Audio	1 channel Bi-Directional Data	Keyboard, Mouse		Single Mode / Multimode		Module / SubRack Card		DDC	Conformal Coating	SpectraSmart™ Diagnostic

For DVI products: RGB part of Part numbers should be changed to DVI.

Connectors

Video	DVI-I (female) HD-15 female (on dongle)
Audio/Data	DB-25F
Optical	ST (two)
USB	4-pin USB (type B)
Power	See SR series chassis for details

Indicators (LEDs)

Power	Green
Diagnostic	Green (OK), Red (alarm)
Tx carrier	Green (OK), Red (alarm)
Rx carrier	Green (OK), Red (alarm)
DVI active	Green
RGB active	Green
SHV (sync H&V)	Green
SOG (sync on green)	Green
USB active	Green (Rx-Data), Red (Tx-Data)
Data Present	Green
Audio Present	Green (2)
Audio Overload	Red (2)

Physical

Dimensions (2 Cards)	160 mm (6.3") L, 127 mm (5") W 40mm (1.60") W
Weight (2 Cards)	900 gms (32 Oz)
No. of Slots	2
Module	See SR-1000 Brochure

Quality

MTBF	>120,000 hours @ Ground Fix 35°C per MIL217F
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Power **

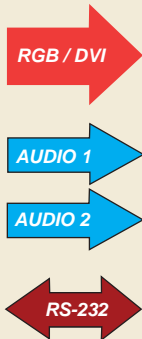
Card	7 Watts
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* Based on maximum resolution & fiber bandwidth

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



RGB / DVI SOURCE

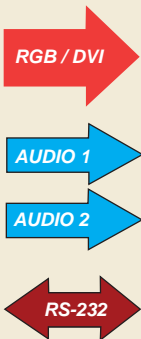


RGB-T-110-0

FIBER



RGB-R-110-0



RGB / DVI MONITOR

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 & 50/125	+2	-8	10	850	ST	15