

### 200 MHz VGA/RGB Video with Audio System For Ultra High Resolution Remote Displays

The RGB-3004 is a four-fiber Amplitude Modulated (AM), LED- or Laser-based VGA-RGB/Video with Digital Audio Unbalanced and Balanced Phoenix 5 Pin for RCA(L/R) stereo jack. A 15 Pin VGA interface port provides H/V Sync or Composite External Sync or Sync on Green or all three channels.

It is ideal for the extension of any high resolution Video signal such as a CAD/CAM graphics workstation. Units come with a built-in Automatic Gain Control (AGC) to maintain constant Video output for each color.

#### System Design

Status indicators for: Power On, VGA H/V Sync present. All units come as a Stand Alone version. Units can be rack-mountable with optionally provided brackets for a flat surface such as a desk top in a cabinet, or mounted in a 19" Rack. RGB-3003 unit comes with internal 87-264 V<sub>AC</sub> power supply that operates with a selectable power supply. The regulated switching power supply has short circuit protection, and an input operating voltage of 110/220 V<sub>AC</sub>.



#### Features

- Ultra-high resolution (1840 x 1634)
- Multimode operation over 4 fibers
- 200 MHz video bandwidth
- VGA/SVGA with Audio
- True DC restoration with AGC
- Flat frequency response
- Complies with RS-170, RS-170A & RS-343 EIA standards
- No EMI or RFI and no ground loops
- Stand Alone or Mounting Brackets
- Ideal for CAD/CAM workstation extensions

865	1310	1550	Type	Mode	Wavelength Suffix	Fiber Type	Output Power	Receiver Sensitivity	Optical Loss Budget	Range*	Conn Type
•			LED	MM	L0	50/125μ	-13 dBm	-20 dBm	7 dB	1 km	ST
•						62.5/125μ	-10 dBm	-20 dBm	10 dB	2 km	ST
	•		Laser	SM	L2	09/125μ	-8 dBm	-16 dBm	8 dB	8 km	FC

\* Chromatic dispersion and additional losses should be taken into account

## Video

Video in/out impedance	75 $\Omega$
Video in/out level	1 volt peak to peak, 0.7 volts without sync
Video bandwidth	10 Hz to 200 MHz @ -3dB
Grayscale linearity distortion	< 2.0 % typical
Pixel intensity distortion	< 2.0° typical
Linearity	$\pm$ 1.1 % typical
Tilt	$\leq$ 0.5 % typical
Maximum horizontal frequency	128 KHz
Maximum refresh rate	120 KHz
Signal to noise ratio	>55 dB using RS-250C standards @ 1 km
Connector type	BNC

## Audio

Audio in/out impedance	600 $\Omega$ balanced or unbalanced
Audio in/out level	-6 to +6 dBm
Frequency response	10 Hz to 20 KHz
Signal to noise ratio	> 60 dB
Total harmonic distortion	< 1.0 %, 1 KHz at maximum modulation
Connector type	Phoenix 5 Pin Unbalanced 1 (L/R) to RCA Phoenix 5 Pin Balanced to 2 Mono (L/R) to XLR

## General

Dimensions & Weight	13.75" L x 8.50" W x 1.65" H	39 oz
Material	Aluminum casing	
Operating temperature	-20° C to +70° C	
Storage temperature	-30° C to +85° C	
Humidity	0 to 95% non-condensing	
Operating voltage	110/220 V <sub>AC</sub>	
Vibration	Up to 5 g's	
Shock	Up to 12 g's	

## Diagnostics

Status monitoring	LED indication
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## Sample Configuration

