

200 MHz VGA/RGB Video with Keyboard/Mouse, Audio, and Auxilliary Data For Ultra High Resolution Remote Displays

The RGB-3006 is a six-fiber Amplitude Modulated (AM), LED or Laser-based VGA-RGB/Video with Keyboard/Mouse PS/2, one RS-232 Aux/Data and two Audio ports. 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 $V_{\rm AC}$ 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 $V_{\rm AC}$.



Features

- Ultra-high resolution (1840 x 1634)
- Multimode operation over 4 fibers
- 200 MHz video bandwidth
- VGA/SVGA with Keyboard/Mouse PS/2, one RS-232 Aux/Data and two Audio ports.
- 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	Туре	Mode	Wavelength Suffix	Fiber Type	Output Power	Receiver Sensitivity	Optical Loss Budget	Range*	Conn Type
•			LED	MM	LO	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

RGB/VGA/DVI

Video

Video in/out impedance 75Ω

> 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 ± 1.1 % typical Linearity

Tilt ≤ 0.5 % typical

Maximun horizontal frequency 128 KHz

> Maximum refresh rate 120 KHz

Signal to noise ratio >55 dB using RS-250C standards @ 1 km

Connector type

Audio

Audio in/out impedance $600~\Omega$ balanced or unbalanced

Audio in/out level -6 to +6 dBm 10 Hz to 20 KHz Frequency response

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

Data

Data rate DC to 19.2 Kbps

10-9 Bit error rate

Data formats available Keyboard/Mouse PS2 6Pin Din type

Connector type Auxilliary RS-232 port DB9 Pin

General

Dimensions & Weight 13.75" L x 8.50" W x 1.65" H 39 oz

> Material Aluminum casing

-20° C to +70° C Operating temperature

Storage temperature -30° C to +85° C

Humidity 0 to 95% non-condensing Operating voltage 110/220 V_{AC} Selectable

> Vibration Up to 5 g's Shock Up to 12 g's

Diagnostics

LED indication Status monitoring

Optiva™ Configurable Communication Platform

Network Management

SDI & HD-SDI

Composite Video, Audio & Data

RGB/VGA/DVI

Audio/FSK/Intercom

Data (Ethernet/Serial/USB)

CATV/RF & L-Band

Optical Switching, Routing & Redundancy

> Passive Multiplexing Solutions

> > Enclosures, Racks & Frames

> > > **Power Supplies** & Accessories







Emissions: FCC Part 15, ICES-003, AS/NZS, 3548, EN55022 Immunity: ENVS0204,

EN61000-4-2,3,4,5,6,11 UL1950, CAN/CSA 22.2, NO.950-95

MADE IN THE USA

Sample Configuration

