RGB-4006-A/B/C

Single Fiber RGB/VGA, Stereo Audio Duplex Data & Keyboard/Mouse

Digital VGA/RGB Video For Ultra-High Resolution Remote Display

The RGB-4006 is a single-fiber, LED or Laser-based VGA-H/V RGB/Video with Keyboard & Mouse, stereo Audio and Data digitally transmitted over one fiber. It boosts performance with precise color management, reduced fiber handling and self-configuration.

It is ideal for the extension of any high resolution Video signal such as a CAD/CAM graphics workstation, plasma display screens, LCD/DLP projectors, military C3 and C41 systems, theaters and stadiums.

The RGB-4006 simplifies cabling infrastructures and has LEDs for Power, Optical link, Video activity, Signal error, System status, Monitor detection, Mouse detection, Keyboard detection & Optical signal present.

RGB-4006 Options

- RGB-4006A 1280 x 1024 x 75Hz 1.25Gb/s
- RGB-4006B 1600 x 1200 x 75Hz 2.30Gb/s
- RGB-4006C 1800 x 1440 x 75Hz 3.11Gb/s

System Design

Sync on green, separate HS/VS, or composite. 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 Shelving. RGB-4004 unit comes with external 8-24 VDC power supply.

Features

- Digital VGA/Video High resolution RGB/Video
- Multimode or singlemode operation over single fiber, reducing fiber handling from 5-to-1 fiber
- Distance of 1.0 km over multimode and 65 km over singlemode
- Self-configuring, precision color transmission
- 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

1310	1550	1270-1610 (CWDM)	Type	Mode	Wavelength Suffix	Fiber Type	Output Power	Receiver Sensitivity	Optical Budget Loss	Range*	Conn Type
•			Laser	MM	L1	50/125µ	-8 dBm	-22 dBm	14 dB	1 km	ST
•			Laser	MM	L1	62.5/125µ	-8 dBm	-24 dBm	16 dB	2 km	ST
•			Laser	SM	L2	09/125µ	-4 dBm	-22 dBm	18 dB	25 km	FC
		•	Laser	SM	L4	09/125µ	0 dBm	-20 dBm	20 dB	40-65 km	FC

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

RGB/VGA/DVI
Hi-Res Video Transmission

Video	Analog RGB Format
Video in/out impedance	75 Ohm
Video in/out level	.7 volt peak to peak, 1 volt with sync
Video bandwidth	10 Hz to 300 MHz @ -3dB
Grayscale linearity distortion	< 1.0 % typical
Pixel intensity distortion	< 2.0 % typical
Linearity	± 1.1 % typical
Tilt	< 0.5 % typical
Maximum horizontal frequency	93.8 KHz
Maximum refresh rate	1280 x 1024 (option A), 1600 x 1200 (option B)
	1800 x 1440 (option C) @ 75 Hz
Signal to noise ratio	>52 dB using RS-250C standards @ 500 meters
Connector type	HD15 Pin female
Audio	
Channels	1 stereo @ 24 bits
Audio in/out impedance	600Ω or 47kΩ - balanced or unbalanced
Audio in/out level	-6 to +6 dBm
Frequency response	10 Hz to 20 KHz @ -3dB
Signal to noise ratio	> 90 dB @ 1 kHz (weighted)
Total harmonic distortion	< 1.0 %, 1 KHz at maximum modulation
Connector type	Phone Jack
Data	
RS-232	19.2 Kb/s DB9 Pin Male
Keyboard/Mouse	Mini-DIN 6 pin
General	
Dimensions	1RU Rack Mount: 19" L X 7.25" W X 1.75" H
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	85-265 VAC50/60 Hz @ 100 mA
Diagnostics	
Status monitoring	LED indicators

10 YEAR WARRANTY

CE

FCC PART 15 COMPLIANT

Emissions: FCC Part 15, ICES-003, AS/NZS, 3548, EN55022
Immunity: ENVS0204, EN61000-4-2,3,4,5,6,11
Safety: UL1950, CAN/CSA 22.2, NO.950-95

MADE IN THE USA

Sample Configuration