RGB-4006A/B
Single Fiber VGA/RGB, Stereo Audio Duplex Data & Keyboard/Mouse

VGA Video Extender w/Stereo Audio, Duplex Data and Keyboard/Mouse for High Resolution Connectivity to Remote Systems

The RGB-4006 is a single-fiber, laser-based KVM extender offering VGA (RGB H/V) video, stereo audio, RS-232 duplex data and keyboard/mouse. It features precision color calibration, uncompressed video stream, and auto-negotiation, creating an optimal remote computing experience.

The RGB-4006 Series is ideal for higher resolution video applications such as digital video editing suites, CAD/CAM graphics workstations, LCD/plasma public display screens, video projectors, military C3/C41 systems, and theaters or stadiums.

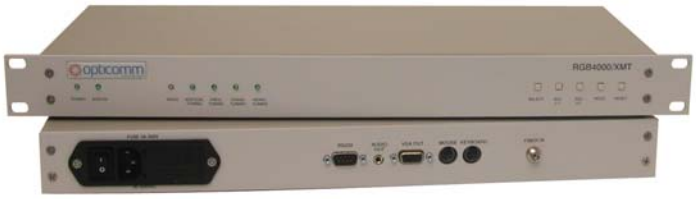
This single fiber system simplifies cabling infrastructures and provides visual LED indicators for power, optical link, video activity, signal error, system status, monitor detection and optical signal presence.

System Design

All units come as either rack-mount (1RU) or stand-alone versions. The 1RU rack-mount version includes an internal 110/220V universal power supply while the stand-alone version comes with an external 12VDC power supply.

Versions Available

- RGB-4006A 1280 x 1024 @ 75Hz
- RGB-4006B 1600 x 1200 @ 75Hz



Rack-Mount

Stand-Alone

Features

- Optical transport of Analog VGA video, Stereo audio and duplex RS-232 Serial data.
- Requires only one multimode or singlemode fiber
- Supports distances up to 2.5 km over multimode and 65 km over singlemode cable
- Auto-negotiation with precision color calibration
- 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
- Sync on green, separate HS/VS
- Rack-Mount (1RU) or Stand-Alone versions available

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	16 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	L3	09/125µ	0 dBm	-20 dBm	20 dB	40 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.

Video	Analog VGA
Video in/out impedance	75 Ω
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)
Signal to noise ratio	>60 dB using RS-250C standards @ 1 km
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	1/8" stereo jack
Data	
RS-232	19.2 Kb/s DB9 Pin Male
Keyboard/Mouse	Mini-DIN 6 pin
General	
Dimensions	Rack-Mount (1RU): 19" L X 7.25" W X 1.75" H Stand-Alone: 6.25" L X 6.13" 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	Front panel LED indicators

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

10 YEAR WARRANTY

ISO 9001:2000 CERTIFIED

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