

## Synchronous, Single Fiber, Digital, RGB and VGA Fiber Optic Transport System



- Transport **RGB, X VGA, SVGA and UXGA** signals plus various configurations of H and V sync over **ONE fiber**.
- **1900 x 1600 @ 75 Hz**
- **CWDM 18 Channels of RGB/UXGA** on one fiber, RGB-5000-FTX-7-xxxx
- **Daisy-chain** one UXGA Source to Multiple Monitors, RGB-5000-FTX/FRX-DC
- **Ethernet & Data** option available, RGB-5000-FTX/FRX-ET
- **Lower Cost, RGB/SXGA** on ONE fiber, RGB-5000-SXGA
- Integrated **Stereo Audio option** available
- **Keyboard, Mouse and Audio** support available with **KMA-2000-FMX**.
- System has **loop-through HD15 inputs** and one HD15 output.
- **Fully Automatic**, no user adjustments or external computer calibration and set-up.

The RGB-5000 provides horizontal gen-lock for a fully synchronous and jitter free high resolution video transport. The video and sync jitter reduced to as low as 4 – 5 nano seconds. The data throughput is 3.125 Gbps. Most systems have a 1.25 GB/S data throughput with high compression. The system enables remoting of a monitor from the video source. It provides electrical isolation and immune to electrical noise in the transmission path. Application include commodity and stock exchanges, medical and MRI displays, advertising and signs, sporting and concert video displays, video walls, digital cinema, radar displays, air traffic control, military information displays plus many more...

### SPECIFICATIONS

#### VIDEO SIGNAL

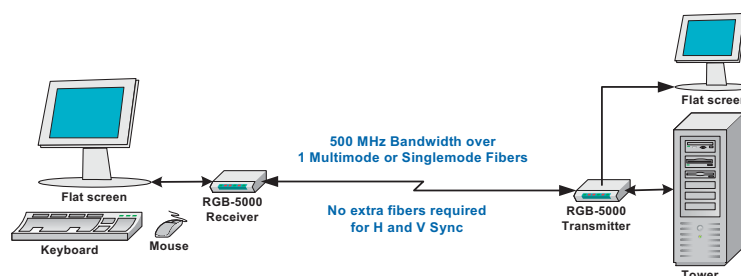
Number of Channels: .....	3
Standards Supported: .....	RGB HV, RGsB, VGA, SVGA, UXGA with TTL H & V sync, Sun and Apple Macintosh with TTL, composite sync, Silicon Graphics with sync on-green
Scan Rates:	
Horizontal: .....	15.75 KHz to 130 KHz
Vertical: .....	50-150 Hz
Signal-to-Noise Ratio: .....	>60 dB
Resolution:	
Singlemode: .....	1900 H x 1600 V @ 75 Hz
Multimode:.....	1900 H x 1600 V @ 75 Hz

#### OPTICAL

Number of Optical Fibers: .....	1
Wavelength:	
Multimode, RGB-5000-FTX-2: .....	850 nm
Singlemode, RGB-5000-FTX-50/-52:.....	1310 nm
Optical Budget, minimum: .....	8 dBm (-50) SM, 13 dBm (-52) SM, 6 dBm (-2) MM
Operating Distance, (-50) SM: .....	up to 2 KM over 8.3/125 $\mu$ m
Operating Distance, (-52) SM: .....	up to 15 KM over 8.3/125 $\mu$ m
Operating Distance, (-2) MM: .....	up to 600 meters over 62.5/125 $\mu$ m
Emitter Type: .....	Laser
Transmitter Power, minimum: .....	-10 dBm (-50) SM, -5 dBm (-52) SM, -9 dBm (-2) MM
Receiver Sensitivity, maximum: .....	-18 dBm (-50) SM, -18 dBm (-52) SM, -15 dBm (-2) MM
Dimensions:	
RGB-5000: (L x W x H).....	7" L x 5 3/4" W x 1 3/4" H
Triple Rack-mount Kit for 3 modules (Part number -RMT): .....	7" L x 19" W x 1 3/4" H
Power consumption:.....	15 Watts



### APPLICATION DIAGRAM FOR THE RGB-5000 RGB AND VGA FIBER OPTIC TRANSPORT SYSTEM OVER ONE FIBER



The RGB-5000 permits the separation of the display from the image source. A common application is the separation of a computer monitor, keyboard and mouse from the large bulky processor unit.

86290909

Vertrieb / Distributor:

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# RGB-5000 Series

## Ordering Information



### RGB-5000 Series Digital RGB and SXGA Fiber Optic Transport System, ONE Fiber, Multimode (SIN 58-6)

RGB-5000-FTX-SXGA-2-ST	Digital RGB and SXGA Fiber Optic Transmitter, Multimode, -9dBm, 1 fiber, loop-through HD15 inputs, 1280 by 1024, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, SXGA, SSXGA and SXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX unit for keyboard, mouse & audio) (Includes wall-mount power supply)
RGB-5000-FRX-SXGA-2-ST	Digital RGB and SXGA Fiber Optic Receiver, Multimode, -15 dBm, 1 fibers, HD15 output, 1280 by 1024, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, SXGA, SSXGA and SXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)
RGB-5000-FRX-SXGA-2-ST-DC	Digital RGB and SXGA Fiber Optic Receiver with Daisy Chain Optics. Multimode, -15 dBm, 1 fibers, HD15 output, 1280 by 1024, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, SXGA, SSXGA and SXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)

### RGB-5000 Series Digital 500 MHz RGB and SXGA Fiber Optic Transport System, ONE Fiber, Singlemode and CWDM (SIN 58-6)

RGB-5000-FTX-SXGA-50-ST	Digital RGB and SXGA Fiber Optic Transmitter, Singlemode, -10dBm, 1 fiber, loop-through HD15 inputs, 1280 by 1024, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, SXGA, SSXGA and SXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)
RGB-5000-FTX-SXGA-52-ST	Digital RGB and SXGA Fiber Optic Transmitter, Singlemode, -5dBm, 1 fiber, loop-through HD15 inputs, 1280 by 1024, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, SXGA, SSXGA and SXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)
RGB-5000-FTX-SXGA-7-XXXX-15KM-ST	Digital RGB and SXGA Fiber Optic Transmitter, Singlemode, CWDM, 15KM, 1 fiber, loop-through HD15 inputs, 1280 by 1024, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, SXGA, SSXGA and SXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)
RGB-5000-FTX-SXGA-7-XXXX-40KM-ST	Digital RGB and SXGA Fiber Optic Transmitter, Singlemode, CWDM, 40KM, 1 fiber, loop-through HD15 inputs, 1280 by 1024, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, SXGA, SSXGA and SXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)
RGB-5000-FRX-SXGA-50-ST	Digital RGB and SXGA Fiber Optic Receiver, Singlemode, -18dBm, 1 fibers, HD15 output, 1280 by 1024, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, SXGA, SSXGA and SXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)
RGB-5000-FRX-SXGA-50-ST-DC	Digital RGB and SXGA Fiber Optic Receiver with Daisy Chain Optics. Singlemode, -18dBm, 1 fibers, HD15 output, 1280 by 1024, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, SXGA, SSXGA and SXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)

### RGB-5000 Series Digital 500 MHz RGB and UXGA Fiber Optic Transport System, ONE Fiber, Multimode (SIN 58-6)

RGB-5000-FTX-2-ST	Digital RGB and UXGA Fiber Optic Transmitter, Multimode, -9dBm, 1 fiber, loop-through HD15 inputs, 1900 by 1600, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, UXGA, SUXGA and UXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX unit for keyboard, mouse & audio) (Includes wall-mount power supply)
RGB-5000-FRX-2-ST	Digital RGB and UXGA Fiber Optic Receiver, Multimode, -15 dBm, 1 fibers, HD15 output, 1900 by 1600, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, UXGA, SUXGA and UXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)
RGB-5000-FRX-2-ST-DC	Digital RGB and UXGA Fiber Optic Receiver with Daisy Chain Optics. Multimode, -15 dBm, 1 fibers, HD15 output, 1900 by 1600, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, UXGA, SUXGA and UXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)

### RGB-5000 Series Digital 500 MHz RGB and UXGA Fiber Optic Transport System, ONE Fiber, Singlemode and CWDM (SIN 58-6)

RGB-5000-FTX-50-ST	Digital RGB and UXGA Fiber Optic Transmitter, Singlemode, -10dBm, 1 fiber, loop-through HD15 inputs, 1900 by 1600, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, UXGA, SUXGA and UXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)
RGB-5000-FTX-52-ST	Digital RGB and UXGA Fiber Optic Transmitter, Singlemode, -5dBm, 1 fiber, loop-through HD15 inputs, 1900 by 1600, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, UXGA, SUXGA and UXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)
RGB-5000-FTX-7-XXXX-15KM-ST	Digital RGB and UXGA Fiber Optic Transmitter, Singlemode, CWDM, 15KM, 1 fiber, loop-through HD15 inputs, 1900 by 1600, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, UXGA, SUXGA and UXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)
RGB-5000-FTX-7-XXXX-40KM-ST	Digital RGB and UXGA Fiber Optic Transmitter, Singlemode, CWDM, 40KM, 1 fiber, loop-through HD15 inputs, 1900 by 1600, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, UXGA, SUXGA and UXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)
RGB-5000-FRX-50-ST	Digital RGB and UXGA Fiber Optic Receiver, Singlemode, -18dBm, 1 fibers, HD15 output, 1900 by 1600, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, UXGA, SUXGA and UXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)
RGB-5000-FRX-50-ST-DC	Digital RGB and UXGA Fiber Optic Receiver with Daisy Chain Optics. Singlemode, -18dBm, 1 fibers, HD15 output, 1900 by 1600, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, UXGA, SUXGA and UXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)

### RGB-5000 Series Digital 500 MHz RGB and UXGA Fiber Optic Transport System, ONE Fiber, Singlemode with 10BaseT & RS232/RS422 (SIN 58-6)

RGB-5000-FTX-50-ST-ET	Digital RGB and UXGA Fiber Optic Transmitter with Duplex 10BaseT Ethernet and RS232/RS422 Data Channels, Singlemode, -10dBm, 1 fiber, loop-through HD15 inputs, 1900 by 1600, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, UXGA, SUXGA and UXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)
RGB-5000-FRX-50-ST-ET	Digital RGB and UXGA Fiber Optic Receiver with Duplex 10BaseT Ethernet and RS232/RS422 Data Channels, Singlemode, -18dBm, 1 fibers, HD15 output, 1900 by 1600, supports all sync formats, RGB HV, RGSB, YsUV, YcCrCb, UXGA, SUXGA and UXGA, Component and Analog HDTV signals. (May require -AUDIO, -RMT, -BLANK) (use KMA-2000-FMX to add keyboard, mouse & audio) (Includes wall-mount power supply)
-AUDIO	Stereo Audio Option for the RGB-5000. (1) each for transmitter & receiver side.
-RMT	Triple Rack-mount Kit (1 kit)
-BLANK	Blank panel for rack-mounting kit
TRI-PS-5VDC	Triple Power Supply, 5VDC, 6 Amps used to power up to three RGB-5000

### Options and Accessories

-KMM	Add PS/2 Keyboard and Serial Mouse support for the RGB-2000, requires a 4th fiber, Multimode ONLY (option required for both the transmitter and receiver) (PS/2 Mouse Not Supported)
-KMAM	Add PS/2 Keyboard, Serial Mouse and Audio support for the RGB-2000, includes Stereo Line level inputs and outputs and Microphone input with AGC, requires a 4th fiber, Multimode ONLY (option required for both the transmitter and receiver) (PS/2 Mouse Not Supported)
KMA-2000-FMX-35M	Stand-alone, PS/2 Keyboard, Serial Mouse and Audio Fiber Link includes Stereo Line level inputs and outputs and Microphone input with AGC, requires a 2nd fiber, Multimode & Multimode. (PS/2 Mouse Not Supported) (requires KMA-2000-FMX-53) (Includes wall-mount power supply)
KMA-2000-FMX-53M	Stand-alone, PS/2 Keyboard, Serial Mouse and Audio Fiber Link includes Stereo Line level inputs and outputs and Microphone input with AGC, requires a 2nd fiber, Multimode & Multimode. (PS/2 Mouse Not Supported) (requires KMA-2000-FMX-35) (Includes wall-mount power supply)
-KMS	Add PS/2 Keyboard and Serial Mouse support for the RGB-2000, requires a 4th fiber, Singlemode ONLY (option required for both the transmitter and receiver) (PS/2 Mouse Not Supported)
-KMAS	Add PS/2 Keyboard, Serial Mouse and Audio support for the RGB-2000, includes Stereo Line level inputs and outputs and Microphone input with AGC, requires a 4th fiber, Singlemode ONLY (option required for both the transmitter and receiver) (PS/2 Mouse Not Supported)
KMA-2000-FMX-35S	Stand-alone, PS/2 Keyboard, Serial Mouse and Audio Fiber Link includes Stereo Line level inputs and outputs and Microphone input with AGC, requires a 2nd fiber, Singlemode & Multimode. (PS/2 Mouse Not Supported) (requires KMA-2000-FMX-53) (Includes wall-mount power supply)
KMA-2000-FMX-53S	Stand-alone, PS/2 Keyboard, Serial Mouse and Audio Fiber Link includes Stereo Line level inputs and outputs and Microphone input with AGC, requires a 2nd fiber, Singlemode & Multimode. (PS/2 Mouse Not Supported) (requires KMA-2000-FMX-35) (Includes wall-mount power supply)
-ATT15	15 dBm inline, optical attenuator, ST male to ST female (Requires 3 for each RGB-2000-FTX-50-ST Singlemode systems for Short Distances)
HD15M-CABLE	Male to Male, HD15 Connector, SVGA Monitor Cable, 6 feet (Use to connect the SVGA computer output to the RGB-2000-FTX transmitter)
HD15M-BNC-CABLE	Male HD15 to 5 BNC Connectors, SVGA Monitor Cable, 6 feet (Use to convert an HD15 to 5 BNC connectors. The RGB2000 supports both HD15 and BNC connectors)
13W3M-BNC-CABLE	Male 13W3M to 4 BNC Connectors, SVGA Monitor Cable, 6 feet (Use to convert a 13W3M to 4 BNC connectors. The Composite Sync signal should be connected the RGB-2000-FTX HSYNC input)