



7220 RGB Series

Digitally transmits high-resolution RGB (up to WXGA) and stereo audio over one single mode or multimode fiber optic core



Features

Ideal Applications:

Digital signage, command and control centers, auditoriums, stadiums and theaters, transportation hubs, distance learning, surgical and medical imaging

Supports VGA, SVGA, XGA and WXGA (640 x 480 up to 1366 x 768)

Supports HDTV resolutions of 480p, 720p and 1080i (RGBHV format only)

Uses all digital processing with no compression for crystal clear signals and no color pixel skewing

Requires no adjustments, equalization or de-skewing during installation

Transmits signals over one single mode or multimode fiber optic core at 1310 nm wavelength

Low audio/video skew, <300 uSec

Use with Fiberlink 8000 and 8100 Series Optical DAs for complex point-to-multipoint distribution

RoHS Compliant

7220/7221

Complete kit available for a point-to-point "ready to install" solution. Includes transmitter, receiver, power supplies, 250 meters of fiber and various audio and VGA cables. Box and card units available. Card versions fill one slot in 6000A card cage.

7222/7224/7226

4, 8 or 12 optical output models for point-to-multipoint distribution

Compatible with all 7220 Series receivers

1 RU case with internal power supply

7223/7225/7227

Compatible with all 7220 Series transmitters

Models support optical looping for daisy-chain distribution

Models support up to 4 baseband video and stereo audio outputs

Available in box version only. Power supply sold separately

7220 Series (all models) - Digital

Signal	Channels	Direction
RGB	1	→
Audio	2	→

Optical Outputs

Model	Standard	Loop-Thru
7220	1	0
7222	4	0
7224	8	0
7226	12	0
7225, 7227	0	1
7221, 7223	0	0

Baseband Outputs

Model	RGB	Audio
7221, 7225	1	2
7223, 7227	4	8
7222, 7224, 7226	1 loop-thru	2 channel loop-thru

Sales



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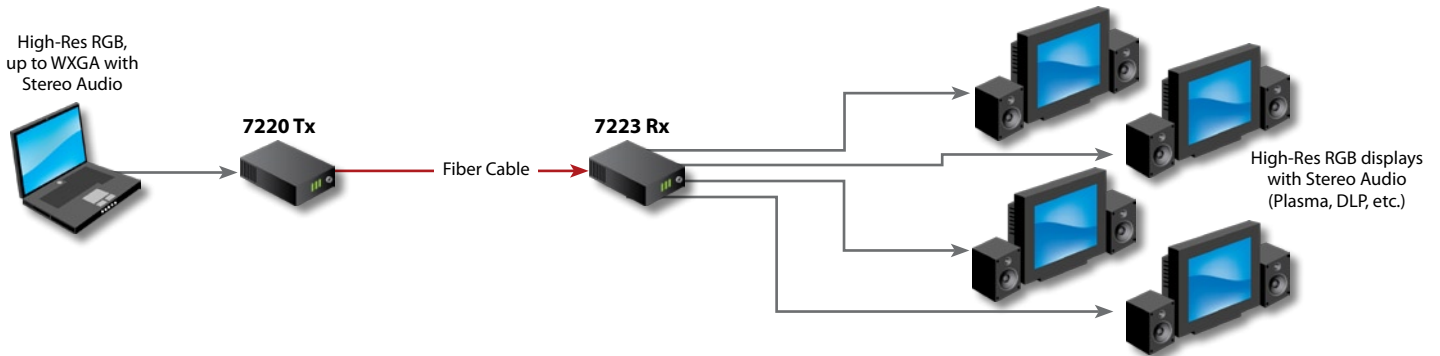
Point-to-Point Distribution

High-Res RGB,
up to WXGA with
Stereo Audio



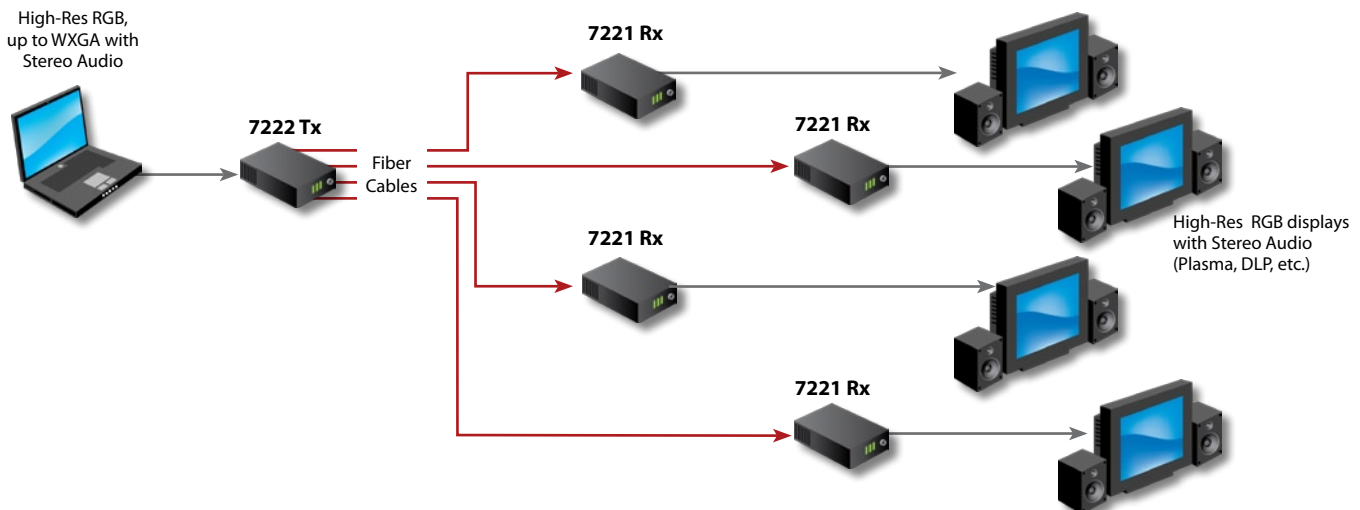
Point-to-Point Distribution; Multiple Baseband Outputs

High-Res RGB,
up to WXGA with
Stereo Audio



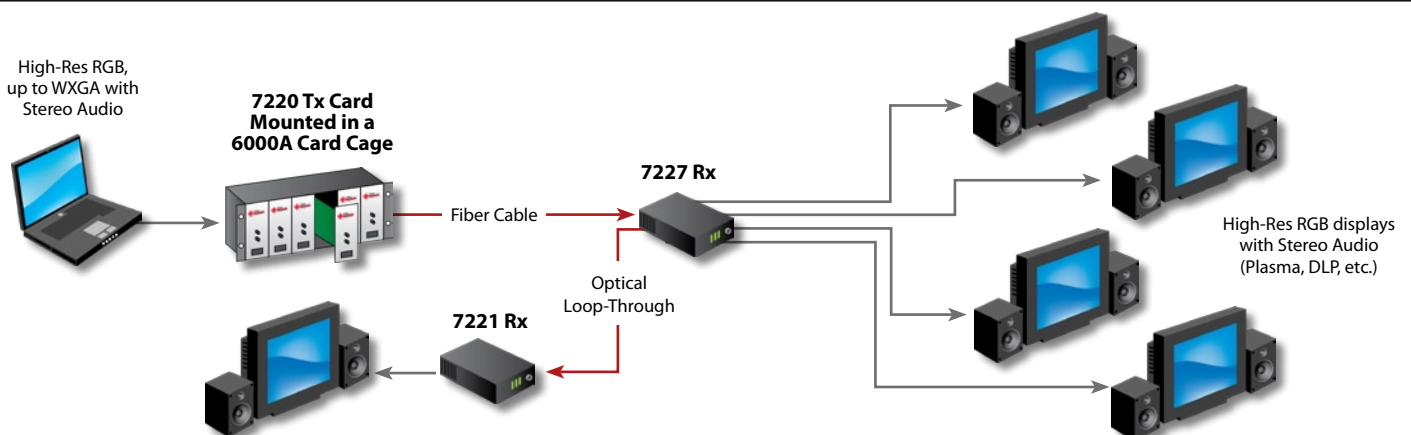
Point-to-Multipoint Distribution

High-Res RGB,
up to WXGA with
Stereo Audio



Drop-and-Repeat Distribution with Optical Loop-Through at Receiver; 1 or 4 Baseband Outputs

High-Res RGB,
up to WXGA with
Stereo Audio





7220 RGB Series

Operating Loss Budget & Maximum Usable Distance*

Wavelength	Loss(dB)	Distance (km)
1310 MM	0-15	0.75
1310 SM	0-15	30

SM = Single Mode Fiber
MM = Multimode Fiber

* Distance specifications are only approximate and are not guaranteed. Operating loss budget must not be exceeded.

Class 1 Laser product complies with FDA performance standard for laser products, Title 21, Code of Federal Regulations, Sub-Chapter J.

Video Specifications

Number of Video Channels Supported

7220, 7221, 7223, 7225, 7227	1 RGBHV
7222, 7224, 7226	1 RGBHV with active loop-thru on input

Number of Baseband Video Outputs

7221, 7225	1 RGBHV
7223, 7227	4 RGBHV
RGB Processing	24 bits, no compression, scaling or color space conversion
Input Impedance	RGB: 75 Ohms; H & V: Hi-Z
Input Level	RGB: 714 mV p-p; H & V: 3 to 5 V p-p
H Sync Frequency Range	31.5 to 60 kHz
V Sync Frequency Range	30 to 85 Hz
RGB Format Supported	RGB with separate H and V

Audio Specifications

Number of Audio Channels Supported

7220, 7221, 7223, 7225, 7227	2, unbalanced
7222, 7224, 7226	2, unbalanced, with passive loop-thru on input

Number of Baseband Audio Outputs

7221, 7225	2, unbalanced
7223, 7227	8, unbalanced
Frequency Response	+0/-0.5 dB, 20 Hz - 20 kHz
Bits-per-Sample/Sampling Rate	24 bits; 54 kHz
THD+N	0.005%, 20 Hz - 20 kHz

Maximum Audio Level	+10 dBu
SNR (A-Weighted)	95 dB
Channel Phase Differential	$\pm 0.1^\circ$
Crosstalk	Min. 95 dB (1kHz)
Input Impedance	>24 k Ohms
Output Impedance	< 1 Ohm
Audio to Video Differential Delay (skew)	<300 uSec

General Specifications

LED Indicators	Power, Video, Audio
Card version only of 7220 & 7221	Alarm LED

Power Requirements

7220*, 7221*	9-24 volts AC or DC, 5 watts
7222, 7224, 7226	95-250 volts AC, 47-63 Hz, 9 watts
7223*, 7225*, 7227*	9-24 volts AC or DC, 8 watts

*For operation from 95-250 volts AC, 50/60 Hz, a PDPS-1 plug-in adapter is required.

Physical Size

7220, 7221	5 W x 1.15 H x 5.25 L (inches) 127 W x 29 H x 133 L (mm)
7222, 7224, 7226	16.75 W x 1.75 H x 10 D (inches) 425 W x 44 H x 254 D (mm)
7223, 7225, 7227	6.5 W x 1.15 H x 8 L (inches) 165 W x 29 H x 203 L (mm)

Approximate Weight

7220, 7221	10 oz; 0.284 kg
7222, 7224, 7226	5.5 lbs; 2.6 kg
7223, 7225, 7227	1.2 lb; 0.55 kg

Optical Connectors ST

Operating Wavelength 1310 nm

Operating Temp. Range -20 to +60° C (7220/7221)
-20 to +50° C (all others)



7220 RGB Series



Schedule
Contract GS-03F-5063C



Backed by a 30-day satisfaction guarantee and a three-year limited warranty on parts and labor. See website for terms and conditions.

Want to learn more about fiber?

Log on to commspecial.com for fiber related resources written for Pro A/V Professionals by Pro A/V Professionals!

Sales



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Ordering Information

7220-KIT-pp*	Complete Kit - contents listed below**	1
7220-B7S	Transmitter, Box Version	1
7220-C7S	Transmitter, Card Version	1
7221-B7S	Receiver, Box Version	1
7221-C7S	Receiver, Card Version	1
7222-7S-pp	Transmitter (1 RU), 4 optical outputs	4
7224-7S-pp	Transmitter (1 RU), 8 optical outputs	8
7226-7S-pp	Transmitter (1 RU), 12 optical outputs	12
7223-B7S	Receiver (Box), 4 RGB w/audio outputs	1
7225-B7S	Receiver (Box), 1 RGB w/audio output, 1 re-clocked optical loop-through	2
7227-B7S	Receiver (Box), 4 RGB w/audio outputs, 1 re-clocked optical loop-through	2
PDPS-1-pp	Power Supply	
101933	6 ft. HD-15M to HD-15M VGA type cable	
1206	6 ft. HD-15M to 5 x BNC-M RGBHV cable	
1214	6 ft. 3.5 mm plug to 3.5 mm plug stereo audio cable	
1213	6 ft. 3.5 mm plug to 2 x RCA-M stereo audio cable	
6340	ST-M to FCPC-F adapter for multimode fiber	
6350	ST-M to FCPC-F adapter for single mode fiber	

**7220-KIT-pp includes:

Qty	Part Number (described above)	*Power Supply Suffix Codes (pp) for AC Line Cord:
1	7220-B7S	NA - North America
1	7221-B7S	AU - Australia
2	PDPS-1-pp (specify line cord)	EU - Europe
2	101933	JP - Japan
1	1206	UK - United Kingdom
2	1214	
1	1213	
1	122960: 250 m (820 ft.) of plenum rated SM fiber with ST connectors and a pulling eye	

About CSI

Communications Specialties, Inc. (CSI) is an award-winning manufacturer of Pro A/V products for the distribution, conversion or transmission of television and computer video signals, including fiber optic transmission systems, scan converters and video scalars. The company was founded in 1983 by veterans of the broadcast industry. Since then, CSI has managed to consistently design innovative products that are used worldwide by Fortune 500 Companies in a variety of markets such as Broadcast/Professional A/V, Videoconferencing, Education, Home Theater, Security, ITS, Industrial Monitoring, and more!

The **Fiberlink**® line offers an extensive and affordable family of fiber optic transmission systems for the Professional A/V marketplace and includes several ground-breaking products for the transmission of high-resolution RGB signals. Systems for point-to-point and point-to-multipoint signal distribution make these products highly desirable for any Pro A/V architecture. New products are constantly being designed and developed and you can get the latest information at commspecial.com

Also from CSI: Scan Do® Scan Converters and Deuce® Video Scalars