



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



CSI Communications Specialties, Inc.

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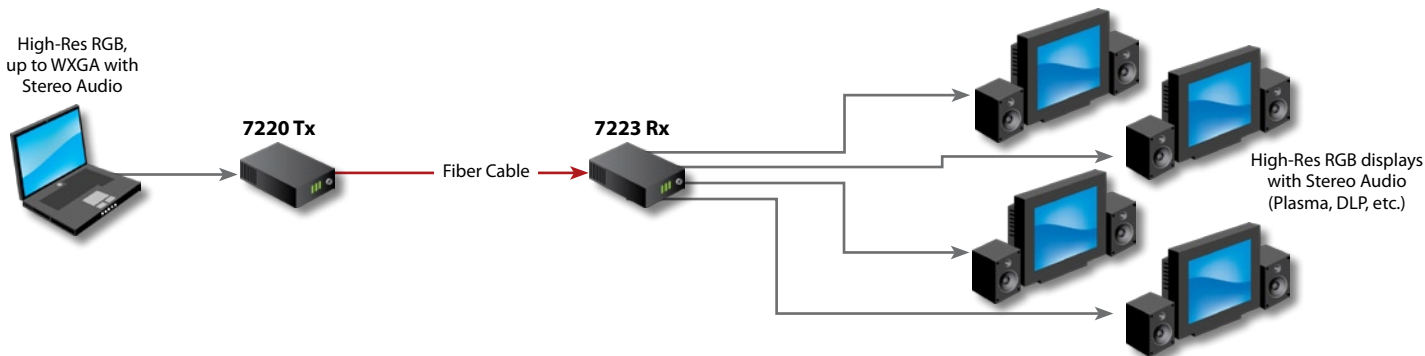
Point-to-Point Distribution

High-Res RGB,
up to WXGA with
Stereo Audio



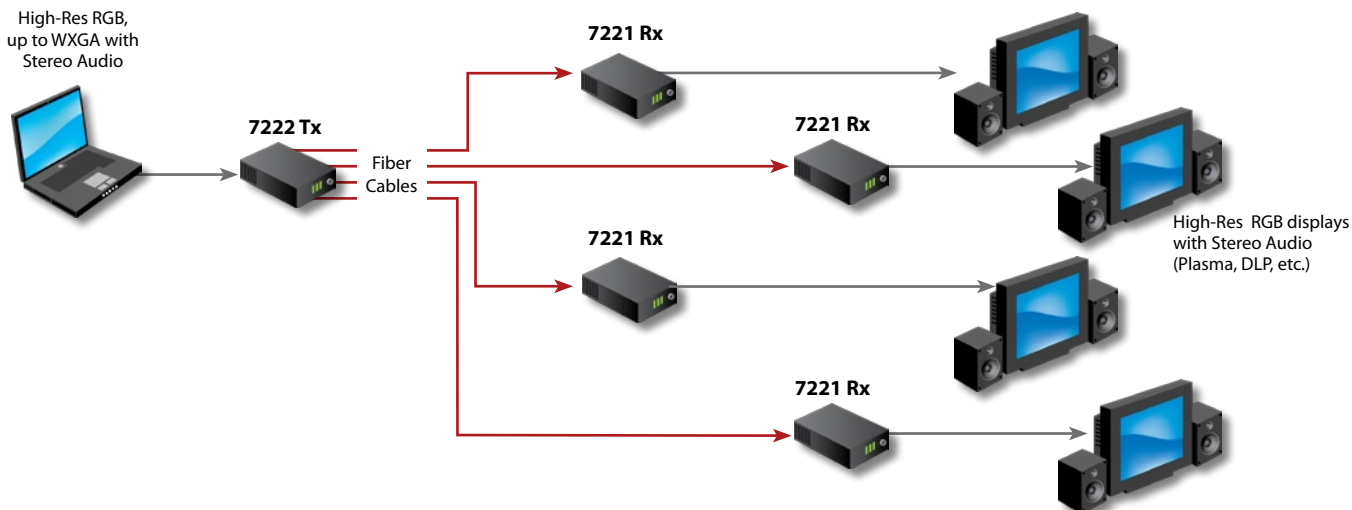
Point-to-Point Distribution; Multiple Baseband Outputs

High-Res RGB,
up to WXGA with
Stereo Audio



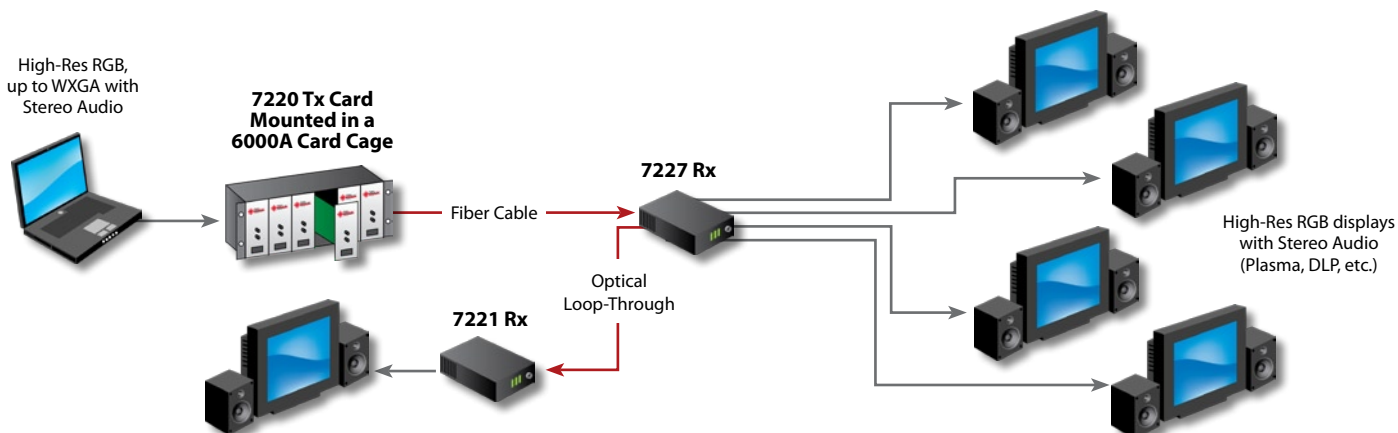
Point-to-Multipoint Distribution

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



CSI Communications Specialties, Inc.

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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