

## 7820 Series HD/SD Component, S-Video, Composite Video

### **Ideal Applications:**

Videoconferencing, Broadcast and Cable TV, Digital Signage

### One unit, three modes of operation!

Over one single mode or multimode fiber, you can transmit:

• One Component Video & Stereo Audio



Component, S-Video, Composite Video	7820 Tx	7821 Rx	Component, S-Video, Composite Video
2 channels — of Audio	110	Fiber Cable	2 channels of Audio

Part Number	Description	Fiber Cores
7820-B7S	Transmitter, Box Version	1
7820-C7S	Transmitter, Card Version	1
7821-B7S	Receiver, Box Version	1
7821-C7S	Receiver, Card Version	1
PDPS-1-pp	Power Supply	

EU - Europe

### Power Supply Suffix Codes (pp) for AC Line Cord:

NA - North America AU - Australia
JP - Japan UK - United Kingdom

Signal	Channels	Direction
Video	1 to 3	<b>→</b>
Audio	2	<b>──</b>

### **Features**

30 MHz Component Video bandwidth

15 MHz Composite and S-Video bandwidth per channel

Supports 1080i and 720p Component Video

Video channel is compatible with NTSC, PAL or SECAM video standards

Two audio channels that may be user-configured for balanced or unbalanced inputs and outputs

Switch selectable audio output gain boost of +0 dB or +6 dB

Indicator LEDs monitor power, video and audio signals

Transmits over one multimode or single mode fiber

No adjustments; pure digital processing and transmission

Wide range power supply allows operation from both AC and DC sources

System consists of transmitter and receiver unit; card or box version. Each end, plus power supply, must be purchased separately.

Card version fills two slots in 6000A card cage



Video Specifications	
Frequency Response Composite & S-Video: Component Video:	15 MHz (-3 dB) Y: 30 MHz (-3dB) PrPb: 15 MHz (-3dB)
Input/Output Impedance	75 Ohms, nominal
Signal-to-Noise Ratio	60 dB (CCIR weighted)
Differential Gain	0.7%
Differential Phase	0.5°
Y/C Delay	< 5 ns
2T K-Factor	0.5%
System Gain	Unity Gain, ± 3%
Video Connectors	BNC; 4-Pin Mini-DIN for S-Video

Audio Specifications	
Number of Audio Channels	2, balanced or unbalanced
Bits per sample/ Sampling Rate	24 bits, 64 kHz
Audio Connector	Screw terminal block
Switches	<ul> <li>Select input termination</li> <li>Balanced or unbalanced input/output, selectable on a per-channel basis</li> <li>Output gain boost +0 dB or +6 dB</li> </ul>
Frequency Response	+0/-0.5 dB, 20 Hz - 20 kHz
Maximum Audio Level	+10 dBu
Signal-to-Noise Ratio (A-weighted)	95 dB referenced full scale (balanced)
THD	0.002%, 20Hz - 20 kHz, full scale
Channel Phase Differential	±0.1°
Crosstalk	-100 dB (1kHz)
Audio Noise Level	-85 dBm
System Gain	Unity Gain, ±3%, input: balanced 600 ohms, 50 ohms source impedance; output: balanced into 600 ohms, gain boost 0 dB.
Receiver Output Gain	+0 dB or +6 dB; switch selectable
Input Impedance	600 Ohms terminated, >24K ohms unterminated
Output Impedance	50 Ohms nominal
Audio to Video Diff. Delay (skew)	<300 usec

Three modes of transmit operation:	One Component Video & Stereo Audio One S-Video, one Composite Video and Stereo Audio Three Composite Video & Stereo Audio
Compatibility	Fiberlink Matrix
LED Indicators	(1) Power, (3) Video, (1) Audio, (1) Alarm LED (card version only)
Power	9-24 volts AC or DC, TX: 4.5 Watts; 15.39 BTU/Hr RX: 4.0 Watts; 13.68 BTU/Hr
Operating Temperature Range	-10° to +60° C
Optical Connectors	ST
Operating Wavelength	1310nm
Physical Size	6.5 W x 1.15 H x 8 L (inches) 165 W x 29 H x 203 L (mm)

approx. 1 lb.; 0.45 kg

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**General Specifications** 

Weight

Slots Filled in 6000A Card Cage



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# Operating Loss Budget & Maximum Usable Distance\*

Wavelength	Loss(dB)	Distance (km)
SM	0-17	40
MM (50u)	0-17	1.3
MM (62.5u)	0-17	1.0

SM = Single Mode Fiber MM = MultiMode Fiber

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

# 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!



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

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