

## Specifications

### XTP CP Fiber 4K I/O Boards

#### TRUE 4K

Max. 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max. Bit Depth per Color
4096 x 2160 at 24 Hz	4:4:4	8 bit
3840 x 2160 at 30 Hz		
3840 x 2160 at 60 Hz	4:2:0	

Frame rate<sup>1</sup> ..... 24, 25, 30, 50, or 60 fps  
 Chroma sampling<sup>1</sup> ..... 4:4:4, 4:2:2, or 4:2:0  
 Color bit depth<sup>1</sup> ..... 8 bits per color  
 Signal type ..... Refer to XTP endpoints  
 Max. video data rate ..... 8.91 Gbps (2.97 Gbps per color)

**NOTE:** <sup>1</sup>Subject to the maximum data rate limit. Use our calculator at [www.extron.com/4KdataRate](http://www.extron.com/4KdataRate) to determine video parameters supported by this data rate.

**NOTE:** The I/O boards are class 1 laser products. They meet the safety regulations of IEC-60825-1.

#### Video – XTP CP 4i Fiber 4K, XTP CP 4o Fiber 4K

Gain ..... Unity  
 Resolution range ..... Up to 2560x1600 @ 60 Hz\* or  
 4K (4096x2160) @ 24 Hz, UHD (3840x2160) @ 30 Hz  
 UHD @ 60 Hz with 4:2:0 color subsampling  
 \*reduced blanking  
 Signal type ..... Single-link HDMI (or DVI-D or DisplayPort)  
 Maximum data rate ..... 8.91 Gbps (2.97 Gbps per color)  
 Maximum pixel clock ..... 300 MHz  
 Video formats ..... RGB and YCbCr digital video  
 Standards ..... Refer to XTP endpoints  
 Switching speed ..... 200 ms (max.)  
 Audio format ..... Analog stereo, Dolby® Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby TrueHD,  
 Dolby Atmos™, DTS®, DTS-ES, DTS 96/24, DTS-HD High Res, DTS-HD Master  
 Audio™, up to 8 ch PCM

## Specifications • XTP CP Fiber 4K I/O (Continued)

### Optical fiber interconnection

Number/signal type.....	4 sets of proprietary signals
Connectors.....	4 LC fiber connector
Operating distance	

**NOTE:** Operating distance is approximate. These are typical maximum bandwidth distances that may vary depending on factors such as fiber type, fiber bandwidth, connector splicing, losses, modal or chromatic dispersion, environmental factors, and kinks.

Singlemode.....	10 km (6.2 miles) with singlemode cables
Multimode.....	400 m (1312') with 50 µm OM3 2000 MHz bandwidth laser optimized multimode cables
	500 m (1640') with 50 µm OM4 4700 MHz bandwidth laser optimized multimode cables

**NOTE:** Multimode units are compatible with OM1 and OM2 multimode cables, but at reduced operating distances.

Nominal peak wavelength	
Singlemode.....	1490 nm, 1550 nm, 1310 nm
Multimode.....	850 nm, 980 nm, 780 nm
Data rate.....	8.5 Gbps
Transmission power	
Singlemode.....	-6 dBm, typical
Multimode.....	-5 dBm, typical
Maximum receiver sensitivity	
Singlemode.....	-15 dBm, typical
Multimode.....	-16 dBm, typical
Optical loss budget	
Singlemode.....	9 dB, maximum
Multimode.....	8 dB, maximum

### Communications – external device (pass-through, unidirectional or bidirectional)

Serial control pass-through ports ...	RS-232 ( $\pm$ 5V) via (4) 3.5 mm, 5 pole captive screw connectors (uses 3 poles) (connector is shared with IR control ports)
Baud rates.....	300 to 115200 baud
Protocol.....	5 to 8 data bits 1 or 2 stop bits no parity (default), even or odd parity flow control Xon, Xoff, and none
Serial control pin configuration .....	1 = Tx, 2 = Rx, 3 = Gnd
IR control port.....	(4) 3.5 mm, captive screw connector, 5-pole (uses 3 poles) (connector is shared with RS-232 control ports) TTL level (0 to 5 V) modulated infrared control from 30 kHz up to 56 kHz
IR control pin configuration .....	3 = Gnd, 4 = IR Tx, 5 = IR Rx
Ethernet pass-through ports .....	4 female RJ-45
Ethernet data rate .....	10/100Base-T, full duplex with autodetect

## Specifications • XTP CP Fiber 4K I/O (Continued)

### General

Power .....	Supplied by XTP CrossPoint or XTP II CrossPoint enclosures
Power consumption.....	19 watts
Product weight .....	2.0 lbs (0.9 kg)
Regulatory compliance	
Environmental.....	Complies with the appropriate requirements of RoHS, WEEE.
Warranty .....	3 years parts and labor

**NOTE:** All nominal levels are at  $\pm 10\%$ .

**NOTE:** Specifications are subject to change without notice.

**NOTE:** Shipping weights and dimensions are available at [www.extron.com](http://www.extron.com).

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