

Specifications

XTP CP Fiber 4K I/O Boards

TRUE 4K

Max. 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max. Bit Depth per Color
4096x2160 at 24 Hz	4:4:4	8 bit
3840x2160 at 30 Hz		
3840x2160 at 60 Hz	4:2:0	

Frame rate¹ 24, 25, 30, 50, or 60 fps
Chroma sampling¹ 4:4:4, 4:2:2, or 4:2:0
Color bit depth¹ 8 bits per color
Signal type Refer to XTP endpoints
Max. video data rate 8.91 Gbps (2.97 Gbps per color)

NOTE: ¹Subject to the maximum data rate limit. Use our calculator at 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 (600 MHz for 4K rates with 4:2:0 chroma subsampling)
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

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
700 m (2297') 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

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.

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