

Specifications

XTP T FB 202 4K

TRUE 4K specification

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

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 DisplayPort 1.1, DVI 1.0, HDMI 1.4, HDCP 2.2
 Max. video data rate 10.2 Gbps (3.4 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 XTP T FB 202 4K transmitter can be used with other XTP products, with twisted pair cables connecting the units.

Video

Gain Unity
 Resolution range
 Digital Up to 2560x1600 @ 60 Hz*, or
 4K (4096x2160) @ 30 Hz, UHD (3840x2160) @ 30 Hz,
 4K/UHD @ 60 Hz with 4:2:0 chroma subsampling
 * reduced blanking
 Analog Up to 1920x1200* or 1080p (HDTV)
 * reduced blanking
 Signal type Single-link HDMI (or DVI-D or DisplayPort)
 Maximum data rate 10.2 Gbps (3.4 Gbps per color)
 Maximum pixel clock 300 MHz (600 MHz for 4K rates with 4:2:0 chroma subsampling)
 Formats RGB and YCbCr digital video
 Standards DisplayPort 1.1, DVI 1.0, HDMI 1.4; HDCP 2.2

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Video input

Number/signal type.....	1 analog RGBHV 1 single link HDMI (or DVI-D or DisplayPort)
Connectors.....	1 female 15-pin HD 1 female HDMI type A
Nominal level.....	0.7 Vp-p for RGB
Minimum/maximum levels.....	0.3 V to 1.45 Vp-p
Impedance.....	75 ohms
Horizontal frequency.....	30 kHz to 100 kHz
Vertical frequency.....	24 Hz to 120 Hz

Shielded twisted pair interconnection

Connectors.....	1 female RJ-45 per unit
Termination standards.....	TIA/EIA T568B
Signal transmission distance.....	330' (100 m) using shielded twisted pair or XTP DTP 24 cable
Cable requirements.....	Solid conductor, 24 AWG or better
Cable recommendations.....	400 MHz bandwidth, STP (shielded twisted pair)

NOTE: Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance.

Audio

Gain	
Range.....	Adjustable, -18 dB to +24 dB
Default.....	Unbalanced output: 0 dB; balanced output +6 dB
Frequency response.....	20 Hz to 20 kHz, ± 0.5 dB
THD + Noise.....	<0.1%, 20 Hz - 20 kHz at nominal level
S/N.....	>90 dB, at maximum balanced output (unweighted)
Crosstalk.....	≤ -80 dB @ 1 kHz, fully loaded
Stereo channel separation.....	>80 dB @ 1 kHz
Sampling rates.....	32 kHz, 44.1 kHz, 48 kHz, 96 kHz, 192 kHz
Bit depths.....	16, 20, 24 bit

Audio input

Number/signal type.....	1 analog stereo, unbalanced or 1 digital audio, de-embedded from HDMI
Connectors.....	1 female 3.5 mm mini stereo jack 1 female HDMI type A (shared with video input)
Source formats.....	LPCM up to 7.1/24-bit/192 kHz, Dolby Atmos™, Dolby TrueHD, Dolby Digital Plus™, Dolby Digital EX, Dolby Digital 5.1, Dolby Digital 2/0 Surround, Dolby Digital 2/0, DTS-HD Master Audio, DTS-HD, DTS-ES Discrete 6.1, DTS-ES Matrix 6.1, DTS Digital Surround 5.1, DTS 2 Channel, analog stereo
Impedance.....	>10k ohms, unbalanced, DC coupled
Nominal level.....	-10 dBV (316 mVrms) unbalanced
Maximum level.....	+7 dBV unbalanced

NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV \approx 2 dBu

Communications – transmitter

Serial control ports.....	1 bidirectional RS-232, 3.5 mm captive screw, 3 pole
Baud rate and protocol.....	9600 (default) to 115200 baud, 8 data bits, 1 stop bit, no parity
Serial control pin configuration.....	1 = Tx, 2 = Rx, 3 = GND
USB control ports.....	1 front panel female mini USB B
USB standards.....	USB 2.0, low speed
Program control.....	Extron control/configuration program for Windows® Extron Simple Instruction Set (SIS™)

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

Serial control pass-through port	RS-232 (+5 V) via a (1) 3.5 mm, 5 pole captive screw connector (uses 3 poles) (connector is shared with the IR control port)
Baud rates	Up to 115200 baud
Protocol	Data bits = 5 - 8 Stop bits = 1 or 2 Parity = odd, even, none Flow control = XON, XOFF, none
Serial control pin configuration	1 = Tx, 2 = Rx, 3 = GND
IR control port	(1) 3.5 mm, captive screw connector, 5 pole (uses 3 poles) (connector is shared with the RS-232 control port) 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 port	1 female RJ-45 connector
Ethernet data rate	10/100Base-T, half/full duplex with autodetect

General

Power supply	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1.5 A, 18 watts
Power consumption	
Device	TBD
Device and power supply	TBD

NOTE: The XTP transmitter can be powered either locally by an external power supply or remotely using an optional power injector or XTP CrossPoint matrix switcher.

Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +104 °F (0 to +40 °C) / 10% to 90%, noncondensing
Cooling	Convectionno , no vents
Thermal dissipation	
Device	TBD
Device and power supply	TBD
Mounting	
Floor box mount	Ackermann GB3/OBO Betterman floor box, MK Electric CableLink Plus Single Pan floor box, MK electric CableLink Plus Modular floor box, ElectraPlan floor box, and PUK floor box mountable

NOTE: See the XTP T FB 202 4K User Guide for mounting considerations.

Enclosure type	Metal
Enclosure dimensions	2.3" H x 2.8" W x 5.2" D* (5.9 cm H x 7.2 cm W x 13.2 cm D) (Dimensions exclude connectors) * Depth is 6.1" (15.5 cm) including mounting tabs
Product weight	1.4 lbs (0.6 kg)
Vibration	ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance.....	CE, c-UL, FDA Class 1, UL, C-tick, FCC Class A, ICES, VCCI Complies with the appropriate requirements of RoHS and WEEE.
Warranty	3 years parts and labor

NOTE: All nominal levels are at ±10%.

NOTE: Specifications are subject to change without notice.

NOTE: Shipping weights and dimensions are available at www.extron.com.

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