

Specifications

DTP3 R 301

TRUE 4K specification

Max. 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max. Bit Depth per Color
4096 x 2160 at 60 Hz	4:4:4	8 bit
3840 x 2160 at 60 Hz		
4096 x 2160 at 30 Hz		12 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, 10, 12 bits per color
 Signal Type HDMI 2.0b, HDCP 1.x, HDCP 2.3
 Max. video data rate 18 Gbps (6 Gbps per color)

NOTE: ¹Subject to the maximum data rate limit. Use our calculator at www.extron.com/8Kdata to determine video parameters supported by this data rate.

Video

Maximum data rate 18 Gbps (6 Gbps per color)
 Maximum pixel clock 600 MHz
 Resolution range Up to 1080p @ 120 Hz or 4K @ 60 Hz (4:4:4 chroma subsampling)
 5120x1080* @ 30 Hz, 5120x1440* @ 30Hz, 5120x2160 @ 30 Hz,
 5120x2560* @ 30 Hz, 5120x2880* @ 30 Hz

NOTE: *Indicated rates not available via standard 256-byte EDID and may require custom video card configuration.

Horizontal frequency range 15 kHz to 270 kHz for resolutions up to 18 Gbps
 Vertical frequency range 24 Hz to 240 Hz for resolutions up to 18 Gbps
 Color bit depth 8, 10, or 12 bits — subject to the maximum data rate limit
 Formats RGB and YCbCr digital video
 HDR HDR10, HDR10+, Dolby Vision
 Standard DVI 1.0, HDMI 2.0b, HDCP 1.x, HDCP 2.3

NOTE: Extron strongly recommends compatibility testing while designing, and before installing, any HDR system. There are several HDR formats in use by source and display manufacturers. The level of HDR product support is governed by pixel clock, signal format, and signal communication between source and sink devices. Please contact an Extron Application Engineer for more information.

Video input

Number/signal type	
DTP3.....	1 DTP3
Connector	
DTP3 input.....	1 female RJ-45 jack

Interconnection between transmitter and receiver

Connector.....	1 female RJ-45 per unit
Termination standard.....	TIA/EIA T568B
Signal transmission distance (using XTP DTP 24 cable)	
1080p @ 60 Hz	Up to 330' (100 m) using shielded twisted pair (STP) or XTP DTP 24 cable
4K/UHD @ 30Hz	Up to 330' (100 m) using shielded twisted pair (STP) or XTP DTP 24 cable
4K/UHD @ 60 Hz	Up to 150' (45 m) using shielded twisted pair (STP) or XTP DTP 24 cable Using 1 coupler with 3' (0.9 m) to 9' (2.7 m) patch cable Using 2 couplers with two 3' (0.9 m) (max) patch cables Using 2 punch-downs with two 3' (0.9 m) to 9' (2.7 m) patch cables
4K/UHD @ 60 Hz	Up to 175' (53 m) using shielded twisted pair (STP) or XTP DTP 24 cable with no couplers
Cable requirements	Solid conductor, 24 AWG or better
Cable recommendations	400 MHz bandwidth, STP (shielded twisted pair)
Signal transmission distance (using XTP DTP 22 cable)	
1080p @ 60 Hz	Up to 330' (100 m) using XTP DTP 22 cable
4K/UHD @ 30Hz	Up to 330' (100 m) using XTP DTP 22 cable
4K/UHD @ 60 Hz	Up to 330' (100 m) using XTP DTP 22 cable Using 1 coupler with 3' (0.9 m) to 16' (4.9 m) patch cable Using 2 couplers with two 4' (1.2 m) (max) patch cables Using 2 punch-downs with two 3' (0.9 m) to 8' (2.4 m) patch cables
Cable requirements	Solid conductor, 22 AWG or better
Cable recommendations	500 MHz bandwidth, STP (shielded twisted pair)

NOTE: Extron XTP DTP 22 shielded twisted pair is strongly recommended for optimal performance.

Video output

Number/signal type.....	1 single link HDMI (or DVI-D*)
Connectors.....	1 female HDMI

NOTE: *Appropriate HDMI to DVI-D cables or adapters are required for DVI signal input/output.

Audio

Gain.....	Unbalanced output: 0 dB; balanced output: +6 dB
Frequency response	20 Hz to 20 kHz, ± 0.5 dB
THD + Noise	0.03% @ 20 Hz to 20 kHz at maximum output
S/N.....	>90 dB, at maximum output (15 dBu), balanced (unweighted)
Stereo channel separation.....	>80 dB @ 1 kHz to 20 kHz

Audio output — analog

Number/signal type.....	1 stereo, balanced/unbalanced (fixed and variable outputs) 1 embedded digital audio on HDMI
Connectors.....	(1) 3.5 mm captive screw connectors, 5-pole 1 female HDMI type A
Impedance.....	50 ohms unbalanced, 100 ohms balanced
Gain error.....	± 0.1 dB channel to channel
Maximum level (Hi-Z).....	>+11 dBu, balanced

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

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USB

Host support.....	xHCI (USB 3.2 Gen 1/2, USB 3.1 Gen1/2, USB 3.0), EHCI (USB 2.0), OHCI/UHCI (USB 1.1)
Data rates	Low speed (1.5 Mbps), full speed (12 Mbps), high speed (480 Mbps)
Throughput	480 Mbps
Data transfer types.....	Bulk, control, interrupt, and isochronous

USB hub

Number/signal type.....	(1) 4-port USB hub (supports up to 480 Mbps speeds)
Connectors	4 female USB type A
Maximum built-in USB hubs.....	1
Minimum built-in USB hubs.....	1
Available USB power	
USB 2.0	500 mA/port
USB HID.....	100 mA/port

Control/remote — external device (RS-232 over TP)

Serial control pass-through ports ...	(1) RS-232 via 3.5 mm 3-pole captive screw connector
Baud rate	300 to 115 k baud
Protocol.....	8 or 7 data bits 1 or 2 stop bits No-parity (default), even or odd parity
Serial control pin configuration.	1 = Tx, 2 = Rx, 3 = Gnd

NOTE: Protocol is mirrored between the connected DTP3 Rx endpoints and the "Over TP". Signals from a control device pass into each "Over TP" port, are embedded with the DTP signal, and sent to the individual DTP3 endpoints for control of remote sink or source devices. The "Over TP" ports are simply pass-through connections to DTP endpoints. There is no RS-232 insertion from any DTP3 control port to the "Over TP" ports.

Control/remote

USB control port	1 front panel female USB-C
USB standards	USB 2.0, low speed
Program control	Extron Simple Instruction Set (SIS) Extron Product Configuration Software (PCS)

General

Power supply	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 4.2 A, 50 watts
Power consumption	
Device	30.5 watts, 12 VDC
Device and power supply	33.9 watts, 100-240 VAC, 50-60 Hz
Ambient temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Cooling	Convection, vents TBD
Thermal dissipation	
Device	44.6 BTU/hr
Device and power supply	56.1 BTU/hr
Mounting	
Rack mount.....	Yes, with optional 1U high rack shelf
Furniture mount	Yes, with optional under-desk mounting kit
Enclosure type	Metal

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Enclosure dimensions	1.0" H x 8.75" W x 6.0" D (half rack wide) (25 mm H x 222 mm W x 152 mm D) (Depth excludes connectors.)
Product weight	TBD lbs (TBD kg)
Regulatory compliance.....	CE, c-UL UL,C-tick, FCC Class A, ICES, VCCI, Complies with the appropriate requirements of RoHS, WEEE
Product warranty	3 years parts and labor
Everlast power supply warranty.....	7 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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