

Specifications

DTP2 211 Tx/Rx

TRUE 4K Specification

Max. 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max. Bit Depth per Color
3840 x 2160 at 60 Hz	4:4:4	8 bit
4096 x 2160 at 30 Hz		12 bit
3840 x 2160 at 30 Hz		
4096 x 2160 at 60 Hz	4:2:0	12 bit
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, or 12 bits per color
 Signal type HDMI 1.4, 2.0b; HDCP 1.4, 2.2
 Max. video data rate 18 Gbps (6 Gbps per color)

NOTE: This product consists of a transmitter (DTP2 T 211) and a receiver (DTP2 R 211), sold separately, with twisted pair cables linking the transmitter and receiver.

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.

Video

Maximum data rate 18 Gbps (6 Gbps per color)
 Maximum pixel clock 600 MHz
 Resolution range 2560x1600 @ 60 Hz or 1080p @ 60 Hz, 12-bit color,
 4K (4096x2160) @ 30 Hz, UHD (3840x2160) @ 30 Hz,
 4K (4096x2160) @ 60 Hz, UHD (3840x2160) @ 60 Hz
 Color bit depth 8, 10, or 12 bits — subject to the maximum data rate limit
 Formats RGB and YCbCr digital video
 Standards DVI 1.0; HDMI 1.4, 2.0b; HDCP 1.4, 2.2, CEA-861E

Video input – transmitter

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

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

Specifications • DTP2 211 Tx/Rx (Continued)

Interconnection between transmitter and receiver

Connectors.....	1 female RJ-45 per unit
Termination standard.....	TIA/EIA T568B
Signal transmission distance.....	Up to 330' (100 m) using shielded twisted pair (STP) cable or XTP DTP 24 STP 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.

Video output – receiver

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

Audio

Gain.....	Unbalanced output: 0 dBu; balanced output +6 dBu
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 input

Number/signal type.....	1 PC level stereo, unbalanced 1 Digital Embedded Audio on HDMI
-------------------------	---

NOTE: Analog audio can be configured for embedding onto the digital video signal at the Transmitter. Embedded digital audio can be (configured) de-embedded from the digital video signal at the Receiver end.

Connectors.....	(1) 3.5 mm stereo jack, 2 channel; tip (L), ring (R), sleeve (ground) (1) Female HDMI
Impedance.....	>10k ohms, DC coupled
Nominal level.....	-10 dBV (316 mVrms)
Maximum level.....	+7 dBV (unbalanced)

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

Audio output

Number/signal type.....	1 stereo (2 channel), balanced/unbalanced
Connectors.....	(1) 3.5 mm captive screw connector, 5 pole
Impedance.....	50 ohms unbalanced, 100 ohms balanced
Gain error.....	± 0.1 dB channel to channel
Maximum level (600 ohm).....	>+11 dBu, balanced

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

Serial control port input/output	
Transmitter.....	RS-232 via (1) 3.5 mm, 5 pole captive screw connector for RS-232 control (± 5 V) (connector is shared with IR control port)
Receiver.....	1 set of proprietary signals on a female RJ-45 jack
Serial control port output/input	
Transmitter.....	1 set of proprietary signals on a female RJ-45 jack
Receiver.....	RS-232 via a 3.5 mm, 3 pole captive screw connector
Baud rate and protocol.....	300 to 115200 baud, 8 or 7 data bits, 1 or 2 stop bits, non-parity (default), even or odd parity
Serial control pin configuration.....	1 = Tx, 2 = Rx, 3 = Gnd

Specifications • DTP2 211 Tx/Rx (Continued)

IR control port.....	(1) 3.5 mm, captive screw connector, 5 pole (connector is shared with RS-232 control port) TTL level (0 to 5 V) modulated infrared control from 30 kHz up to 60 kHz
IR control pin configuration	3 = Gnd, 4 = IR Tx, 5 = IR Rx

General

Power supply.....	External (included with Tx) Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1.5 A, 18 Watts
Power consumption	
Transmitter	
Device	13.1 watts
Device and power supply...	15.6 watts
Receiver	
Device	12.8 watts
Device and power supply...	15.3 watts

NOTE: Each transmitter or receiver can be powered either locally by an external power supply or remotely by receiver or transmitter on the other end of the twisted pair cable.

Remote power capability.....	Supports one endpoint (DTP2)
------------------------------	------------------------------

NOTE: DTP2 devices can only send power to other DTP2 devices. DO NOT send power to DTP devices or they will be damaged.

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, no vents
Thermal dissipation	
Transmitter	
Device	43.7 BTU/HR
Device and power supply...	52.1 BTU/HR
Receiver	
Device	42.7 BTU/HR
Device and power supply...	51.3 BTU/HR
Mounting	
Rack mount.....	Yes, with optional 1U high rack shelf
Furniture mount	Yes, with optional under-desk mounting kit
Enclosure type	Metal
Enclosure dimensions	
Transmitter	1.0" H x 4.3" W x 6.0" D (quarter rack wide) (2.5 cm H x 10.9 cm W x 15.2 cm D) (Depth excludes connectors.)
Receiver	1.0" H x 4.3" W x 6.0" D (quarter rack wide) (2.5 cm H x 10.9 cm W x 15.2 cm D) (Depth excludes connectors.)
Product weight	
Transmitter	0.562 lbs (.255 kg)
Receiver	0.529 lb (.240 kg)
Regulatory compliance.....	CE, C-Tick, FCC Class A, ICES, VCCI, KCC, c-UL, UL UL rated for use in plenum airspaces: meets UL for heat and smoke release, excluding the power supply.
Product warranty	3 years parts and labor
Everlast power supply warranty.....	7 years parts and labor

NOTE: All nominal levels are at ±10%.

Specifications • DTP2 211 Tx/Rx (Continued)

NOTE: Specifications are subject to change without notice.

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

4700-D6