

# DTP2 T 211

## HDMI 4K/60 DTP2 TRANSMITTER WITH AUDIO EMBEDDING

**DTP**  
SYSTEMS

**18 Gbps**  
4K/60 4:4:4



- ▶ Transmits HDMI plus control and analog audio up to 330 feet (100 meters) over a shielded CATx cable
- ▶ Supports computer and video resolutions up to 4K/60 @ 4:4:4
- ▶ Analog stereo audio embedding
- ▶ Supported HDMI 2.0b specification features include data rates up to 18 Gbps, HDR, Deep Color up to 12-bit, 3D, HD lossless audio formats, and CEC pass-through
- ▶ Support for HDR – High Dynamic Range video
- ▶ HDCP 2.2 compliant
- ▶ Remote power capability
- ▶ Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance
- ▶ Bidirectional RS-232 and IR pass-through for AV device control
- ▶ Supports multiple embedded audio formats
- ▶ Supports EDID and HDCP transmission
- ▶ Compatible with all DTP receivers and DTP-enabled products
- ▶ 1" (2.5 cm) high, quarter rack width metal enclosure

The Extron DTP2 T 211 is a long distance, digital twisted pair transmitter for sending HDMI, audio, and bidirectional RS-232 and IR signals, up to 330 feet (100 meters) over a shielded CATx cable to Extron DTP®-enabled products. It supports video signals at resolutions up to 4K/60 at 4:4:4 chroma sampling, and complies with HDCP 2.2. The compact enclosure size and remote power capability make this HDCP 2.2-compliant transmitter ideal for discreet placement in lecterns and beneath tables.



**Extron Electronics**  
INTERFACING, SWITCHING AND CONTROL

## DESCRIPTION

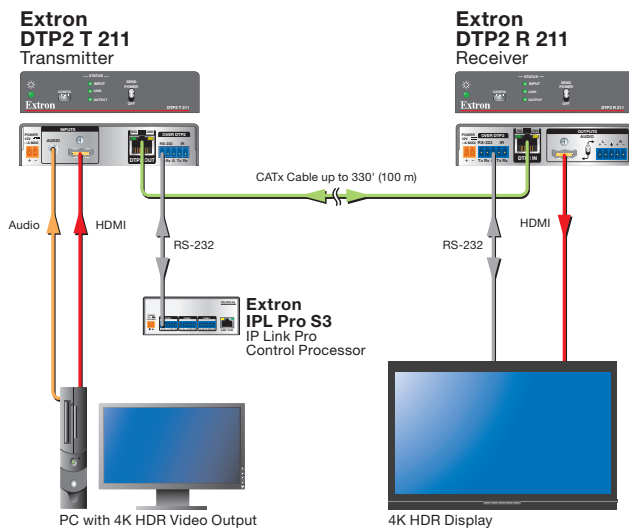
The Extron **DTP2 T 211** is a long distance, digital twisted pair transmitter for sending HDMI, audio, and bidirectional RS-232 and IR signals up to 330 feet (100 meters) over a shielded CATx cable to Extron DTP®-enabled products. It supports video signals at resolutions up to 4K/60 at 4:4:4 chroma sampling, and complies with HDCP 2.2. Analog stereo audio signals can be embedded onto the digital video output signal. The compact enclosure size and remote power capability make the DTP2 T 211 ideal for discreet placement in lecterns, beneath tables, or wherever needed to meet application requirements.

The HDCP 2.2-compliant DTP2 T 211 enables reliable, long distance transmission of HDMI signals at data rates up to 18 Gbps with support for HDR, Deep Color up to 12-bit, 3D, CEC pass-through, and embedded HD lossless audio formats. In addition, DDC communication of EDID and HDCP is continuously maintained between a source and display, ensuring compatibility and optimal signal transmission between devices.

The DTP2 T 211 provides a connection for sending stereo analog audio to a DTP-enabled matrix switcher, switcher, or signal processor. Analog stereo audio signals can be selectively embedded onto the video output signal for transport over DTP.

The DTP2 T 211 supports simultaneous transmission of bidirectional RS-232 and IR signals from a control system for AV device control. It can be remotely powered over the shielded twisted pair cable by a DTP2-enabled product. In addition, the DTP2 T 211 can be configured to provide power to a connected DTP2 receiver, allowing both devices to share one power supply.

## APPLICATION DIAGRAM



## SPECIFICATIONS

### 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		
3840 x 2160 at 30 Hz	4:2:0	12 bit
4096 x 2160 at 60 Hz		
3840 x 2160 at 60 Hz		

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, 10, or 12 bits per color
Signal type	HDMI 1.4, 2.0b; HDCP 2.2, 1.4
Max. video data rate	18 Gbps (6 Gbps per color)
<b>NOTE:</b> <sup>1</sup> Subject to the maximum data rate limit. Use our calculator at <a href="http://www.extron.com/4Kdata">www.extron.com/4Kdata</a> to determine video parameters supported by this data rate.	

### VIDEO INPUT – TRANSMITTER

Connectors	1 female HDMI type A
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### INTERCONNECTION BETWEEN TRANSMITTER AND RECEIVER

Connectors	1 female RJ-45 per unit
Signal transmission distance	Up to 330' (100 m) using shielded twisted pair (STP) cable or XTP DTP 24 STP cable
Cable recommendations	400 MHz bandwidth, STP (shielded twisted pair)
<b>NOTE:</b> Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance.	

### VIDEO OUTPUT – RECEIVER

Connectors	1 female HDMI type A
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### AUDIO INPUT

Number/signal type	1 PC level stereo, unbalanced 1 Digital Embedded Audio on HDMI
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### AUDIO OUTPUT

Number/signal type	1 stereo (2 channel), balanced/unbalanced
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### 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 ( $\pm 5$ V) (connector is shared with IR control port)
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#### 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
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### GENERAL

Power supply	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 3 A, 36 Watts
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#### Remote power capability

	Supports one endpoint (DTP2)
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<b>Model</b>	<b>Version Description</b>	<b>Part number</b>
DTP2 T 211	HDMI 4K/60 Tx - 330 feet (100 m)	60-1631-52

For complete specifications, please go to [www.extron.com](http://www.extron.com)  
Specifications are subject to change without notice.

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