

Specifications

DTP T HWP 4K 331 D

TRUE 4K specifications

| Max. 4K Capabilities | | |
|-----------------------------|-----------------|--------------------------|
| Resolution and Refresh Rate | Chroma Sampling | Max. Bit Depth per Color |
| 4096x2160 at 30 Hz | 4:4:4 | 8 bit |
| 3840x2160 at 30 Hz | | |
| 4096x2160 at 60 Hz | 4:2:0 | |
| 3840x2160 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 type¹ HDMI 1.4, HDCP 2.3
 Maximum video data rate¹ 10.2 Gbps (3.4 Gbps per color)

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

Video

Maximum data rate 10.2 Gbps (3.4 Gbps per color)
 Maximum pixel clock 300 MHz
 Resolution range 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)
 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, HDCP 2.3, CEA-861E

Video input

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

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

Specifications • DTP T HWP 4K 331 D (Continued)

Interconnection between transmitter and receiver

| | |
|------------------------------|--|
| Connectors | 1 female RJ-45 per unit for 1 cable connecting the transmitter and receiver |
| Termination standards | TIA/EIA T568B |
| DTP signal | |
| Signal transmission distance | |
| 1080p @ 60 Hz | Up to 330' (100 m) using shielded twisted pair (STP) cable or XTP DTP 24 cable |
| 2560x1600 @ 60 Hz | Up to 330' (100 m) using STP cable or XTP DTP 24 cable |
| 4K/UHD @ 30 and 60 Hz ... | Up to 330' (100 m) using STP cable or XTP DTP 24 cable |
| Cable requirements | Solid conductor, 24 AWG or better |
| Cable recommendations | 400 MHz bandwidth STP cable |

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

NOTE: Output mode signaling:

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|-----------------|---|
| DTP: | HDMI with embedded audio, analog audio, RS-232 and IR, and remote power |
| HDBaseT: | HDMI with embedded audio plus RS-232 and IR |

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 input

| | |
|--------------------------|----------------------------------|
| Number/signal type | 1 stereo (2 channel), unbalanced |
|--------------------------|----------------------------------|

NOTE: Analog audio is not embedded onto the digital video signal. Analog audio and digital embedded audio are transmitted simultaneously and output on the receiver on two different connectors.

| | |
|---------------------|---|
| Connectors | (1) 3.5 mm stereo jack, 2 channel; tip (L), ring (R), sleeve (ground) |
| 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

Communications — external device (RS-232/IR over TP)

| | |
|---------------------------|---|
| Serial control port | RS-232 via (1) 3.5 mm, 5 pole captive screw connector (connector is shared with IR control port) |
|---------------------------|---|

NOTE: Protocol is mirrored between the connected DTP 230 or DTP 330 endpoints and the "Over TP" ports on the DTP T HWP 4K 331 D. Signals from a control device pass into each "Over TP" port, are embedded with the DTP signal, and sent to the individual DTP 230 Tx or Rx endpoints for control of remote sink or source devices. The "Over TP" ports are simply pass-through connections to DTP endpoints.

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| 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 configurations | Captive screw connectors: 1 = Tx, 2 = Rx, 3 = Gnd |
| 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 |

Specifications • DTP T HWP 4K 331 D (Continued)

General

| | |
|-------------------------------|---|
| Power supply | External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1.5 A, 18 watts |
| Power consumption | |
| Device | 3.0 watts |
| Device and power supply | 3.9 watts |
| Remote power budget..... | 12 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.

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|-------------------------------|--|
| 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 | |
| Device | 10.0 BTU/hr |
| Device and power supply | 13.3 BTU/hr |
| Mounting | |
| Furniture or wall mount | Yes, with a 1 gang wall box or mud ring |
| Enclosure type | Metal |
| Enclosure dimensions | |
| Faceplate | 2.6" H x 1.3" W x 0.3" D (6.6 cm H x 3.3 cm W x 0.6 cm D) |
| Device | 2.8" H x 1.7" W x 1.9" D (7.1 cm H x 4.3 cm W x 4.8 cm D) |

NOTES:

- Overall height is 4.2" (10.7 cm), including mounting tabs. Mounting holes are 3.2" (8.2 cm) apart on center.
- Depth excludes connectors. Fits the opening in a 1 gang decorator wallplate)

| | |
|----------------------------|---|
| Product weight | 0.2 lbs (0.1 kg) |
| Regulatory compliance..... | AS/NZS, C-tick, c-UL, CE**, FCC Class A**, ICES, UL |

NOTE: **CE and FCC testing is conducted with STP cable.

| | |
|-------------------------------------|-------------------------|
| Warranty | 3 years parts and labor |
| Everlast power supply warranty..... | 7 years parts and labor |

NOTE: All nominal levels are at $\pm 10\%$.

NOTE: Specifications are subject to change without notice.

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

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