

Specifications

DTP HD DA4 4K 230

DTP HD DA8 4K 230

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 1.4
 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 1.4, CEA-861E

Video input

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

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

Video Outputs

Number/signal type 1 single link HDMI (Local Output)
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 DTP HD DA8 4K 230 8 DTP 230

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Interconnection Between Transmitter and Receiver

Connectors

DTP HD DA4 4K 230..... 4 female RJ-45

DTP HD DA8 4K 230..... 8 female RJ-45

Termination standards..... TIA/EIA T568B

Signal transmission distance

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1080p @ 60 Hz..... Up to 230' (70 m) using shielded twisted pair (STP) cable or XTP DTP 24 cable

2560x1600 @ 60 Hz..... Up to 130' (40 m) using STP cable or XTP DTP 24 cable

4K/UHD @ 30 and 60 Hz... Up to 130' (40 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:

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 (analog audio)

Gain..... Unbalanced output (from receiver): 0 dB; balanced output (from receiver): +6 dB

Frequency response 20 Hz to 20 kHz, ± 1 dB

THD + Noise 0.03% @ 1 kHz; 0.3% @ 20 kHz at nominal level

S/N >90 dB at maximum input (unweighted)

Stereo channel separation..... >80 dB

Digital sampling rate..... 48 kHz

Bit depth..... 16 bit

Audio input (analog audio)

Number/signal type..... 1 PC level stereo, 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

Audio output

Number/signal type

Local output 1 PC level stereo, unbalanced

DTP output..... 4 or 8 embedded digital audio on DTP signal

Embedded digital

audio formats 2-ch PCM, PCM, Dolby Digital 2/0, Dolby Digital 2/0 Surround, Dolby Digital 5.1, Dolby Digital EX, DTS Digital Surround 5.1, DTS-ES Matrix 6.1
DTS-ES Discrete 6.1

Connectors

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

DTP 4 or 8 female RJ-45

Impedance..... >50 ohms, DC coupled

Nominal level..... -10 dBV (316 mVrms)

Maximum level +6.5 dBV (unbalanced)

Specifications • DTP HD D4/D8 4K 230 (Continued)

Control/remote

Serial control port.....	RS-232, 3.5 mm, 3 pole captive screw connector
Baud rate and protocol.....	9600 baud rate, 8 data bits, 1 stop bit, non-parity
Serial control pin configurations.....	Captive screw connectors: 1 = Tx, 2 = Rx, 3 = Gnd
USB control ports	1 front panel female Mini USB-B
USB standards	USB 2.0, low speedhm
Ethernet data rate	10/100Base-T, half/full duplex, with autodetect
Ethernet protocol	ARP, ICMP (ping), IP, TCP, DHCP, HTTP, Telnet, SMTP, SSH
Program control	Extron's Simple Instruction Set (SIS™), Extron Product Configuration Software (PCS), Microsoft Edge, Telnet

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

Serial control port.....	RS-232 via (4) or (8) 3.5 mm, 5 pole captive screw connectors (connectors are shared with IR control ports)
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 pass-through control port	(4) or (8) 3.5 mm, 5 pole captive screw connectors (connectors are shared with RS-232 control ports) 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

NOTE: Protocol is mirrored between the connected DTP 230 Rx or DTP 330 Rx endpoints and the "Over TP" ports on the DTP HD DA series. Signals from a control device pass into each "Over TP" port, are embedded with the DTP signal, and sent to the individual DTP 230 Rx or DTP 330 Rx 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 or IR insertion from any DA control port to the "Over TP" ports.

General

Power supply	Internal Input: 100-240 VAC, 50-60 Hz
Power consumption	
DTP HD DA4 4K 230.....	45.6 watts
DTP HD DA8 4K 230.....	78.7 watts
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	Fans, air flows from right to left (when viewed from the front)
Thermal dissipation	
DTP HD DA4 4K 230.....	85.5 BTU/hr
DTP HD DA8 4K 230.....	125 BTU/hr
Rack mount	Yes, with included rack ears
Enclosure type	Metal
Enclosure dimensions	
DTP HD DA4 4K 230.....	1.75" H x 17.5" W x 10.6" D (1U high, full rack wide) (4.4 cm H x 44.4 cm W x 26.8 cm D, depth excludes connectors)
DTP HD DA8 4K 230.....	1.75" H x 17.5" W x 10.6" D (1U high, full rack wide) (4.4 cm H x 44.4 cm W x 26.8 cm D, depth excludes connectors)
Product weight	
DTP HD DA4 4K 230.....	4.9 lbs (2.2 kg)
DTP HD DA8 4K 230.....	5.0 lbs (2.3 kg)
Vibration	ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance	
Safety	CE, c-UL, UL
EMI/EMC.....	CE**, C-tick, FCC Class A**, ICES, VCCI
Environmental.....	Complies with the appropriate requirements of RoHS, WEEE

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

Warranty 3 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 <http://www.extron.com>.

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