

Specifications

DXP HD 4K PLUS Series

TRUE 4K specifications

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, 60, 120, 144, 240 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 2.0, HDCP 2.3

Max. video data rate 18 Gbps (6 Gbps per color)

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

Video

Routing 4x2 to 16x16 matrix

Maximum data rate 18 Gbps (6 Gbps per color)

Maximum pixel clock 600 MHz

Resolution range 640x480 to 4096x2160 @ 60 Hz,
4096x2160 @ 30Hz
480i, 576i, 480p, 576p, 720p, 1080i, 1080p, and 2K

Formats RGB and YCbCr digital video

Standards *DVI 1.0, HDMI 1.4, HDMI 2.0, HDCP 1.4 and 2.3

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

NOTE: Extron strongly recommends compatibility testing while designing, and before installing, any 3D or HDR (high dynamic range) system. There are several unique 3D and HDR formats in use by source devices and display manufacturers. The level of 3D and HDR product support is governed by pixel clock, signal format, and communication between source and sink devices. Please contact an Extron Application Engineer for more information.

Video processing

Digital sampling 8, 10, or 12 bits per color

Colors 1 billion (10-bit processing)

Specification • DXP HD 4K PLUS Series (Continued)

Video input

Number/signal type.....	4, 8, or 16 HDMI digital video (HDCP compliant)
Connectors	4, 8, or 16 female HDMI type A
Horizontal frequency	15 KHz to 270 KHz for resolutions up to 18 Gbps
Vertical frequency.....	24 Hz to 240 Hz for resolutions up to 18 Gbps

NOTE: Use our calculator (www.extron.com/8KdataRate) to determine video parameters supported by these data rates.

Video output

Number/signal type.....	2, 4, 8, or 16 HDMI digital video (HDCP compliant)
Connectors	2, 4, 8, or 16 female HDMI type A
Power for active cables.....	4.2 or 8.4 W total power for all HDMI ports 1.1 W per HDMI port, max.
Peripheral device power.....	250 mA per HDMI output
Standards	DVI 1.0, HDMI 1.4, HDMI 2.0, HDCP 1.4 and 2.3

Audio — DXP 42, 44, 84, 88, 168, 1616 HD 4K PLUS

Analog de-embedding	LPCM up to 2.0/24-bit/96 kHz
Supported formats — Pass through	
HDMI connectors	LPCM up to 7.1/24-bit/192 kHz, Dolby Atmos, Dolby TrueHD, and Dolby legacy formats DTS:X, DTS-HD Master Audio, DTS 96/24, and DTS legacy formats
Supported formats — S/PDIF (DXP 44, 84, 88, 168, 1616 HD 4K PLUS only)	
LPCM.....	2-channel, 16/20/24 bit depths, 32/44.1/48 kHz sampling
Dolby Digital (AC-3)	6-channel, 640k mbr, 32/44.1/48 kHz sampling
DTS.....	7-channel, 1536k max bit rate, 44.1/48 kHz sampling

Audio — individual audio groups (HDMI)

DXP 42 HD 4K PLUS

Gain	Unbalanced output: -6 dB; balanced output: 0 dB
Frequency response	20 Hz to 20 kHz, ± 0.5 dB
THD + Noise.....	<0.01% @ 20-20 kHz at nominal level
S/N	>90 dB at maximum output (unweighted)
Crosstalk	≤ -80 dB @ 1 kHz, fully loaded
Stereo channel separation	>80 dB @ 1 kHz

DXP 44, 84, 88, 168, 1616 HD 4K PLUS

Gain	Unbalanced output: 0 dB; balanced output: +6 dB
Frequency response	20 Hz to 20 kHz, ± 0.2 dB
THD + Noise.....	0.03% @ 20-20 kHz at nominal level
S/N	>105 dB at maximum output (unweighted)
Crosstalk	<-90 dB @ 20 Hz to 20 kHz, fully loaded
Stereo channel separation	>80 dB @ 20 Hz to 20 kHz

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

Audio output

Number/signal type.....	2, 4, 8, or 16 HDMI, embedded 2 or 4 stereo, balanced or unbalanced 2 or 4 S/PDIF (DXP 44, 84, 88, 168, 1616 only)
Connectors	
HDMI.....	2, 4, 8, or 16 female
Stereo	(2 or 4) 3.5 mm captive screw, 5 pole
S/PDIF	2 or 4 female RCA (DXP 44, 84, 88, 168, and 1616 models only)

Specification • DXP HD 4K PLUS Series (Continued)

Impedance

Stereo audio.....	50 ohms unbalanced, 100 ohms balanced
S/PDIF.....	75 ohms (DXP 44, 84, 88, 168, and 1616 HD 4K PLUS only)
Gain error.....	±0.1 dB channel to channel
D/A conversion	24-bit, 192 kHz

Maximum level (Hi-Z)

DXP 44, 84, 88, 168, and 1616 HD 4K PLUS	>+21 dBu, balanced, or +15 dBu, unbalanced
DXP 42 HD 4K PLUS	>+12 dBu, balanced, or +6 dBu, unbalanced

Output volume range

DXP 42 HD 4K PLUS	-90 to 0 dB (control 0 to 90 in 1 dB steps)
DXP 44, 84, and 88 HD 4K PLUS	-100 to 0 dB (control 0 to 100 in 1.3 dB steps)
DXP 168 and 1616 HD 4K PLUS	-90 to 0 dB (control 0 to 90 in 1.3 dB steps)

Communications

Serial control port.....	1 bidirectional RS-232
Serial control connector	(1) 3.5 mm captive screw, 3 pole (rear panel)
Baud rate and protocol	300 to 115200 baud; 7 or 8 data bits; 1 or 2 stop bits; no parity, even, odd, mark, or space parity Defaults: 9600 baud, 8 data bits, 1 stop bit, no parity
Serial control pin configuration	1 = Tx, 2 = Rx, 3 = Gnd
USB control port.....	1 front panel female USB mini-B
USB standards	USB 2.0, low speed
Ethernet control port	1 female RJ-45 connector
Ethernet data rate	10/100Base-T, half/full duplex with autodetect
Ethernet protocol	ARP, DHCP, DNS, HTTP, HTTPS, ICMP (ping), IEEE 802.1X, NTP, SFTP, SMTP, SNMP, SSH, TCP/IP, Telnet, UDP/IP
Ethernet default settings	Link speed and duplex level: autodetected IP address: 192.168.254.254 Subnet mask: 255.255.0.0 Gateway: 0.0.0.0 DHCP: Off
Web server	Up to 200 simultaneous sessions 40.0 MB nonvolatile user memory
Program control	Extron Product Control Software (PCS) Extron Simple Instruction Set™ (SIS™) Microsoft® Edge®, Telnet

General

Power supply

DXP 44, 84, 88, 168, and 1616 HD 4K PLUS	Internal Input: 100-240 VAC, 50-60 Hz
DXP 42 HD 4K PLUS	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1.5 A, 18 watts

Power consumption (full load)

DXP 42 HD 4K PLUS	
Device	16 watts
Device with power supply ..	17.5 watts
DXP 44 HD 4K PLUS	20.4 watts
DXP 88 HD 4K PLUS	30.8 watts
DXP 168 HD 4K PLUS	59.3 watts
DXP 1616 HD 4K PLUS	67.9 watts

Specification • DXP HD 4K PLUS Series (Continued)

Power consumption (power save) ..	10.8 watts (DXP 44, 84, 88, 168, and 1616 HD 4K PLUS only)
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	
DXP 42 HD 4K PLUS	Convection, vents on top and sides
DXP 44, 84, 88, 168, and 1616 HD 4K PLUS	Fans, air flows from right to left (as viewed from front panel)
Thermal dissipation (full load)	
DXP 42 HD 4K PLUS	
Device	51.2 BTU/hr
Device with power supply ..	56.3 BTU/hr
DXP 44 HD 4K PLUS	
115 VAC, 60 Hz	64.9 BTU/hr
240 VAC, 50 Hz	65.8 BTU/hr
DXP 88 HD 4K PLUS	
115 VAC, 60 Hz	96.8 BTU/hr
240 VAC, 50 Hz	97.3 BTU/hr
DXP 168 HD 4K PLUS	
115 VAC, 60 Hz	194.5 BTU/hr
220 VAC, 50 Hz	191.1 BTU/hr
DXP 1616 HD 4K PLUS	
C	216.5 BTU/hr
220 VAC, 50 Hz	212.9 BTU/hr
Mounting	
DXP 42 HD 4K PLUS	
Rack mount	Yes, with optional rack shelf kit Back of the rack mountable with optional back-of-the-rack mounting kit
Furniture mount	Yes, with optional under-desk mounting kit
DXP 44, 84, and 88 HD 4K PLUS	
Rack mount	Yes, with included brackets
DXP 168 and 1616 HD 4K PLUS	
Rack mount	Yes (has built-in brackets)
Enclosure type	Metal
Enclosure dimensions	
DXP 42 HD 4K PLUS	1.0" H x 8.75" W x 8.0" D (half rack wide) (25 mm H x 222 mm W x 152 mm D) (Depth excludes connectors.)
DXP 44, 84, and 88 HD 4K PLUS	1.75" H x 17.5" W x 9.5" D (1U high, full rack wide) (44 mm H x 445 mm W x 241 mm D) (Depth excludes connectors and knobs. Width excludes rack ears.)
DXP 168 and 1616 HD 4K PLUS	3.5" H x 17.4" W x 9.5" D (2U high, full rack wide) (89 mm H x 432 mm W x 241 mm D) (Depth excludes connectors and knobs. Width excludes rack ears.)
Product weight	
DXP 42 HD 4K PLUS	1.5 lbs (0.7 kg)
DXP 44 HD 4K PLUS	5.2 lbs (2.3 kg)
DXP 84 HD 4K PLUS	5.3 lbs (2.4 kg)
DXP 88 HD 4K PLUS	5.5 lbs (2.5 kg)
DXP 168 HD 4K PLUS	8.2 lbs (3.7 kg)
DXP 1616 HD 4K PLUS	8.8 lbs (4.0 kg)

Specification • DXP HD 4K PLUS Series (Continued)

Regulatory compliance..... CE, C-tick, c-UL, UL, FCC Class A, ICES, PSE, KC, VCCI, RoHs, and WEEE
Product warranty 3 years parts and labor
Everlast power supply warranty..... 7 years parts and labor

NOTE: Specifications are subject to change without notice.

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

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