Specifications

CrossPoint™ Ultra Series

Video

Routing	
84 Series	8 x 4 matrix
88 Series	8 x 8 matrix
128 Series	12 x 8 matrix
1212 Series	12 x 12 matrix
168 Series	16 x 8 matrix
1616 Series	16 x 16 matrix
Gain	Unity
Bandwidth	
84/88/128 Series	600 MHz (-3 dB), fully loaded
0 - 10 MHz	No more than ±0.1 dB
0 - 130 MHz	No more than ±0.3 dB
1212/168/1616 Series	525 MHz (-3 dB), fully loaded
0 - 10 MHz	No more than ±0.30 dB
0 - 130 MHz	No more than ±0.50 dB
Crosstalk	
84/88/128 Series	-85 dB @ 1 MHz -73 dB @ 5 MHz -70 dB @ 10 MHz -63 dB @ 30 MHz -56 dB @ 100 MHz
1212/168/1616 Series	-92 dB @ 1 MHz -80 dB @ 5 MHz -78 dB @ 10 MHz -75 dB @ 30 MHz -70 dB @ 100 MHz
Switching speed	200 ns (max.)

Video input

Number/signal type	8, 12, or 16 RGBHV, RGBS, RGsB, RsGsBs, HDTV, component video, S-video, composite video
Connectors	
84/88 Series	8 x 5 female BNC
128/1212 Series	12 x 5 female BNC
168/1616 Series	16 x 5 female BNC
Nominal level	1 Vp-p for Y of component video and S-video, and for composite video 0.7 Vp-p for RGB and R-Y and B-Y of component video 0.3 Vp-p for C of S-video
Minimum/maximum levels	Analog: 0.2 V to 2.25 Vp-p with no offset
Impedance	75 ohms
Horizontal frequency	15 kHz to 150 kHz
Vertical frequency	30 Hz to 150 Hz
Return loss	<-40 dB @ 5 MHz
DC offset (max. allowable)	1.47 V

Video output

Number/signal type	4, 8, 12, or 16 RGBHV, RGBS, RGsB, RsGsBs, HDTV, component video, S-video, composite video
Connectors	
84 Series	4 x 5 female BNC
88/128/168 Series	8 x 5 female BNC
1212 Series	12 x 5 female BNC
1616 Series	16 x 5 female BNC
Nominal level	1 Vp-p for Y of component video and S-video, and for composite video 0.7 Vp-p for RGB and R-Y and B-Y of component video 0.3 Vp-p for C of S-video
Minimum/maximum levels	0 V to 1.8 Vp-p (follows input)
Impedance	75 ohms
Return loss	-40 dB @ 5 MHz
DC offset	±7 mV with input at 0 offset
Switching type	Triple-Action™

Sync

Input type	RGBHV, RGBS, RGsB, RsGsBs
Output type	RGBHV, RGBS, RGsB, RsGsBs (follows input)
Input level	0.5 V to 5.0 Vp-p, 4.0 Vp-p normal
Output level	AGC to TTL: 4.0 V to 5.0 Vp-p, unterminated
Input impedance	Inputs 1 to 4: 75 or 510 ohms, switchable Inputs 5 to 8, 12, or 16: 510 ohms
Output impedance	75 ohms
Max. input voltage	5.0 Vp-p
Max. propagation delay	<120 ns
Max. rise/fall time	4 ns
Polarity	Positive or negative (follows input)

Audio— audio models only

Routing	
84 Series	8 x 4 stereo matrix
88 Series	8 x 8 stereo matrix
128 Series	12 x 8 stereo matrix
1212 Series	12 x 12 stereo matrix
168 Series	16 x 8 stereo matrix
1616 Series	16 x 16 stereo matrix
Gain	Unbalanced output: -6 dB; balanced output 0 dB
Frequency response	20 Hz to 20 kHz, ±0.05 dB
THD + Noise	0.01% @ 1 kHz at nominal level
S/N	>105 dB, balanced, at maximum output (21 dBu), unweighted
Crosstalk	<-89 dB @ 1 kHz, fully loaded
Stereo channel separation	>-105 dB @ 1 kHz
CMRR	>-83 dB @ 20 Hz to 20 kHz

Audio input— audio models only

Number/signal type	8, 12, or 16 stereo, balanced/unbalanced
Connectors	(8, 12, or 16) 3.5 mm captive screw connectors, 5 pole
Impedance	>10k ohm, balanced/unbalanced, DC coupled
Nominal level	+4 dBu (1.228 Vrms)
Maximum level	+21 dBu, (balanced or unbalanced) at 0.01% THD+N

Input gain adjustment	-18 dB to +24 dB (default = 0 dB), adjustable per input by RS-232/422, Ethernet, or front panel

NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu

Audio output— audio models only

Number/signal type	4, 8, 12, or 16 stereo, balanced/unbalanced
Connectors	(4, 8, 12, or 16) 3.5 mm captive screw connectors, 5 pole
Impedance	50 ohms unbalanced, 100 ohms balanced
Gain error	±0.1 dB channel to channel
Maximum level (Hi-Z)	>+21 dBu, balanced or unbalanced at 1.0% THD+N
Maximum level (600 ohm)	>+20 dBm, balanced or unbalanced at 1.0% THD+N
Output volume range	0 to 64 (-75.8 dB to 0 dB) in 1 dB increments from steps 1 to 64, in 12 dB increment from step 0 to 1; default = 64 = 0 dB

Control/remote — switcher

Serial host control port	1 bidirectional RS-232 or RS-422, rear panel female 9-pin D connector 1 bidirectional RS-232, front panel 2.5 mm mini stereo jack
Baud rate and protocol	9600 (default), 19200, 38400, 115200 baud (adjustable); 8 data bits, 1 stop bit, no parity
Serial control pin configurations	
RS-232	9-pin D connector: 2 = Tx, 3 = Rx, 5 = GND Mini stereo jack: tip = Tx, ring = Rx, sleeve = GND
RS-422	9-pin D connector: 2 = Tx-, 3 = Rx-, 5 = GND, 7 = Rx+, 8 = Tx+
Ethernet control port	1 female RJ-45 connector
Ethernet data rate	10/100Base-T, half/full duplex with autodetect
Ethernet protocol	ARP, ICMP (ping), IP, TCP, DHCP, HTTP, SMTP, Telnet
Ethernet default settings	Link speed and duplex level = autodetected IP address = 192.168.254.254 Subnet mask = 255.255.0.0 Default gateway = 0.0.0.0 DHCP = off
Web server	Up to 200 simultaneous sessions 1.24 MB nonvolatile user memory
Program control	Extron control/configuration program for Windows® Extron Simple Instruction Set™ (SIS™) Microsoft® Internet Explorer®, Telnet

General

Power	100 VAC to 240 VAC, 50-60 Hz, internal
84/88/128 Series	35 watts (typical) 38 watts (loaded)
1212/168/1616 Series	45 watts (typical) 52 watts (loaded)
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
Mounting	
Rack mount	Yes
Enclosure type	Metal
Enclosure dimensions (Depth excludes connectors. Width excludes rack ears.)	
84/88/128 Series	5.25" H x 17.0" W x 9.4" D (3U high, full rack wide) (13.3 cm H x 43.2 cm W x 23.9 cm D)
1212/168/1616 Series	10.5" H x 17.0" W x 9.7" D (6U high, full rack wide) (26.7 cm H x 43.2 cm W x 24.6 cm D)

Product weight	
84/88/128 Series	14.4 lbs (6.5 kg)
1212/168/1616 Series	19.4 lbs (8.8 kg)
Shipping weight	
84/88/128 Series	21 lbs (10 kg)
1212/168/1616 Series	26 lbs (12 kg)
DIM weight, international	
84/88/128 Series	25 lbs (12 kg)
1212/168/1616 Series	34 lbs (15.5 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
MTBF	30,000 hours
Warranty	3 years parts and labor

NOTE: All nominal levels are at ±10%.

NOTE: Specifications are subject to change without notice.

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