

Specifications

RGB-DVI 300, RGB-HDMI 300 A

Video input

Number/signal type.....	1 RGBHV, RGBS, RGsB, HDTV component video (Y, R-Y, B-Y)
Connectors.....	1 female 15-pin HD
Nominal level.....	1.0 Vp-p for Y of component video 0.7 Vp-p for RGB and for R-Y and B-Y of component video
Minimum/maximum levels.....	Analog: 0.0 V to 2.0 Vp-p with no offset
Impedance.....	75 ohms
Horizontal frequency.....	30 kHz to 100 kHz
Vertical frequency.....	24 Hz to 120 Hz
Resolution range.....	640x480 to 1920x1200* or 480p, 576p, 720p, 1080i, or 1080p

NOTE: *Only the reduced blanking version of the 1920x1200 resolution is sampled at full bit rate.

Formats.....	RGB and HDTV Y, R-Y, B-Y
Return loss.....	<-30 dB @ 5 MHz

Video processing

Digital sampling.....	24 bit, 8 bits per color; 162 MHz standard
Colors.....	16.78 million

Video output

Number/signal type	
RGB-DVI 300.....	1 single link DVI-D
RGB-HDMI 300 A.....	1 single link HDMI
Connectors	
RGB-DVI 300.....	1 female DVI-I (digital output only)
RGB-HDMI 300 A.....	1 female HDMI
Scaled resolutions.....	640x480 ^{6,8,9} , 800x600 ^{6,8,9} , 852x480 ^{6,8,9} , 1024x768 ^{6,8,9} , 1024x852 ^{6,8,9} , 1024x1024 ^{6,8,9} , 1280x768 ^{6,8,9} , 1280x800 ^{6,8,9} , 1280x1024 ^{6,8,9} , 1360x765 ^{6,8,9} , 1360x768 ^{6,8,9} , 1365x768 ^{6,8,9} , 1365x1024 ^{6,8,9} , 1366x768 ^{6,8,9} , 1440x900 ^{6,8,9} , 1400x1050 ^{6,8} , 1600x900 ^{6,8} , 1600x1200 ^{6,8} , 1680x1050 ^{6,8} , 1920x1200 ^{6,8} , 2048x1080 ^{1,2,3,4,5,6,7,8} , 480p ^{7,8} , 576p ⁶ , 720p ^{3,4,5,6,7,8} , 1080p ^{1,2,3,4,5,6,7,8} , 1080i ^{6,7,8} 1 = at 23.98 Hz, 2 = at 24 Hz, 3 = at 25 Hz, 4 = at 29.97 Hz, 5 = at 30 Hz, 6 = at 50 Hz, 7 = at 59.94 Hz, 8 = 60 Hz, 9 = 75 Hz; or automatic based on display device or current input rate
Formats.....	RGB and YCbCr digital video

Sync

Input type.....	RGBHV, RGBS, RGsB; bi-level YUVp component video, or tri-level HDTV component video
Output type.....	DVI-D or HDMI digital video
Standards.....	DVI 1.0, HDMI
Input level.....	2.75 V to 5.0 Vp-p for RGBHV or RGBS 0.6 Vp-p for component video tri-level sync 0.3 Vp-p for component video bi-level sync or RGsB
Input impedance.....	10k ohms

Audio – RGB-HDMI 300 A

Frequency response	20 Hz to 20 kHz, ± 1.1 dB
THD + Noise	0.03% @ 1 kHz at nominal level, 0 dB gain
S/N	>70 dB at rated maximum output

Audio input – RGB-HDMI 300 A

Number/signal type.....	1 stereo, unbalanced
Connectors	(1) 3.5 mm mini stereo (tip-ring-sleeve) jack
Impedance.....	>10k ohms unbalanced, DC coupled
Nominal level.....	+4 dBu (1.23 Vrms), -10 dBV (316 mVrms)
Maximum level	+10.4 dBu, (unbalanced) at 1% THD+N
Input gain adjustment.....	-18 dBu to +10 dBu

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

Audio output – RGB-HDMI 300 A

Number/signal type.....	1 stereo, digital LPCM 48 kHz (embedded in HDMI output)
Connectors	1 HDMI

Communication – scaler

Serial control ports.....	1 RS-232, 3.5 mm captive screw connector, 3 pole (rear panel) 1 RS-232, 2.5 mm mini stereo jack (front panel)
Baud rate and protocol	9600 baud, 8 data bits, 1 stop bit, no parity
Serial control pin configurations.....	1 = Tx, 2 = Rx, 3 = GND
Program control	Extron control/configuration program for Windows® Extron Simple Instruction Set (SIS™)

General

Power supply	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1.5 A, 18 watts
Power consumption	
RGB-DVI 300	
Device	8.1 watts, 12.0 VDC
Device and power supply...	10.0 watts, 100-240 VAC, 50-60 Hz
RGB-HDMI 300 A	
Device	9.3 watts, 12.0 VDC
Device and power supply...	14.0 watts, 100-240 VAC, 50-60 Hz
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, vents on top and sides
Thermal dissipation	
RGB-DVI 300	
Device	24.5 BTU/hour
Device and power supply...	29.7 BTU/hour
RGB-HDMI 300 A	
Device	32.6 BTU/hour
Device and power supply...	38.2 BTU/hour
Mounting	
Rack mount.....	Yes, with optional rack shelf kit and RFF 052 false front
Wall mount	Yes, with optional under-desk or through-desk mounting kit
Enclosure type	Metal
Enclosure dimensions	1.0 H x 8.75" W x 6.0" D (half rack wide) (2.5 cm H x 22.2 cm W x 15.2 cm D) (Depth excludes connectors and knobs.)

Product weight 1.6 lbs (0.7 kg)
Regulatory compliance..... CE, C-tick, c-UL, FCC Class A, ICES, KCC, UL, VCCI, WEEE
Warranty 3 years parts and labor

NOTES:

- All nominal levels are at $\pm 10\%$.
- Specifications are subject to change without notice.
- Shipping dimensions and weights are available at www.extron.com.

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