

## Specifications

### ISS 608

#### **TRUE 4K** specification – ISS 608

| 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        |                 | 10 bit                   |
| 3840 x 2160 at 30 Hz        |                 |                          |
| 4096 x 2160 at 60 Hz        | 4:2:0           | 10 bit                   |
| 3840 x 2160 at 60 Hz        |                 |                          |

|                                    |  |
|------------------------------------|--|
| Frame rate <sup>1</sup> .....      | 24, 25, 30, 50, or 60 fps  |
| Chroma sampling <sup>1</sup> ..... | 4:4:4, 4:2:2, or 4:2:0   |
| Color bit depth <sup>1</sup> ..... | 8 or 10 bits per color   |
| Signal type .....                  | DVI v1.0, HDMI v1.4 and v2.0, DisplayPort v1.2, HDCP v1.4 and v2.3 |
| Max. video data rate <sup>1</sup>  |  |
| HDMI .....                         | 18 Gbps (6 Gbps per color)   |
| DisplayPort .....                  | 21.6 Gbps (5.4 Gbps per lane)                                      |

**NOTE:** <sup>1</sup>Subject to the maximum data rate limit. Use our calculator at [www.extron.com/8Kdata](http://www.extron.com/8Kdata) to determine video parameters supported by this data rate.

#### Video input

|                            |  |
|----------------------------|--|
| Number/signal type .....   | 6 HDMI/DVI (HDCP compliant)<br>2 DisplayPort (HDCP compliant)  |
| Connectors .....           | 6 female HDMI Type A<br>2 female DisplayPort   |
| 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  |
| Resolution range .....     | 640x480 to 4096x2160, 480i, 576i, 480p, 576p, 720p, 1080i, 1080p, 2K, 4K<br>3840x2160 (up to 60 Hz) to 4096x2160 (up to 60 Hz) |
| Standards .....            | DVI 1.0, HDMI 1.4 and 2.0, HDCP 1.4 and 2.3, DisplayPort 1.2   |

#### Video processing

|                        |   |
|------------------------|---|
| Digital sampling ..... | 8, 10 bits per color maximum; 600 MHz pixel clock |
| Colors .....           | 1 billion (10-bit 4:4:4 processing)               |

#### Video output

|   |   |
|---|---|
| Number/signal type .....                      | 2 HDMI/DVI (HDCP compliant)                             |
| Connectors .....                              | 2 female HDMI Type A                                    |
| Video output power for<br>active cables ..... | 2.2 W total for all HDMI ports, 1.1 W per HDMI port max |

## Specifications • ISS 608 (Continued)

|                         |   |
|-------------------------|---|
| Scaled resolution ..... | 640x480 <sup>8</sup> , 800x600 <sup>8</sup> , 1024x768 <sup>8</sup> , 1280x768 <sup>8</sup> , 1280x800 <sup>8</sup> , 1280x1024 <sup>8</sup> , 1360x768 <sup>8</sup> , 1366x768 <sup>8</sup> , 1440x900 <sup>8</sup> , 1400x1050 <sup>8</sup> , 1600x900 <sup>8</sup> , 1600x1200 <sup>8</sup> , 1920x1200 <sup>8</sup> , 2048x1200 <sup>8</sup> , 2048x1536 <sup>8</sup> , 2560x1080 <sup>8</sup> , 2560x1440 <sup>8</sup> , 2560x1600 <sup>8</sup> , 3840x2160 <sup>1,2,3,4,5,6,7,8</sup> , 4096x2160 <sup>1,2,3,4,5,6,7,8</sup><br>480p <sup>7,8</sup> , 576p <sup>6</sup> , 720p <sup>3,4,5,6,7,8</sup> , 1080i <sup>6,7,8</sup> , 1080p <sup>1,2,3,4,5,6,7,8</sup> , 2K <sup>1,2,3,4,5,6,7,8</sup><br>Custom 1 through 10<br><sup>1</sup> = 23.98 Hz, <sup>2</sup> = 24 Hz, <sup>3</sup> = 25 Hz, <sup>4</sup> = 29.97 Hz, <sup>5</sup> = 30 Hz, <sup>6</sup> = 50 Hz, <sup>7</sup> = 59.94 Hz, <sup>8</sup> = 60 Hz |
| Standards .....         | DVI 1.0, HDMI 1.4 and 2.0, HDCP 1.4 and 2.3   |

### Audio

|                                |   |
|--------------------------------|---|
| Frequency response .....       | 20 Hz to 20 kHz, ±0.05 dB   |
| THD + Noise .....              | <0.1% @ 1 kHz, 20 kHz bandwidth at nominal level  |
| S/N .....                      | >90 dB at maximum output (unweighted)   |
| Stereo channel separation..... | >80 dB @ 1 kHz  |
| Supported formats              |   |
| Analog de-embedding.....       | LPCM-2Ch  |
| HDMI pass-through.....         | LPCM up to 7.2/24-bit/192 kHz, Dolby TrueHD, Dolby Digital Plus, Dolby Digital EX, Dolby Digital 5.1, Dolby Digital 2/0 Surround, Dolby Digital 2/0, Dolby Atmos 7.2, DTS-HD, DTS ES Discrete 6.1, DTS ES Matrix 6.1, DTS Digital Surround 5.1, DTS 2-channel |

### Audio input

|                         |   |
|-------------------------|---|
| Number/signal type..... | 6 HDMI embedded audio<br>2 DisplayPort embedded audio |
| Connectors.....         | 6 female HDMI<br>2 female DisplayPort                 |

### Audio output

|                         |  |
|-------------------------|--|
| Number/signal type..... | Stereo/mono, balanced/unbalanced<br>2 analog (1 program, 1 preview)<br>2 HDMI embedded |
| Connectors.....         | (2) 3.5 mm captive screw connector, 5 pole<br>2 HDMI female Type A                     |

### Communications – switcher

|  |  |
|--|--|
| Serial control port.....               | 1 bidirectional RS-232, 3.5 mm, 3 pole captive screw connector (rear panel)  |
| Baud rate and protocol .....           | 9600, 8 data bits, 1 stop bit, no parity   |
| Serial control pin configuration ..... | 1 = Tx, 2 = Rx, 3 = GND  |
| Ethernet control port.....             | 1 RJ-45 female connector   |
| Ethernet data rate .....               | 10/100Base-T, half/full duplex with autodetect   |
| Ethernet protocol .....                | ARP, ICMP (ping), IP, TCP, DHCP, HTTP, Telnet  |
| Ethernet default settings .....        | Link speed and duplex level = autodetected<br>IP address = 192.168.254.254<br>Subnet mask = 255.255.0.0<br>Gateway = 0.0.0.0<br>DHCP = off |
| Program control.....                   | Extron control/configuration program for Windows®<br>Extron Simple Instruction Set (SIS™)<br>Microsoft® Internet Explorer®                 |

### General

|                            |  |
|----------------------------|--|
| Power supply.....          | Internal<br>Input: 100-240 VAC, 50-60 Hz   |
| Power consumption.....     | 59.1 watts   |
| Temperature/humidity ..... | Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing<br>Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing |
| Cooling.....               | 2 fans, air flows right to left, as viewed from front panel  |
| Thermal dissipation.....   | 179 BTU/hr   |

## Specifications • ISS 608 (Continued)

|                                     |   |
|-------------------------------------|---|
| Rack mount .....                    | Yes   |
| Enclosure type .....                | Metal   |
| Enclosure dimensions .....          | 3.5" H x 17.5" W x 12.75" D (2U high, full rack wide)<br>(8.9 cm H x 44.4 cm W x 32.4 cm D)<br>(Depth excludes connectors and knobs. Width excludes rack ears.) |
| Product weight .....                | 8.6 lbs (3.9 kg)  |
| Regulatory compliance.....          | CE, c-UL, C-Tick, FCC Class A, ICES, UL, VCCI   |
| Product 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 weights and dimensions are available at [www.extron.com](http://www.extron.com).

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