

**CRYSTAL™****SPECS**

Crystal Group RVA6152 Rugged Video Appliance



Extend your reach with multi-channel HD. Video-based data is critical to the accuracy and effectiveness of critical edge applications, whether it's in the midst of active combat operations, real-time oil rig monitoring, or conducting live, virtual, constructive training on land, in air, or at sea. In collaboration with Matrox® Video, the RVA6152 is the world's only ruggedized multi-4K video encoder and 4K IP KVM extender. This game-changing ruggedized video appliance (RVA) delivers critical, real-time 4K video streaming, recording, extension, and storage with seamless accuracy in the most demanding and unpredictable operating environments.

SYSTEM CAPABILITIES

- Simultaneously customize settings for each channel while streaming, processing, and recording real-time video
- Auto discover any RVA6152 on the subnet; easily add units outside the subnet
- Execute multiple encoder tasks in multiple settings with a single appliance without compromising quality
- Supports MP4, MOV, and fMP4 file formats and SRT, RTSP, RTP, RTMP, MPEG2.TS, and HLS streaming protocols
- Monitor and manage installations, as well as configure individual device settings from a central application

Equipped with H.264 compression technology, the RVA6152 video encoder delivers quality, low-bitrate streaming and recording. The quad 4K input capture and encode enables secure, real-time streaming and/or recording of four or more 4K channels simultaneously over standard one Gigabit Ethernet (GbE) networks. The plug-and-play design integrates easily into existing infrastructures for high-density content distribution and system scalability.

FEATURES

- 4x 4096x2160 @ 60Hz max resolution
- Four HDMI outputs
- Four+ decoded streams
- Glass-to-glass latency as low as 50 ms
- Quad 4K input with zero latency pass through
- HDCP compliant: 1.4 and 2.2
- Whisper-quiet operation at less than 25 dB
- Supports up to eight 4K streams from a single U of rack space
- Multiple audio input and output options
- Stand alone or rackmounted options

A clear advantage.

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Specifications

Hardware

Acoustic noise

- ~25 dB at full stream/record capacity

Power supply

- 100-240 VAC in, 12 VDC out, 60W
- DIN4 locking power connector

Product dimensions

- 8.53 x 7.52 x 1.68 in (21.7 x 19.1 x 4.3 cm)

Form factors

- Stand-alone appliance
- Rack mount (1U, 1/2R)

Encoding

Formats (Codecs)

- Video: H.264/MPEG-4 Part 10 (AVC)
- Audio: MPEG-4 AAC-LC/HEV1/HEV2

Recording

Formats

- MP4, MOV, fMP4

Programmability

- Start date and time, duration, maximum file length, file frequency

Locations

- Shared network drive or NAS
- Local USB ports for USB flash drive and external hard drive
 - 2x USB 2.0 (front) and 1x USB 3.0 (back)

Network interface

Streaming protocols

- RTSP (TCP), RTCP, and RTP (UDP); all required
- RTP/RTCP over UDP; both required
- SRT over UDP
- RTMP
- MPEG2.TS over UDP
- HLS

Command & control

- HTTPS over TCP, UPnP (discovery)

Network standard

- 100/1,000 base-T Ethernet, auto speed, half/full duplex

IP addressing

- IPv4, IPv6, DHCP (default), static IP address support

IP stream support

- Unicast, multi-unicast, multicast

Performance

Maximum capture resolution

- 2x 3840x2160 @60Hz or 2x 4096x2160 @60Hz
- 4x 3840x2160 @30Hz or 4x 4096x2160 @30Hz

Color space capture

- RGB and YUV 8- and 10-bit support
- Color space conversion support

Connectivity

Network connector

- 2x RJ45 with status LED indicators
 - 1x control and stream
 - 1x stream only

Video input

- 4x HDMI (Type A) with audio support

Video output/Pass-through

- 4x HDMI (Type A) with audio support

Video monitoring output

- 1x DisplayPort 1.1

Audio input

- 4x HDMI digital LPCM two-channel stereo audio
- 4x 3.5 mm analog stereo audio
 - 1 Vrms (0 dBV)
 - 14.3 kΩ (gain = 0 dB)
 - -60 dB to +6 dB (default is 0)
- 1x 3.5 mm stereo mic in
 - 2.5 V
 - 1 Vrms (0 dBV)
 - 15 kΩ (gain = 0 dB), 5 kΩ (gain ≥ 10 dB)
 - -74 dB to +41 dB (default is 0)

Audio output

- 4x HDMI digital LPCM two-channel stereo audio
- 1x 3.5 mm headphones out
 - 1.2 Vrms (1.6 dBV)
 - 32 mW into 32Ω
 - -74 dB to 0 dB (default is 0)

Environmental standards¹

MIL-STD-810, Operational Temperature, Method 501, Procedure I/II: -10°C to +50°C, -40°C operational with SSD

MIL-STD-810, Storage, Method 501, Procedure I/II: -30°C to +75°C

MIL-STD-810, Humidity, Method 507, Procedure II: 240 hours with humidity kit

MIL-STD-810, Altitude, Method 500: 10,000ft operation, 20,000ft transport

MIL-STD-810, Vibration, Method 514, Procedure I: 1.5 GRMS, 5-2,000Hz, 75 min/axis

MIL-STD-810, Shock, Method 516, Procedures I/V: 20g, 11 msec; 3 axes, each direction

IEC/EN 60945, Maritime navigation and radiocommunication equipment and systems (ENV and EMC)



RVA6152 rear view

1 - Designed to meet standard; full compliance testing available upon request

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