

RVA6152

RUGGED VIDEO APPLIANCE



4x 4096x2160
@ 60Hz max
resolution



Stand alone or
rack-mounted
options



Up to 7 full-
height PCIe
slots



Quad 4K input with
zero latency pass
through



AC or DC
power



HDCP
compliant



EXTEND YOUR REACH WITH MULTI-CHANNEL HD

Video-based data is critical to the accuracy and effectiveness of critical edge applications. 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. 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.

Crystal Group provides a 5-year warranty and forward-looking configuration management to enhance the long-term investment of your compute solution.



USE CASES

- Active combat operations
- Real-time oil rig monitoring
- Conducting live, virtual, constructive training on land, in air, or at sea

CRYSTAL GROUP RVA6152 TECHNICAL 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:
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, multi-cast

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

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CRYSTAL GROUP RVA6152 TECHNICAL SPECIFICATIONS

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 k Ω (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 k Ω (gain = 0 dB), 5 k Ω (gain $\geq$ 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 32 Ω
 - -74 dB to 0 dB (default is 0)

ENVIRONMENTAL TESTING STANDARDS

MIL-STD-810: Environmental Engineering Considerations and Laboratory Tests

Method 500, Altitude: 10,000ft operation, 20,000ft transport

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

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

Method 507, Humidity: Procedure II: 240 hours *with optional conformal coating kit* ¹

Method 514, Vibration: Procedure I: 4.7G, 5–2,000Hz, 60 min/axis, 3 axis ¹

Method 516, Shock: Procedures I & V: 40G, 11ms, 18 pulses, 3/axis both directions ¹

ELECTROMAGNETIC COMPATIBILITY STANDARDS

IEC/EN 60945

Maritime navigation and radio communication equipment and systems (ENV and EMC)

In-house test reports provided for baseline units; customer-specific test options available upon request.

1: Test report available

2: Testing in progress

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