



CRYSTAL™

SPECS

# Crystal Group RVA3408T/R Rugged Video Appliance



**Extend your reach with multi-channel HD.** The RVA3408 IP KVM extender provides 4Kp60 4:4:4 UHD performance or quad-monitor capabilities over a standard 1GbE network at unprecedented low bitrates. This transmitter-receiver duo can be configured as a point-to-point or networked extender to securely deliver multiple video, keyboard, mouse, USB 2.0, and audio signals. The system also provides aggregated, seamless control of multiple systems from a remote 4K/multi-display station with a single keyboard and mouse.

Ideally suited for multi-domain command and control, surveillance, and perimeter security, the RVA3408T/R works with commercial off-the-shelf (COTS) network switches to deliver a scalable KVM matrix switching solution. The system centralizes hardware in a command post to increase security, protect against environmental hazards, and reduce system noise and heat emissions. The RVA3408 3 IP KVM extender grants seamless remote access to secured systems and the added benefit of smart control of multiple video sources over the IP network.

## SYSTEM CAPABILITIES

- Support quad-monitor configurations (4x 1920x1080 @60Hz) with a single system
- Improve operator workflow across an expansive multi-monitor workspace
- Deliver pristine image quality, smooth video playback, and excellent keyboard and mouse responsiveness
- Create a scalable KVM matrix over IP supporting one-to-one/many, many-to-one/many configurations
- Leverage existing networking equipment and standard GbE infrastructure for seamless deployment and operations
- Connect to and control systems from any remote location on the IP network to maximize information flow
- Elevate protection from cyber attacks with IPSec VPN client and multi-factor authentication

## FEATURES

- World's first IP KVM extender with 4Kp60 4:4:4 UHD performance
- Unprecedented low bit rates
- Stand alone or rack mounted options
- Configure over LAN, private WAN, or internet networks
- Standard 1GbE network infrastructure
- Small form factor/size

*A clear advantage.*

SERVERS

DISPLAYS

STORAGE

NETWORKING

EMBEDDED

[crystalrugged.com](http://crystalrugged.com)



## Specifications

RVA3408T
<b>Connections</b> <ul style="list-style-type: none"> <li>• 1x DisplayPort 1.2 video input connector</li> <li>• 3x DisplayPort 1.1 video input connectors</li> <li>• 1x USB 2.0 Type B</li> <li>• Line in 3.5 mm, line out 3.5 mm, RS-232 9-pin D-type (supported in certain configurations)</li> </ul>
<b>Local outputs</b> <ul style="list-style-type: none"> <li>• 1x DisplayPort 1.1</li> <li>• 2x USB 2.0 Type A</li> </ul>
<b>Link</b> <ul style="list-style-type: none"> <li>• 1x RJ45 network port</li> <li>• 1x SFP cage (supports SFP multi-mode or single-mode transceiver, sold separately)</li> </ul>
<b>General</b> <ul style="list-style-type: none"> <li>• Embedded digital audio through DisplayPort, with option to de-embed digital audio on the receiver unit</li> <li>• Lockable power connector, external 12V power supply unit</li> <li>• Stand-alone or rack-mountable unit (1U ½ R)</li> <li>• Status LED indicators</li> <li>• On/off and recessed reset button</li> </ul>

RVA3408R
<b>Local devices</b> <ul style="list-style-type: none"> <li>• 1x DisplayPort 1.2 video output connectors</li> <li>• 3x DisplayPort 1.1 video output connectors</li> <li>• 6x USB 2.0 Type A</li> <li>• Line in 3.5 mm, line out 3.5 mm, mic in 3.5 mm, headphone out 3.5 mm, RS-232 9 Pin D-Type</li> </ul>
<b>Link</b> <ul style="list-style-type: none"> <li>• 1x RJ45 network port</li> <li>• 1x SFP cage (supports SFP multi-mode and single-mode transceivers, sold separately)</li> </ul>
<b>General</b> <ul style="list-style-type: none"> <li>• Option to de-embed digital audio and convert to analog audio</li> <li>• Lockable power connector, external 12V power supply</li> <li>• Stand-alone or rack-mountable unit (1U ½ R)</li> <li>• Status LED indicators</li> <li>• On/off and recessed reset buttons</li> </ul>

RVA3408T/R System
<b>Maximum resolution</b> <ul style="list-style-type: none"> <li>• 1x 3840x2160 @60Hz</li> <li>• 2x 3840x2160 @30Hz</li> <li>• 2x 2560x1600 @60Hz</li> <li>• 3x 1920x1200 @60Hz</li> <li>• 4x 1920x1080 @60Hz</li> <li>• 4x 1920x1200 @50Hz</li> </ul>
<b>Distance in point-to-point</b> <ul style="list-style-type: none"> <li>• OM2, OM3, OM4 (50/125µm) multi-mode - 550 m (1804 ft.)</li> <li>• OM1 (62.5/125µm) multi-mode cable type - 275 m (902 ft.)</li> <li>• OS1, OS2 (9/125µm) single-mode cable type - 10 km (6.20 mi)</li> <li>• Cat5e, Cat6 - 100 m (328 ft.)</li> </ul>
<b>Distance over IP</b> <ul style="list-style-type: none"> <li>• LAN</li> <li>• Private WAN</li> <li>• Internet</li> </ul>

Environmental standards <sup>1</sup>
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 radio communication equipment and systems (ENV and EMC)



RVA3408R rear view



RVA3408T rear view

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

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