

1-Local / Remote Shared Access Single Port VGA KVM over IP Switch

RCMVGA101

The RCMVGA101 Single Port VGA KVM over IP Switch is a KVM device exclusively designed for production line applications, which can grant the video, audio, mouse & keyboard, and virtual media access of a workstation at a production line to a local and remote consoles for convenient management. Supporting both USB and PS/2 (keyboard and mouse) interfaces, RCMVGA101 is compatible with not only modern-day workstations but also legacy systems and older generation servers. It also supports microphone and speakers for both local and remote consoles.

Integrated with ATEN's exclusive RCM API and sporting an FPGA graphics processor, the RCMVGA101 delivers optimal OCR functionality and customizable system integration and automation. Additionally, by using the RCMMS (RCM Management Software), an intuitive, centralized management platform featuring Panel Array, users can manage, monitor, and control up to hundreds of RCM devices simultaneously.

For enhancing its production line application capabilities, RCMVGA101 features USB / RS-232 touch panel support, OSD title-bar notification, and local console priority. Furthermore, it supports ATEN Access Control Box (2XRT-0015G) for on-site enabling or disabling remote control privilege.

For user-friendly operation, a mini USB port on the front panel is designed as a Laptop USB Console (LUC) port. By simply connecting a laptop to the LUC port, users can access any computer connected to the switch for easy on-site management. That means no additional monitor, keyboard and mouse is required locally for routine maintenance. Additionally, the RCMVGA101's Virtual Media function allows a user to perform diagnostic testing, file transfers, or apply OS / applications updates and patches from a remote console.

To ensure seamless connectivity, the RCMVGA101 is equipped with dual LAN and dual power functionality for keeping operation at the production line smooth and efficient.

All in all, the RCMVGA101 provides a complete system management across different facilities and reduces the number of operators to minimize space requirements and maximizes personnel efficiency. With its over-IP access eliminating the need to physically move legacy KVM solution to each malfunctioning unit, providing users with the ability to capture the device display screen data for data collection and direct OCR analysis, and using APIs for software integration applications, it is an outstanding solution for high-tech production lines requiring durable and reliable over-IP server management.

Front View



Rear View



Features

Exclusive RCM functionalities

- Supports ATEN Access Control Box for on-site enabling / disabling of remote control privilege
- Supports RCMMS for customizable Panel Array for operators to monitor all machines simultaneously
- Supports exclusively integrated RCM APIs with various functions, such as OCR, for system integrators
- OSD title bar notification — instantly notifies users upon urgent events
- Local console priority — gives the local console the priority over remote consoles to access the connected server

Hardware

- Compact and slim design for space usage optimization
- Provides an FPGA graphics processor for better image quality
- RS-232 DTE / DCE standards compliant for serial control
- Provides over-IP capability to VGA KVM switches that do not have built-in over-IP functionality¹
- Local console provides USB keyboard and mouse support²
- A mini USB port on the front panel serves as a Laptop USB Console (LUC) port
- Two 10 / 100 / 1000 Mbps NICs for redundant LAN or dual IP operation
- Dual Power Supply for power backup
- Supports multiplatform server environments: Windows, Mac, Sun, Linux and VT100 based serial devices
- Virtual Media support
- High video resolution — up to 1920 x 1200 @ 60 Hz for both local and remote consoles
- Audio support — microphone and speakers are supported on both local and remote consoles

Note:

1. When connecting to KVM switches, certain features of the RCMVGA101 may not be supported (e.g. some switches do not support virtual media).
2. Using keyboards / mouses with OS-dependent functions not designed for Windows may have compatibility issues.

Management

- Up to 64 user accounts — up to 32 users can simultaneously share control*
- Console access right management
- End session feature — administrators can terminate running sessions
- Event logging and Windows-based Log Server support
- Event Logging — the RCMVGA101 can record all events and write them to a searchable database
- Supports instant notification of critical system events via email, SNMP trap and Syslog
- Firmware upgradable via remote access
- Access via a built-in serial viewer, or via third-party software (such as PuTTY) for Telnet and SSH sessions
- Out of Band support — accessible through its serial port using a dial-up connection
- Port Share Mode allows multiple users to gain access to a server simultaneously
- Local / Remote Share Mode conveniently grants shared or exclusive console privilege
- Integration with ATEN CCVSR Video Session Recording Software
- Supports ATEN KVM over IP Console Station (KA8270 / KA8280 / KA8278 / KA8288)
- DDNS — allows mapping of a dynamic IP address assigned by a DHCP server to a host name
- Supports export / import of user account and configuration settings
- Browser Access Permission — extra security feature to allow / disallow browser / http / https access
- Supports IPv6

Note: As more users connect to the device, the bandwidth allocated to each user decreases.

Easy-to-Use Interface

- Browser-based and AP GUIs offer a unified multilanguage interface to minimize user training time and increase productivity
- Multiplatform client support (Windows, Mac, Linux, Sun)
- Multibrowser support (IE, Chrome, Firefox, Safari, Opera, Netscape)
- Browser-based UI in pure Web technology allows administrators to perform administrative tasks without pre-installed Java software package requirements
- Full-screen or sizable and scalable Virtual Remote Desktop
- Magic Panel with configurable function for quick launch

Advanced Security

- External authentication support: RADIUS, LDAP, LDAPS and MS Active Directory
- Supports TLS 1.2 data encryption and RSA 2048-bit certificates to secure users logging in from browsers
- Flexible design allows users to choose any combination of encryption algorithms (e.g. 256-bit AES) or system-generated random selection for independent keyboard/mouse, video, and virtual media data encryption
- Supports IP / MAC Filter
- Supports password protection
- Private CA

Virtual Media

- Virtual media enables file applications, OS patching, software installation and diagnostic testing
- Works with USB-enabled servers at OS and BIOS level
- Supports USB 1.1 and USB 2.0 DVD / CD drives, USB mass storage devices, PC hard drives, folders and ISO images

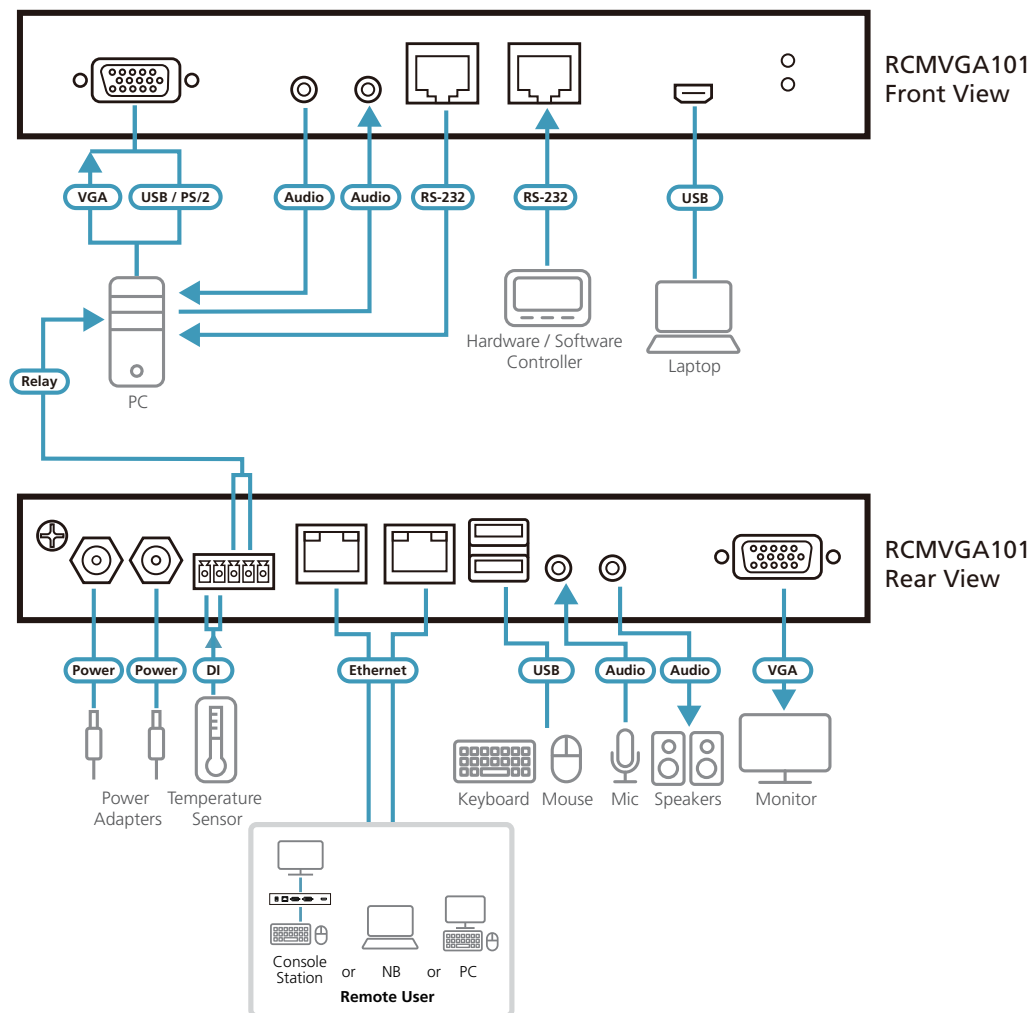
Virtual Remote Desktop

- Video quality can be adjusted to optimize data transfer speed; monochrome color depth, threshold and noise settings can be adjusted for compression of the data bandwidth in low bandwidth situations
- Full-screen video display or scalable video display
- Message Board for communication among remote users
- On-screen keyboard with multilanguage support
- Mouse DynaSync™ — automatically synchronizes the local and remote mouse movements
- Supports Exit Macros
- BIOS-level access

Highlights

Exclusive RCM Features	The RCMVGA101 is compatible with the 2XRT-0015G KVM over IP Access Control Box, allowing users to enable or disable remote control privilege, and supports Panel Array for monitoring all machines with multiple RCM products. The RCMVGA101 also offers exclusively integrated RCM APIs with various functions, such as OCR, for easy management.
Enhanced System Availability	Dual Gigabit LAN (10 / 100 / 1000 Mbps) ports / Dual power The dual LAN / power supply provides backup/redundancy for ensured reliability. Should one of the IPs or one of the power supplies becomes unavailable, a backup takes over in order to keep the system functioning normally. Modem dial-in / dial-back / dial-out support for OOB This function provides backup for networking connectivity and ensures high system reliability and availability.
Audio Supports	Microphone and speakers are supported by both local and remote consoles.
Advanced Security External Authentication Support	In addition to its own security protection, the RCMVGA101 allows you to set up login authentication and authorization management from external sources, such as RADIUS, LDAP, LDAPS and MS Active Directory.

Virtual Media	Virtual Media support lets you map DVD / CD-ROMs and other storage media to a remote server. This function allows you to conduct file transfers, application and OS patches, and diagnostic tests remotely.
Smart Card / CAC Reader Supports	This function allows a smart card reader that is plugged into a remote client computer's USB port to be redirected, and appear as if it were plugged into the local server. One purpose of smart cards (Common Access Cards, for example) is to allow authentication to the local server from the remote client.
Virtual Remote Desktop	The remote desktop can appear in full screen or as a window with a flexible, scalable video display. Advanced features such as the Message Board, Mouse DynaSync™, Virtual Media, and Keyboard Pass Through, create a Virtual Remote Desktop that allows users to operate servers from remote locations as if they were actually at the local site.



Specifications

RCMVGA101	
Connectors	
Console Ports	2 x USB Type-A Female (White) 1 x VGA Female (Blue) 1 x Mini Stereo Jack Female (Green) 1 x Mini Stereo Jack Female (Pink)
KVM Ports	1 x SPHD Female (Yellow) 1 x Mini Stereo Jack Female (Green) 1 x Mini Stereo Jack Female (Pink)
LAN Ports	2 x RJ-45 Female
Virtual Media	1 x USB Mini-B Female
Power	2 x DC Jack
Serial	2 x RJ-45 Female
Control	1x PS/2 Female
Switches	
Reset	1 x Semi-recessed pushbutton (Black)
Emulation	
Keyboard / Mouse	USB, PS/2
LEDs	
Power	2 (Green)
Video	Local console – 1920 x 1200 @ 60 Hz
	Remote console – 1920 x 1200
Power Consumption	DC 5 V : 7.46 W
Environmental	
Operating Temperature	0 – 50 °C (RCMVGA101) 0 – 40 °C (Power Adapter)
Storage Temperature	-20 – 60 °C
Humidity	0 – 80% RH, Non-condensing
Physical Properties	
Housing	Metal
Weight	0.86 kg
Dimensions (L x W x H)	20.00 x 15.41 x 2.85 cm

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