

RCM816A

1-Local/8-Remote Shared Access 16-Port Multi-Interface Cat 5 KVM over IP Switch





offers superior FHD video resolution up to 1920 x 1200, virtual media transmissions at double speed, FIPS 140-2 with level 1 security standards by using an embedded FIPS 140-2 certified OpenSSL cryptographic module. Equipped with dual on-board NICs, the RCM series is built to ensure reliability and availability of remote access to all servers. The RCM series can be remotely accessed via WinClient / JavaClient* at a console from a separated location for management and operation.

The RCM series is compatible with ATEN's KVM over IP Console Station - the KA82 series. The KA82 series is a standalone console that replaces PC or NB, enabling users to remotely access, monitor and control all servers connected to multiple ATEN's RCM series with impenetrable security against virus threats. It is especially suitable for environments where a PC is not allowed. In addition, the RCM series works with ATEN's <u>PDU</u> remote power management systems from the KVM over IP switches' user interface.

Integrated with ATEN's exclusive RCM API, the RCM series 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.

To ensure seamless connectivity, the RCM series is equipped with dual LAN capability for keeping operation at the production line smooth and efficient.

All in all, the RCM series provides a complete system management across different facilities reduces the number of operators required on site to minimize space requirement while maximizing 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.

Note:

We recommend using WinClient app or JavaClient app for more robust management and control. Performance and usage may vary depending on the user's hardware configuration. A minimum of 8GB RAM, dual core CPU and a graphics card that supports OpenGL is required. Please also make sure that the browser is the latest version



Features

Exclusive RCM functionalities

- · Supports exclusively integrated RCM APIs with various functions, such as OCR, for system integrators
- Supports RCMMS for customizable Panel Array for operators to monitor all machines simultaneously
- Supports ATEN Access Control Box for on-site enabling / disabling of remote control privilege*
- 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*
- · Supports RS-232 and USB touch panel for easy and intuitive control*

Note: These exclusive RCM functions are supported when working with KVM Adapter Module - KA7174.

Hardware

- · Laptop USB Console (LUC) a dedicated USB port directly connects to a laptop for easy console operation
- 8 separate buses for remote KVM over IP access Two 10 / 100 / 1000 Mbps NICs for redundant LAN or two IP operation
- Blade server support
- Supports PS/2, USB, Sun Legacy and serial (RS-232) connectivity Multiplatform server environments: Windows, Mac, Sun, Linux and VT100 based serial devices
- Audio enabled
- Video resolution up to 1920 x 1200 @ 60 Hz; 24-bit color depth



Management

- Integration with ATEN CCVSR Video Session Recording Software
- Supports 64 user accounts and up to 32 users can be logged in at the same time for control and management
- Green IT Fan auto-fan-speed adjustment responding to temperature
- Event logging and Windows-based log server
- Event notification supports notification of SMTP email, SNMP Trap, and SMS (with additional mobile devices)
- Event destination event logs will be saved to Log server, Syslog server, and USB drive
- Firmware upgradeable
- Out-of-Band access modem dial-in / dial-out / dial-back support
- Adapter ID stores port information allowing administrators to relocate the servers to different ports, without having to re-configure the adapters and switches
- Port share mode allows multiple users to gain access to a server simultaneously
- Supports ATEN KVM over IP console station (KA82xx series)
- Power association enables the switch's KVM ports to be associated with ATEN PDUs power outlets for remote power management
- Supports IPv4, IPv6

· Easy-to-Use Interface

- Panel Array Mode™ monitors all ports in a grid display (both local and remote screens)
- Local console, browser-based, and AP GUIs offer a unified multi-language interface to minimize the user training time and increase productivities
- Multiplatform client support (Windows, Mac OS X, Linux, and Sun)
- Multi-browser support Internet Explorer, Chrome, Firefox, Safari, Opera, and Netscape
- Browser-based GUI in pure Web technology –allows administrators to perform administrative tasks without preinstalled software. (e.g. Java) Supports web-friendly KVM-over-IP access with HTML5 WebClient viewer users can remotely access all the connected servers and PCs without Java or browser plug-in installation
- Users can launch multiple virtual remote desktop sessions to control multiple servers during the same login
- Full-screen or sizable and scalable virtual remote desktop Keyboard / mouse broadcast keyboard and mouse signals can be duplicated across all servers simultaneously Video syncing with the local console - local console monitor's EDID information stored on the KVM adapter for display resolution optimization

Security

- · High-grade security supports FIPS 140-2 level 1 security standards that use an embedded FIPS 140-2 certified OpenSSL cryptographic module (Certificate #1747, #2398, #2473)
- Remote authentication support: RADIUS, LDAP, LDAPS, and MS Active Directory
- Supports TLS 1.2 data encryption and RSA 2048-bit certificates to secure users log in from browser
- Flexible encryption design allows users to choose any combination of 56-bit DES, 168-bit 3DES, 256-bit AES, 128-bit RC4, or random for independent keyboard / mouse, video, and virtual media data encryption
- Support for IP / MAC filter
- Configurable user and group permissions for server access and control
- Automated CSR creation utility and third party CA certificate authentication

Virtual Media

- Virtual media enhances data transmission performance, ideally for file transfers, OS patching, software installations and diagnostic testing
- Works with USB enabled servers in operating system and BIOS level
 Support USB2.0 DVD / CD drives, USB mass storage devices, PC hard drives and ISO images

Virtual Remote Desktop

- Video quality such as monochrome color depth, threshold and noise settings, bandwidth increment / reduction can be adjusted for optimizing data transfer speed
- Mouse DynaSync[™] automatically synchronizes the local and remote mouse movements
- On-screen keyboard with multi-language support
- BIOS-level access for Troubleshooting

Specifications

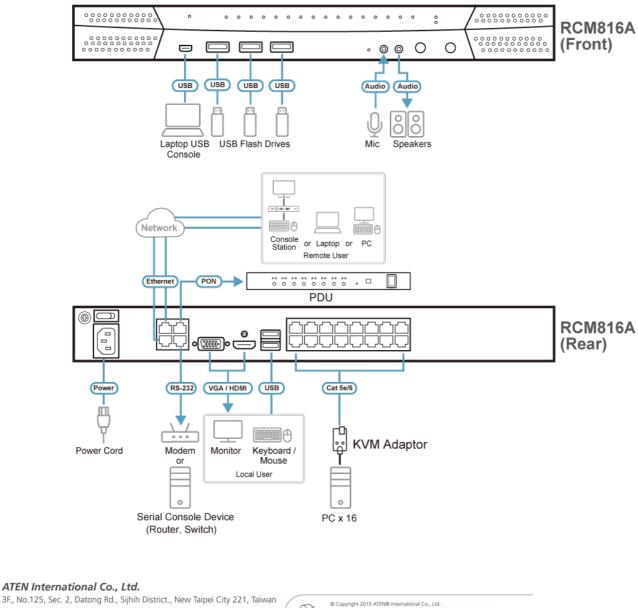
Console Connections	
Local	1 (Share)
Remote	8
Computer Connections	
Direct	16
Port Selection	Pushbuttons, Hotkeys, GUI
Connectors	
Console Ports	2 x USB Type A Female (White) 1 x HDMI Female (Black) 1 x VGA HDB-15 (Blue)



USB Peri3 x USB Ype A FomelAudo2 x Audo semileLapot DC anove (LUC) PM1 x USB Mini PermaeLapot DC anove (LUC) PM1 x USB Mini PermaeSMI Para1 x R J-K FomelFM Para1 x R J-K FomelPara2 x R J-K FomelLA Nord2 x R J-K FomelPara2 x R J-K K FomelPara2 x R J-K K K K K K K K K K K K K K K K K K K			
Labop UBS Console (LUC) Prod 1 x USB Mri-B Penale KVM Ports 1 is R.J.4.5 Famale Serial 1 x R.J.4.5 Famale PCM 1 x R.J.4.5 Famale PCM 2 x R.J.4.5 Famale PCM 2 x R.J.4.5 Famale Power 2 x R.J.4.5 Famale Switches	USB Port	3 x USB Type A Female	
KM Ports 16 k R J 4 5 Female Serial 1 x R J 4 5 Female FON 1 x R J 4 5 Female FON 2 x R J 4 5 Female FON 2 x R J 4 5 Female FON 2 x R J 4 5 Female Four 2 x R J 4 5 Female Switches	Audio	2 x Audio Jack Female	
Serial 1.8.1-4.5 Fenale PON 1.8.1-4.5 Fenale PN 2.8.1-4.5 Fenale IAM Poris 2.8.1-4.5 Fenale Power 3.8.1-6 Fenale Power 2.8.1-4.5 Fenale Statistic 3.8.1-10 Statistic 3.8.1-10 Power 1.8.5 cmi roossed Publishon Power 1.6.5 cmi roossed Publishon Saturation 1.6.5 cmi roossed Publishon Power 1.9.0 x 20.0 cmi roossed Publishon Power <t< td=""><td>Laptop USB Console (LUC) Port</td><td>1 x USB Mini-B Female</td></t<>	Laptop USB Console (LUC) Port	1 x USB Mini-B Female	
PN 1 x RJ45 Penale LAN Ports 2 x RJ45 Penale Pover 1 x IEC 003201C14 Switches	KVM Ports	16 x RJ-45 Female	
LNN Ports 2 x RL45 Female Poror 1 x IEC 60320C14 Switches	Serial	1 x RJ-45 Female	
Power 1 x IE 68030.C14 Switches I x Semi-rocessed Pushbuton Power 1 x Semi-rocessed Pushbuton Power 1 x Rocker Switches Power 1 x Rocker Switches Ebs I (Green/Dange/Green) Online / Skeledd 16 (Green/Dange/Green) Power 1 (Green/Dange/Green) Power 1 (Green/Dange/Green) Power 1 (Green/Dange/Green) Power 1 (Green) Power 1 (Green) Power 1 (Green) Power Posity 1200 @ 6014: Power 1 200 @ 6014: Power Consumption 1 200 @ 6014: Power Consumption Pime Switewer In BTUM indididate the lypical power cons	PON	1 x RJ-45 Female	
Number Number Port Selection 2 Puthutions Peer 1 A Scent-Accessed Puthution Power 1 A Rockor Switches EB	LAN Ports	2 x RJ-45 Female	
Port Selection 2.x Pushbuttons Reset 1.x Somi-recessed Pushbutton Power 1.x Rocker Switches Dillor / Selected 1.x Rocker Switches Online / Selected 16 (Green/Orango) Link 10 / 100 / 100 Mbps 2.(Red/Orange/Green) Power 1.(Green) Emulation	Power	1 x IEC 60320/C14	
Reat 1 x Semi-iccossed Publition Power 1 x Roker Switches LEDs I (Green/Orange) Online / Selected 16 (Green/Orange) Power 2 (Red/Orange/Green) Power 1 (Green) Errulation I (Green) Errulation Vision Vision Vision Vision 1920 x 1200 @ 0014z Renote 1920 x 1200 @ 0014z Renote 1920 x 1200 @ 0014z Scan Interval 1 - 255 Se Maximum Input Power Rating 100-240V : 50 6014z; 1A Power Consumption AC1100 X/W 400BTUh AC2002 : 50 6014z; 1A Power Consumption 1 - 625 Se Erruinomental - 10-250 Se Erruinomental 100-240V : 50 6014z; 1A Power Consumption AC1100 X/W 400BTUh AC2002 : 50 5014z; 1A Note: = The measurement in BTUh indicates the typical power consumption of the device with n tis fully loaded. Erruinomental Note: = The measurement in BTUh indicates the typical power consumption of the device with n tis fully loaded. Erruinomental 0 - 400 C Strange Temperature <	Switches		
Pewer 1 x Roker Switches LEBs 16 (Green/Orange) Link 10/ 100 /100 Mbps 2 (Red/Orange/Green) Power 1 (Green) Power 1 (Green) Envlation Envlation Video PS2: USB Video 1900 x 1200 @ 60Hz Renote 1900 x 1200 @ 60Hz Scan Interval 1920 x 1200 @ 60Hz Scan Interval 1-255 Sec Maximum Input Power Rating 0-240V : 150-60Hz; 1A Power Consumption Accitavity: 240-839BTUh Accitavity: 240-830BTUh Accitavity: 240-830BTUh Accitavity: 240-830BTUh Accitavity: 240-830BTUh Accitavity: 240-830BTUh Acci	Port Selection	2 x Pushbuttons	
LEBs Online / Selected 16 (Green/Orange) Link 10 / 100 / 1000 Mps 2 (Red/Orange/Green) Power 1 (Green) Enulation Keyboard / Mouse PS2; USB Video 1920 x 120 @ 60Hz Coal 1920 x 120 @ 60Hz Renote 1920 x 120 @ 60Hz Scan Interval 1920 x 120 @ 60Hz Power Consumption AC110V:74W:400BTUh Accitory:z 8W398ETUh Naccitory: Interval Inter	Reset	1 x Semi-recessed Pushbutton	
Online / Selected 16 (Green/Orange/Green) Link 10 / 100 / 1000 Mbps 2 (Red/Orange/Green) Power 1 (Green) Emulation PS2: USB Video 1920 x 120 @ 60Hz Cacal 1920 x 120 @ 60Hz Renote 1920 x 120 @ 60Hz Scan Interval 1920 x 120 @ 60Hz Maximum Input Power Rating 1920 x 120 @ 60Hz Scan Interval 1920 x 120 @ 60Hz Maximum Input Power Rating 100-240 · : 50 - 60Hz; 1A Power Consumption AC110V:74W-400BTUh Ac220V:72.8W 398ETUh Note: - The measurement in BTUh indicates the typical power consumption of the device when to esternal loading. • The measurement in BTUh indicates the power consumption of the device when us tatenal loading. • The measurement in BTUh indicates the power consumption of the device when us tatenal loading. • The measurement in BTUh indicates the power consumption of the device when us tatenal loading. • The measurement in BTUh indicates the power consumption of the device when us tatenal loading. • The measurement in BTUh indicates the power consumption of the device when us tatenal loading. • The measurement in BTUh indicates the power consumption of the device when us tatenal loading. • The measurement in BTUh indicates the power consumption of the device when us tatenal loading. • The measurement in BTUh indicates the power consumption of the device when us tatenal loading. • The measurement in BTUh indicates the power consumption of the	Power	1 x Rocker Switches	
Link 10 / 100 Mbps 2 (Red/Orange/Green) Power 1 (Green) Emulation Emulation Keyboard / Mouse PS/2; USB Video 1 Local 0 1920 x 1200 @ 60Hz Remote 1920 x 1200 @ 60Hz Scan Interval 1 - 255 Sec Maximum Input Power Rating 100-240V-; 50-60Hz; 1A Power Consumption 1 - 255 Sec Maximum Input Power Rating 100-240V-; 50-60Hz; 1A Power Consumption 1 - 255 Sec Maximum Input Power Rating 100-240V-; 20-60Hz; 1A Power Consumption Note: - The measurement in Watts Indicates the typical power consumption of the device with no external loading. - The measurement in Watts Indicates the power consumption of the device withen it is fully loaded. Environmental Note: - The measurement in Watts Indicates the power consumption of the device withen it is fully loaded. Environmental - 20-60°C Humidity 0 - 40°C Power Sorage Temperature - 20-60°C Humidity 0 - 80% RH, Non-condensing Physical Properties - Housing Metal Vieight <td colspan="2">LEDs</td>	LEDs		
Power 1 (Green) Emulation Final Section (Section (Sect	Online / Selected	16 (Green/Orange)	
Emulation Emulation PS/2; USB Video Isso x 1200 @ 60Hz Local 1920 x 1200 @ 60Hz Remote 1920 x 1200 @ 60Hz Scan Interval 1-255 Sec Maximum Input Power Rating 100-240V- ; 50-60Hz; 1A Power Consumption ACI10V.74W-400BTUh AC220V'.72.WIJSOSTULh Acc220V'.72.WIJSOSTULh Acc220V'.72.WIJSOSTULh Acc220V'.72.WIJSOSTULH Acc220V'.	Link 10 / 100 / 1000 Mbps	2 (Red/Orange/Green)	
Keyboard / Mouse PSi/2; USB Video Ideo (2000) Local 1920 x 1200 @ 60Hz Benote 1920 x 1200 @ 60Hz Scan Interval 1 - 255 Sec Maximum Input Power Rating 100-240V~; 50-60Hz; 1A Power Consumption ACI 10V/74W/4008TU/h AC220V/72.8W/390BTU/h AC220V/72.8W/30BTU/h AC220	Power	1 (Green)	
Video Local 1920 x 1200 @ 60Hz Remote 1920 x 1200 @ 60Hz Scan Interval 1 - 255 Sec Maximum Input Power Rating 100-240V - : 50-60Hz: 1A Power Consumption AC110V-74W400BTU/h AC220V-72.8W/395BTU/h Note: • The measurement in Waths indicates the typical power consumption of the device with no external loading. • The measurement in BTU/h indicates the power consumption of the device with no external loading. Environmental -0.40°C Operating Temperature 0.40°C Storage Temperature -20.60°C Hunidity 0.40°C Physical Properties -20.60°C Housing Metal Weight 5.20 kg (11.45 lo) Dimensions (L x W x H) 43.36 x 41.21 x 4.40 cm (17.07 x 16.22 x 1.73 in.)	Emulation		
Local 1920 x 1200 @ 60Hz Renote 1920 x 1200 @ 60Hz Scan Interval 1 - 255 Sec Maximum Input Power Rating 100-240V~; 50-60Hz; 1A Power Consumption AC110V:74W:400BTU/h AC220V:72.8W:395BTU/h Note: • The measurement in Watts indicates the typical power consumption of the device with no external loading. • The measurement in BTU/h indicates the power consumption of the device when it is fully loaded. Environmental 0 - 40°C Operating Temperature 0 - 40°C Hunidity 0 - 80% RH, Non-condensing Physical Properties -20 - 60°C Housing Metal Weight 520 kg (11.45 lb) Dimensions (L x W x H) 4336 x41.21 x 4.40 cm (17.07 x 16.22 x 1.73 in.)	Keyboard / Mouse	PS/2; USB	
Remote 1920 x 1200 @ 60Hz Scan Interval 1 - 255 Sec Maximum Input Power Rating 100-240V~; 50-60Hz; 1A Power Consumption ACI10V.74W.400BTU/h AC220V.72.8W.395BTU/h Note: • The measurement in Watts indicates the typical power consumption of the device with no external loading. • The measurement in BTU/h indicates the power consumption of the device with no external loading. Environmental 0 - 40°C Storage Temperature 0 - 40°C Storage Temperature 0 - 80% RH, Non-condensing Physical Properties Metal Humidity 0 - 80% (11.45 lb) Dimensions (L x W x H) 43.36 x 41.21 x 4.40 cm (17.07 x 16.22 x 1.73 in.)	Video		
Scan Interval 1 – 255 Sec Maximum Input Power Rating 100–240V~; 50-60Hz; 1A Power Consumption AC110V:74W-400BTU/h AC220V:72.8W:395BTU/h Note: • The measurement in Watts indicates the typical power consumption of the device with no external loading. • The measurement in BTU/h indicates the power consumption of the device when it is fully loaded. Environmental 0 - 40°C Operating Temperature 0 - 40°C Storage Temperature 0 - 40°C Hunidity 0 - 80% RH, Non-condensing Physical Properties Housing Housing Metal Weight 5.20 kg (11.45 lb) Dimensions (L x W x H) 43.36 x 41.21 x 4.40 cm (17.07 x 16.22 x 1.73 in.)	Local	1920 x 1200 @ 60Hz	
Maximum Input Power Rating 100-240V- ; 50-60Hz; 1A Power Consumption AC110V:74W:400BTU/h AC220V:72.8W:395BTU/h AC220V:72.8W:395BTU/h AC220V:72.8W:395BTU/h AC220V:72.8W:395BTU/h AC220V:72.8W:395BTU/h Note:	Remote	1920 x 1200 @ 60Hz	
Power Consumption AC110V:74W:400BTU/h AC220V:72.8W:395BTU/h Note: • The measurement in Watts indicates the typical power consumption of the device with no external loading. • The measurement in BTU/h indicates the power consumption of the device when it is fully loaded. Environmental 0 - 40°C Operating Temperature 0 - 40°C Storage Temperature -20 - 60°C Humidity 0 - 80% RH, Non-condensing Physical Properties Image: Storage Temperature Housing Metal Weight 5.20 kg (11.45 lb) Dimensions (L x W x H) 43.36 x 41.21 x 4.40 cm (170 x 16.22 x 1.73 in.)	Scan Interval	1 – 255 Sec	
AC220V:72.8W:395BTU/h Note: • The measurement in Watts indicates the typical power consumption of the device with no external loading. • The measurement in BTU/h indicates the power consumption of the device with no external loading. • The measurement in BTU/h indicates the power consumption of the device with no external loading. • The measurement in BTU/h indicates the power consumption of the device with no external loading. • The measurement in BTU/h indicates the power consumption of the device when it is fully loaded. Environmental Operating Temperature 0 - 40 °C Humidity 0 - 80% RH, Non-condensing Physical Properties Housing Metal Veight 5.20 kg (11.45 lb) Dimensions (L x W x H) 4.36 x 41.21 x 4.40 cm (17.07 x 16.22 x 1.73 in.)	Maximum Input Power Rating	100–240V~ ; 50-60Hz; 1A	
• The measurement in Watts indicates the typical power consumption of the device with no external loading. • The measurement in BTU/h indicates the power consumption of the device when it is fully loaded. Environmental Operating Temperature 0 - 40°C Storage Temperature -20 - 60°C Humidity 0 - 80% RH, Non-condensing Physical Properties - Housing Metal Weight 5.20 kg (11.45 lb) Dimensions (L x W x H) 43.36 x 41.21 x 4.40 cm (1.70 x 16.22 x 1.73 in.)	Power Consumption		
Operating Temperature 0 - 40°C Storage Temperature -20 - 60°C Humidity 0 - 80% RH, Non-condensing Physical Properties		 The measurement in Watts indicates the typical power consumption of the device with no external loading. 	
Storage Temperature -20 - 60°C Humidity 0 - 80% RH, Non-condensing Physical Properties Housing Metal Weight 5.20 kg (11.45 lb) Dimensions (L x W x H) 43.36 x 41.21 x 4.40 cm (1.07 x 16.22 x 1.73 in.)	Environmental		
Humidity 0 - 80% RH, Non-condensing Physical Properties Housing Metal Weight 5.20 kg (11.45 lb) Dimensions (L x W x H) 43.36 x 41.21 x 4.40 cm (17.07 x 16.22 x 1.73 in.)	Operating Temperature	0 - 40'C	
Physical Properties Housing Metal Weight 5.20 kg (11.45 lb) Dimensions (L x W x H) 43.36 x 41.21 x 4.40 cm (17.07 x 16.22 x 1.73 in.)	Storage Temperature	-20 - 60°C	
Housing Metal Weight 5.20 kg (11.45 lb) Dimensions (L x W x H) 43.36 x 41.21 x 4.40 cm (17.07 x 16.22 x 1.73 in.)	Humidity	0 - 80% RH, Non-condensing	
Weight 5.20 kg (11.45 lb) Dimensions (L x W x H) 43.36 x 41.21 x 4.40 cm (17.07 x 16.22 x 1.73 in.)	Physical Properties		
Dimensions (L x W x H) 43.36 x 41.21 x 4.40 cm (17.07 x 16.22 x 1.73 in.)	Housing	Metal	
(17.07 x 16.22 x 1.73 in.)	Weight	5.20 kg (11.45 lb)	
Note For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.	Dimensions (L x W x H)		
	Note	For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.	



Diagram



Phone: 886-2-8692-6789 Fax: 886-2-8692-6767 www.aten.com E-mail: marketing@aten.com Copyright 2015 ATEN® International Co., Ltd. ATEN and the ATEN logo are trademarks of ATEN International Co., Ltd. All rights reserved. All other trademarks are the property of their respective owners.