

## RCM416

The Remote Control & Monitoring (RCM) Series of KVM over IP switches



The RCM416 offers superior Full HD video resolution up to 1920 x 1200, FIPS 140-2 with level 1 security standards as well as virtual media transmissions at twice the speed. The RCM416 also provides local console and remote over IP access for users to monitor and access their entire data center over the network. In addition, it offers out-of-band access with external modem support for BIOS-level troubleshooting when the network is down.

With the [2XRT-0015G](#) KVM over IP Access Control Box, the RCM416 KVM over IP switch allows users to enable or disable remote control privilege, and also support Panel Array for monitoring all machines with multiple RCM products. The RCM switch also supports advanced and exclusive RCM and OCR API (DDL) interfaces with various function integrated for easy management. Equipped with dual on-board NICs, the RCM416 is built to ensure reliability and availability of remote access to all servers.

To help you manage and control the entire data center, the RCM416 KVM over IP switch supports blade servers and chassis. With powerful features such as Power Association – KVM ports can be associated with ATEN PDU power outlets for power management of servers from the KVM over IP switches' user interface.

Additional exclusive features include: a Message Board, Panel Array Mode™, Mouse DynaSync™ and the Adapter ID.

The RCM416 saves you time and money by allowing administrators to manage their data centers from practically anywhere – minimizing travel and MTTR (Mean Time to Repair) costs, ensuring the highest availability for data center services possible.

### Features

#### • RCM Series Exclusive

- Supports ATEN Access Control Box for on-site enabling/disabling of remote control privilege
- Supports Panel Array to monitor all machines for operators with multiple RCM products
- Supports exclusive integrated RCM API (DLL) interface with various function for system integrators
- Supports OCR API (DLL) interface for optical character recognition
- High grade security – supports FIPS 140-2 level 1 security standards
- Extreme virtual media speed – 2 x faster virtual media transmission speed
- Advanced FPGA graphics processor – with an Full HD resolution of 1920 x 1200
- Simultaneously share one local console and one/two/four/eight independent connection(s) to the attached servers

#### • Hardware

- High port density – RJ-45 connectors and Cat 5e/6 cable for up to 16 ports in a 1U housing
- Laptop USB Console (LUC) – A dedicated USB port directly connects to a laptop for easy console operation
- One/two/four/eight 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 (13W3) and serial (RS-232) connectivity
  - Local console provides USB keyboard and mouse support
  - Supports multiplatform server environments: Windows, Mac OS X, Sun, Linux and VT100 based serial devices
  - Audio enabled
  - High video resolution – up to 1920 x 1200 @ 60Hz with 24-bit color depth at the switch's local console and on remote session displays
  - Monitor and control up to 16/64 computers on a single level, or control up to 512 computers in a cascade\*
- \* Cascade-compatible KVM Switches include the following: [CS9134](#), [CS9138](#), [CS1308](#), [CS1316](#), [KH1508A](#), and [KH1516A](#)

## • Management

- Up to 64 user accounts – up to 32 users simultaneously share the control
- Green IT-Fan speed varies according to temperature
- Event logging and Windows-based Log Server support
- Critical system event notification via SMTP email; SNMP trap and Syslog support
- Customizable events notification
- Firmware upgradeable
- Out-of-Band Access-Modem dial-in/dial-out/dial-back support
- Adapter ID Function: 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
- Power Association enables the switch's KVM ports to be associated with ATEN PDUs power outlets for remote power management
- IPv6 capable

## • Easy-to-Use Interface

- ATEN Exclusive Panel Array Mode™ simultaneously monitoring for both local console operators and remote access users
- Local Console, browser-based, and AP GUIs offer a unified Multilanguage interface to minimize the user training time and increase productivity
- Multiplatform client support (Windows, Mac OS X, Linux, Sun)
- Multi-browser support: Internet Explorer, Chrome, Firefox, Safari, Opera, Mozilla, Netscape
- Browser-based UI in pure Web technology allows administrators to perform administrative tasks without pre-installed Java software package required
- 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 inputs can be duplicated on all the attached servers
- Video syncing with the local console – local console monitor's EDID information stored on the KVM Adapter Cables for display resolution optimization

## • Advanced Security

- 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 KB/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 enables file applications, OS patching, software installation and diagnostic testing
- Works with USB enabled servers in operating system and BIOS level
- Support DVD/CD drives, USB mass storage devices, PC hard drives and ISO images

## • Virtual Remote Desktop

- Video quality can be adjusted to optimize data transfer speed; monochrome color depth setting, threshold and noise settings 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
- Mouse DynaSync-automatically synchronizes the local and remote mouse movements
- Exit Macros support
- On-screen keyboard with multi-language support
- BIOS-level access for trouble shooting

## Specification

Console Connections	
Local	1
Remote	4
Computer Connections	
Direct	16
Maximum	512 (via Cascade)
Port Selection	Pushbuttons, Hotkeys, GUI
Connectors	
Console Ports	2 x USB Type-A Female (White) 1 x DVI-D Female (White) 1 x VGA HDB-15 (Blue) 1 x RJ-45 Female (Black)
USB Port	3 x USB Type-A Female
Audio	2 x Audio Jack Female
Laptop USB Console (LUC) Port	1 x USB Mini-B Female
KVM Ports	16 x RJ-45 Female
Serial	1 x RJ-45 Female
PON	1 x RJ-45 Female
LAN Ports	2 x RJ-45 Female
Power	1 x IEC 60320/C14
Switches	
Port Selection	2 x Pushbuttons
Reset	1 x Semi-recessed Pushbutton
Power	1 x Rocker Switches
LEDs	
Online / Selected	16 (Green/Orange)
Link 10 / 100 / 1000 Mbps	2 (Red/Orange/Green)
Power	1 (Blue)

Emulation	
Keyboard / Mouse	PS/2; USB
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:40.5W:226BTU/h AC220V:39.6W:222BTU/h  Note: <ul style="list-style-type: none"> <li>● The measurement in Watts indicates the typical power consumption of the device with no external loading.</li> <li>● The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.</li> </ul>
Environmental	
Operating Temperature	0 - 40°C
Storage Temperature	-20 - 60°C
Humidity	0 - 80% RH, Non-condensing
Physical Properties	
Housing	Metal
Weight	5.38 kg ( 11.85 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.)
Note	For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.

## Diagram



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