Simply Better Connections

KN2116v

1-Local/2-Remote Access
16-Port Cat 5 KVM over IP Switch with Virtual Media (1600 x 1200)

Aten´s new generation of KVM over IP switches - KN series allows local console access and remote over IP access for operators to monitor and access their entire data center over a network using a web-based browser. In addition, they offer out-of-band access with external modem support for BIOS-level troubleshooting when the network is down.

To help you manage and control an entire data center, our KVM over IP switches support blade servers and chassis. With powerful new 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.

KVM over IP switches now support the new Control Center Video Session Recorder (CCVSR) software. The CCVSR records all operations made on servers accessed through KVM over IP switches. Every operation and change from the BIOS level to logging in, from running software applications to configuring the operating system- is recorded and saved to a secure video file as evidence, without exception.

The Virtual Media function lets you map to storage media on USB, hard disk and DVD/CD drives located on remote servers – allowing administrators to conduct file transfers, install applications, run O.S. updates, or perform diagnostics across a network with ease.

Enhanced capabilities of KVM over IP switches also include: a Message Board, Panel Array Mode™, Mouse DynaSync™, and Adapter ID.

With dual on-board NICs and dual power supplies, the KVM over IP switches are built for reliability, to ensure 24/7 availability of remote access to all server room computers. The switch´s design features Green IT solutions that include four temperature sensors to regulate up to six fans – run at optimum speeds – throttling down and speeding up depending on room temperature, reducing data center operational costs through a more efficient way of maintaining energy.

With Aten KVM over IP switches IT administrators can manage their server rooms and data centers from practically anywhere – minimizing travel costs and MTTR (Mean Time to Repair) – ensuring the highest availability of data center services possible.

Compatible KVM Adapter Cables:
KA7120, KA9120 PS/2 KVM Adapter Cable
KA7170, KA9170 USB KVM Adapter Cable
KA7130, KA9130 Sun Legacy KVM Adapter Cable
KA7140, KA9140 Serial KVM Adapter Cable
KA7175 USB Virtual Media KVM Adapter Cable
KA7176 USB Virtual Media KVM Adapter Cable with Audio
KA7177 USB Virtual Media KVM Adapter Cable with Smart Card Reader

Features

- **Hardware**
- High port density – RJ-45 connectors for up to 16 ports in a 1U housing
- Simultaneously share access to one local console and two remote KVM over IP switches
- Two 10/100/1000 Mbps NICs for redundant LAN or two IP operation
- Blade server support NEW!

- Supports PS/2, USB, Sun Legacy (13W3) and serial (RS-232) connectivity
- Local console provides PS/2 and USB keyboard and mouse support
- Supports multiplatform server environments: Windows, Mac, Sun, Linux and VT100 based serial devices
- Audio enabled
- Virtual Media support lets you map DVD-CD-ROMs and other storage media to a remote server
- Dual Power Supply
- High video resolution - up to 1600 x 1200 @ 60Hz - 32 bit color depth for the local console; up to 1600 x 1200 @ 60Hz with 24 bit color depth for remote sessions, at up to 50 m
- Monitor and control up to 16 computers on a single level, or control up to 256 computers in a two-level cascade *

* Cascade-compatible KVM Switches include the following: CS9134, CS9138, CS88A, KH1508, KH1516, KH1508A, and KH1516A. Some KVM over IP Switches features may not be supported, depending on the functionality of the cascaded KVM switch.

- **Management**
- Multi Display for viewing extended monitors in a remote session
- Up to 64 user accounts
- Up to 32 concurrent logins
- Green IT-Fan speed varies according to temperature
- End session feature - administrators can terminate running sessions
- Event logging and Windows-based Log Server support
- Critical system event notification via SMTP email; SNMP trap and Syslog support
- Customizable events notification NEW!
- Firmware upgradeable
- Out-of-Band Access-Modem dial-in/dial out/dial back support NEW!
- 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
- Integration with ALTUSEN CC2000 Management software
- Power Association enables the switch's KVM ports to be associated with an ATEN/ALTUSEN'S PDUs power outlets for remote power management of the servers from the switch's interface NEW!
- Manage browser access methods(Browser, http, https) NEW!
- IPv6 capable NEW!
- PadClient provides instant, convenient, and secure remote access to control servers through your iPad. Free available on Apple Store. * NEW!

* PadClient works on iOS 7(and above) with ATEN KN2 and KN4 series KVM switches running on firmware 1.7.162 (and above).

- **Ease-to-Use Interface**
- Local Console, browser-based, and AP GUIs offer a unified multilanguage interface to minimize 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
- User can launch multiple Virtual Remote Desktop to control multiple connected servers from the same login session
- Magic Panel
- Full-screen or sizable and scalable Virtual Remote Desktop
- Panel Array Mode available to both local console operators and remote access users
- Keyboard/Mouse Broadcast – keyboard and mouse inputs can be duplicated on all the attached servers NEW!
- Video syncing with the local console – local console monitor's EDID information stored on the KVM Adapter Cables for display resolution optimization NEW!

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 NEW!

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 and video tolerance 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 usersc
- Mouse DynaSync – automatically synchronizes the local and remote mouse movements
- Exit Macros support
- On-screen keyboard with multilanguage support
- BIOS-level access

Specification

Computer Connections	
Direct	16
Maximum	256 (via Cascade)
Console Connections	
Local	1
Remote	2
Port Selection	Pushbutton, GUI, Hotkey
Connectors	
Console Ports	2 x USB Type A Female (White) 1 x 6-pin Mini-DIN Female (Purple) 1 x 6-pin Mini-DIN Female (Green) 1 x HDB-15 Female (Blue)
KVM Ports	16 x RJ-45 Female (Black)
Power	2 x 3-prong AC socket
LAN Ports	2 x RJ-45 Female (Black)
PON	1 x RJ-45 Female (Black)
Modem	1 x RJ-45 Female (Black)
USB Port	3 x USB Type A Female (White)
Audio	2 x Audio Jack Female
Switches	
Reset	1 x Semi-recessed Pushbutton
Power	2 x Rocker
Port Selection	2 x Pushbutton
LEDs	
Online	16 (Green)
Selected	16 (Red)
Power	1 (Blue)
Link 10 / 100 / 1000 Mbps	2 (Red / Red + Green / Green)
Emulation	
Keyboard / Mouse	PS/2 / USB (PC, Mac, Sun) / Serial
Video	1600x1200 @ 60Hz
Scan Interval	1-255 Seconds

Maximum Input Power Rating	100-240V AC ; 50-60Hz; 1.0A
Power Consumption	115V / 38W ; 230V / 38.7W 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	
Operating Temperature	0 - 50˚C
Storage Temperature	-20 - 60˚C
Humidity	0 - 80% RH, Non-condensing
Physical Properties	
Housing	Metal
Weight	5.91 kg (13.02 lb)
Dimensions (L x W x H)	43.84 x 41.21 x 4.40 cm (17.26 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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