

## KN1116VA

1-Local/1-Remote Access 16-Port Cat 5 KVM over IP Switch with Virtual Media (1920 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.

In addition, the KN series is compatible with ATEN's KVM over IP Console Station, the KA82 series. The KA82 series is a hardware-based standalone console solution that can centrally manage multiple KN devices. It is especially suitable for environments where a PC is not allowed. The KVM over IP Console Station features a 0U space-saving compact design and low power consumption for 24/7 operations.

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™, Adapter ID and Secure Serial Server Access. The secure access to serial-controlled devices includes network equipment, Unix servers, Linux servers, Sun servers and many more serial consoles. It provides installation without needing expensive serial dongles.

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.

A Windows Client and a Java Client are available for remote access. They allow IP connection and login from anywhere over the internet. In addition, ATEN also provides an iOS APP - PadClient, whose intuitive interface makes it easy to connect to the KVM over IP switch and control computers direct from your iPad. Please visit the [PadClient webpage](#) for more information.

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.

### Features

#### • Hardware

- High port density – RJ-45 connectors 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
- Two separate buses for one local console access and one remote 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 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 1920 x 1200 @ 60Hz for local and remote sessions](#) <sup>1</sup>
- Monitor and control up to 16 computers on a single level, or control up to 256 computers in a cascade <sup>2</sup>.

Note:

1. 1920 x 1200 only supported by [KA7166](#), [KA7168](#), [KA7169](#), [KA7175](#), [KA7176](#), [KA7177](#), [KA7170](#), and [KA7178](#)
2. Cascade-compatible KVM Switches include the following: [CS9134](#), [CS9138](#), [CS1308](#), [CS1316](#), [KH1508A](#), and [KH1516A](#)

## • Management

- Up to 64 user accounts
- UP to 32 concurrent logins
- 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](#)
- 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
- Integration with ATEN [CC2000](#) Management Software
- Integration with ATEN [CCVSR](#) Video Session Recording Software<sup>1</sup>
- Supports ATEN KVM over IP Console Station ([KA8270](#) / [KA8280](#) / [KA8278](#) / [KA8288](#))
- [Power Association enables the switch's KVM ports to be associated with ATEN'S PDUs power outlets for remote power management of the servers from the switch's interface](#)
- Power Over the NET™ integration for remote power control, plus support for 3rd party power distribution units (PDUs)
- Manage browser access methods (Browser, http, https)
- IPv6 capable

Note:

1. Supports recording computer operations accessed via remote sessions

## • Easy-to-Use Interface

- 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: Edge, Chrome, Firefox, Safari, and Opera
- Browser-based UI in pure Web technology allows administrators to perform administrative tasks without pre-installed Java software package required
- 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
- [Magic Panel – a special hideaway control panel with configurable function icon](#)
- 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
- Video syncing with the local console – local console monitor's EDID information stored on the KVM Adapter Cables for display resolution optimization

## • Advanced Security

- High-grade security – supports TLS 1.3 and an embedded FIPS 140-2 certified OpenSSL cryptographic module (Certificate #4282)
- Remote authentication support: RADIUS, LDAP, LDAPS, and MS Active Directory
- Supports TLS 1.3 data encryption and RSA 2048-bit certificates to secure users log in from browser
- Flexible encryption design allows users to choose any combination of DES, 3DES, AES, RC4, or Random for independent KB/Mouse, video, and virtual media data encryption
- [IP/MAC Filter for enhanced security protection](#)
- 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 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 users](#)
- [Mouse DynaSync™ - automatically synchronizes the local and remote mouse movements](#)
- [Keyboard pass through support](#)
- [Exit Macros support](#)
- [On-screen keyboard with multilanguage support](#)
- BIOS-level access

## Specifications

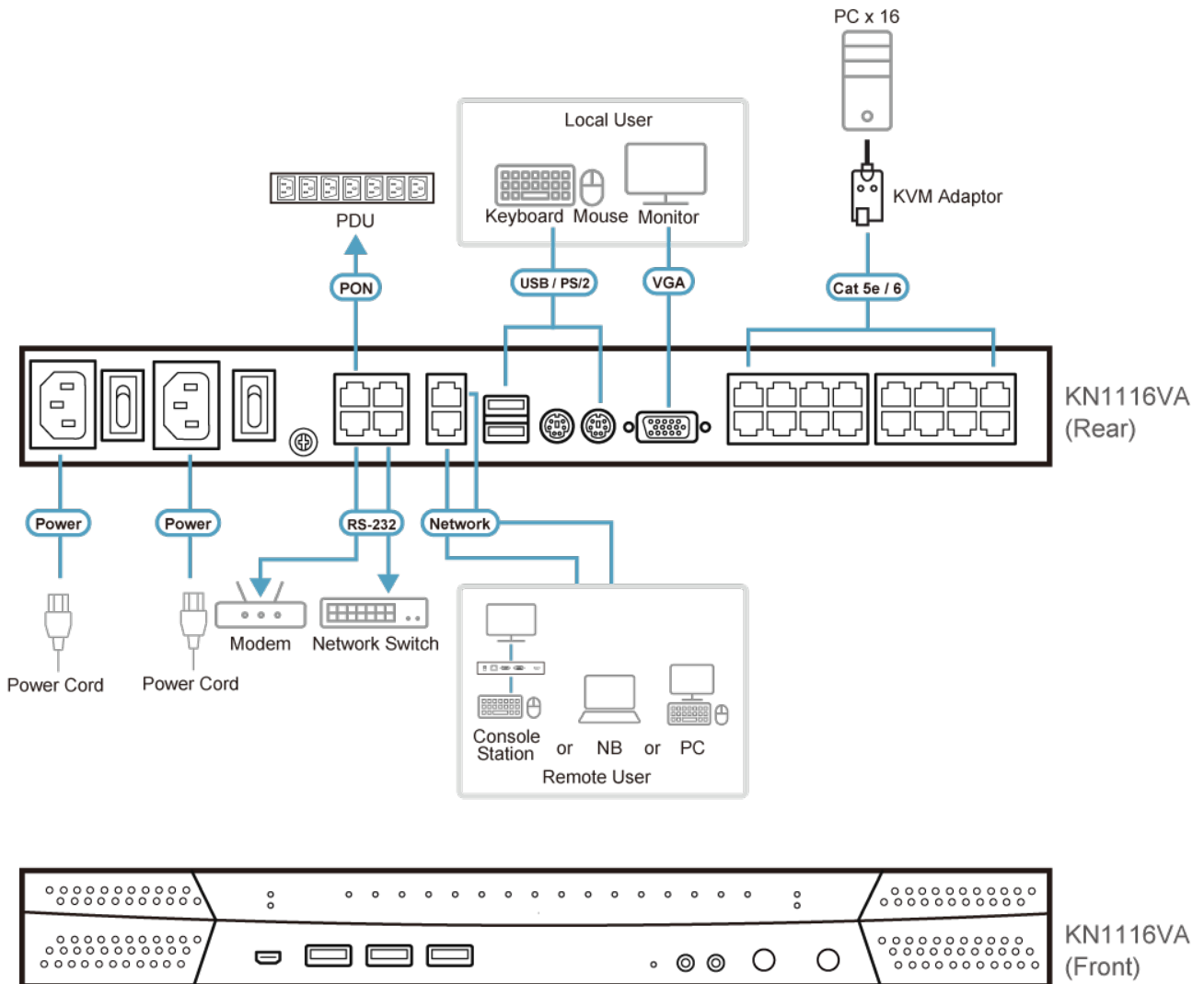
|                      |                   |
|----------------------|-------------------|
| Console Connections  |                   |
| Local                | 1                 |
| Remote               | 1                 |
| Computer Connections |                   |
| Direct               | 16                |
| Maximum              | 256 (via Cascade) |

|                               |                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port Selection                | Pushbuttons, GUI, Hotkeys                                                                                                                                                                                                                                                                                                          |
| Connectors                    |                                                                                                                                                                                                                                                                                                                                    |
| Console Ports                 | 2 x USB Type-A Female (White)<br>1 x 6-pin Mini-DIN Female (Purple)<br>1 x 6-pin Mini-DIN Female (Green)<br>1 x HDB-15 Female (Blue)                                                                                                                                                                                               |
| 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                        | 2 x RJ-45 Female                                                                                                                                                                                                                                                                                                                   |
| PON                           | 1 x RJ-45 Female                                                                                                                                                                                                                                                                                                                   |
| Modem                         | 1 x RJ-45 Female                                                                                                                                                                                                                                                                                                                   |
| LAN Ports                     | 2 x RJ-45 Female                                                                                                                                                                                                                                                                                                                   |
| Power                         | 2 x IEC 60320/C14                                                                                                                                                                                                                                                                                                                  |
| Switches                      |                                                                                                                                                                                                                                                                                                                                    |
| Port Selection                | 2 x Pushbutton                                                                                                                                                                                                                                                                                                                     |
| Reset                         | 1 x Semi-recessed Pushbutton                                                                                                                                                                                                                                                                                                       |
| Power                         | 2 x Rocker                                                                                                                                                                                                                                                                                                                         |
| LEDs                          |                                                                                                                                                                                                                                                                                                                                    |
| Online                        | 16 (Green)                                                                                                                                                                                                                                                                                                                         |
| Link 10 / 100 / 1000 Mbps     | 2 (Red/Orange/Green)                                                                                                                                                                                                                                                                                                               |
| Power                         | 2 (Blue)                                                                                                                                                                                                                                                                                                                           |
| Emulation                     |                                                                                                                                                                                                                                                                                                                                    |
| Keyboard / Mouse              | PS/2 / USB                                                                                                                                                                                                                                                                                                                         |
| Video                         |                                                                                                                                                                                                                                                                                                                                    |
| Local                         | 1920 x 1200@60 Hz                                                                                                                                                                                                                                                                                                                  |
| Remote                        | 1920 x 1200@60 Hz                                                                                                                                                                                                                                                                                                                  |
| Scan Interval                 | 1-255 Seconds                                                                                                                                                                                                                                                                                                                      |
| Maximum Input Power Rating    | 100-240V AC, 50-60Hz, 1A                                                                                                                                                                                                                                                                                                           |
| Power Consumption             | AC110V:14W:102BTU/h<br>AC220V:15W:107BTU/h<br><br>Note:<br><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                        | 3.56 kg ( 7.84 lb )                                                                                                                                                                                                                                                                                                                |
| Dimensions (L x W x H)        | 43.84 x 28.78 x 4.40 cm<br>(17.26 x 11.33 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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