

# KN1000

KVM Over the NET™

**ALTUSCEN™**  
Enterprise KVM Solutions by ATEN

The KN1000 is a control unit that provides remote BIOS-level access to servers or “over-IP” capability to KVM switches that do not have built in over-IP functionality. It allows operators to monitor and access their computers from remote locations using a standard Internet browser or Windows/Java based application programs, for BIOS-level troubleshooting without the need for constant on site IT maintenance. In addition, the KN1000 offers out-of-band access – including external modem support.



To help you manage and control multiple widely distributed servers efficiently from a remote console, a built-in single-port Power Switch allows remote power management of a server/installation connected locally to the KN1000, including turning servers On, Off and Rebooting. In addition, you can also add a PON (Power Over the NET™) power management unit to manage the power status of even more devices. The KN1000 also provides serial console management over the internet which can remotely control serial console devices such as a network switch.

KN1000's Virtual Media function allows you to perform diagnostic testing, file transfer, and OS and application patches from a remote console. There is no need to physically load a CD directly to the server to perform data-related tasks. Conveniently and efficiently troubleshoot and resolve the problems at BIOS level from anywhere.

Both a Windows GUI Client and a Java Applet are also available in browser based and Windows application versions. They are provided for IP connection and login from anywhere on the net. Inclusion of a Java-based client ensures that the KN1000 is platform independent, and is able to work with practically all operating systems.

With these advanced features, the KN1000 is the fastest, most reliable, most cost effective way to remotely access and manage widely distributed multiple computer installations, such as kiosks and automated banking.

## » FEATURES

### Hardware

- Provides over-IP capability to servers or KVM switches that do not have built in over-IP functionality<sup>1</sup>
- Built in single port Power Switch
- Supports PS/2, USB, Sun Legacy (13W3)<sup>2</sup> 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
- Virtual Media Support
- 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

<sup>1</sup> Compatible KVM Switches include the following: CS9134, CS9138, CS88A, CS1308, CS1316, CS1754\*, CS1758\*, CS1708A, CS1716A, ACS1208A, ACS1216A, KH2508A, KH2516A, KH1508A, and KH1516A

- Some of the KN1000's features may not be supported, depending on the functionality of the connected KVM switch. (For example, some switches do not support virtual media.)
- Some features found on the connected KVM switches may not be supported on the KN1000. (For example, the CS1754's audio.)

<sup>2</sup> Requires CV130A converter purchase

## Management

- Up to 64 user accounts – up to 32 users simultaneously share the control
- 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
- Remote Firmware upgradable
- Serial console management – serial terminal access. Access the KN1000 via a built-in serial viewer, or via third party software (such as PuTTY) for Telnet and SSH sessions
- PPP mode (modem) dial-in/dial out support for out-of-band, and low bandwidth operation
- Port Share Mode allows multiple users to gain access to a server simultaneously
- Integration with ALTUSEN CC2000 Management software
- Power Over the NET™ integration for remote power control
- Remote power on and off control function with Wake on LAN
- DDNS (Dynamic Domain Name System)
- Export/import user account and configuration settings
- Enable/disable browser operation

## Ease-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 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
- Full-screen or sizable and scalable Virtual Remote Desktop
- Magic Panel

## Advanced Security

- Smart Card /CAC Reader Support
- External authentication support: RADIUS, LDAP, LDAPS, and MS Active Directory
- 128-bit SSL encryption to protect password when users log in
- 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
- Supports password protection
- Private CA

## 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
- Supports USB 2.0 DVD/CD drives, USB mass storage devices, PC hard drives and ISO images

## Virtual Remote Desktop

- BIOS-level access
- 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
- On-screen keyboard with multilanguage support
- Mouse Dynasync™
- Exit Macros support

## » Benefits

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### **Virtual Remote Desktop**

The remote desktop can appear full-screen or as a window with a flexible scaling 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 just as if they were actually at the local site

### **Remote Power Control**

A built-in single-port Power Switch allows remote power management of a server/installation connected locally to the KN1000.

In addition, you can also add a PON (Power Over the NET™) power management unit and remotely control the power status of devices on your installation, including monitoring their current status, as well as turning servers On, Off and Rebooting them.

### **Multi-Keyboard Language Support — On-Screen Keyboard**

The KN1000 supports multiple keyboard language input – including English, French, German, Italian, Spanish, Japanese, Korean, and Traditional Chinese. There is no need to have a separate keyboard for each language – you can input key data in any of these languages with the KN1000's convenient on-screen keyboard.

### **External Authentication Support**

In addition to its own security protection, the KN1000 allows you to set up log in authentication and authorization management from a external sources such as RADIUS, LDAP, LDAPS, and MS Active Directory.

### **Configurable Network Bandwidth settings**

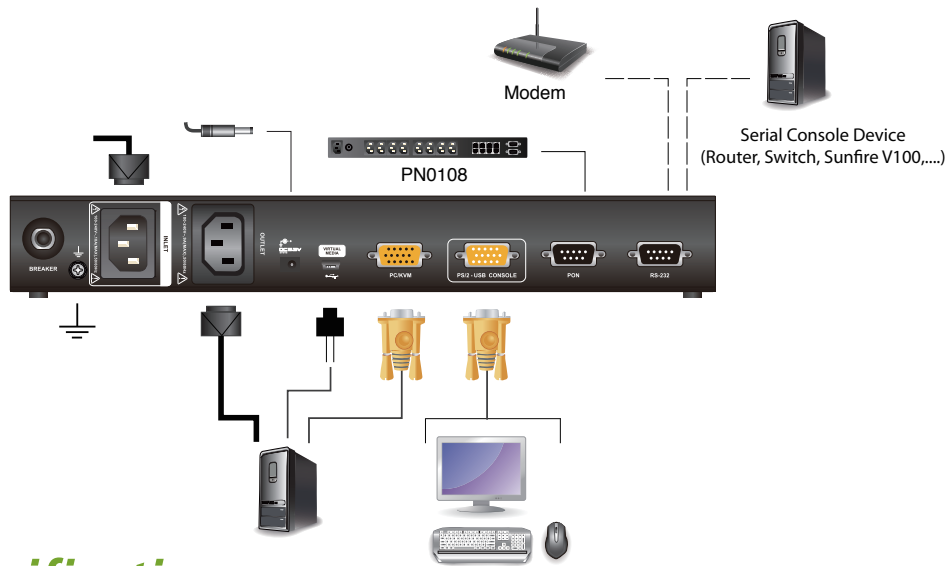
A Network setting is provided that allows you to streamline data throughput by adjusting the size of the data stream (bandwidth) to match network traffic conditions. Video performance can be adjusted so that data throughput is optimized for the available network bandwidth. With high speed LAN access, the network setting can be adjusted so that a greater amount of video information is sent, resulting in a higher quality video display. In a limited bandwidth situation, the network setting can be adjusted so that net lag is minimized.

### **Mouse DynaSync™**

Automatically synchronizes the local and remote mouse movements for perfect alignment of mouse pointers, regardless of server mouse acceleration settings.

### **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 diagnostics remotely



## Specification

| Function            |                        | KN1000                        |
|---------------------|------------------------|-------------------------------|
| Connectors          | Console                | 1 x SPHD-18 Male (Yellow)     |
|                     | KVM (Computer)         | 1 x SPHD-17 Female (Yellow)   |
|                     | PON <sup>1</sup>       | 1 x DB-9 Male (Black)         |
|                     | RS-232                 | 1 x DB-9 Male (Black)         |
|                     | LAN                    | 1 x RJ-45 Female              |
|                     | Power Inlet            | 1 x IEC320 C14                |
|                     | Power Outlet           | 1 x IEC320 C13                |
|                     | Power                  | 1 x DC Jack                   |
|                     | Virtual Media          | 1 x USB Mini-B Female (Black) |
| Switches            | Reset                  | 1 x Semi-recessed pushbutton  |
| LEDs                | Power                  | 1 (Orange)                    |
|                     | Power Outlet           | 1 (Orange)                    |
|                     | Link                   | 1 (Green)                     |
|                     | 10/100 Mbps            | 1 (Orange/Green)              |
| Emulation           | Keyboard/Mouse         | USB; PS/2                     |
| Video               |                        | 1600 x 1200 @ 60 Hz; DDC2B    |
| I/P Rating          |                        | 100–240 VAC; 50/60 Hz, 10A    |
| O/P Rating          |                        | 100–240 VAC; 50/60 Hz; 9A     |
| Power Consumption   |                        | DC5.3V; 6.3W                  |
| Environment         | Operating Temp.        | 0–40° C                       |
|                     | Storage Temp.          | -20–60° C                     |
|                     | Humidity               | 0–80% RH Non-condensing       |
| Physical Properties | Housing                | Metal                         |
|                     | Weight                 | 0.86 kg                       |
|                     | Dimensions (L x W x H) | 30.85 x 8.15 x 4.20 cm        |

<sup>1</sup> Power Over the NET™

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