

# Single Port KVM over IP Switch with Single Port Power Switch

## KN1000A

ATEN's new KN1000A Single Port KVM over IP Switch provides access and control "over-IP" for conventional KVM switches and servers that do not have built-in over-IP functionality. It allows system operators to monitor and access computers from remote locations for "down to the BIOS-level" troubleshooting, using standard Web browsers or Windows and Java based application programs, without the need to be on site for constant IT maintenance. In addition, the KN1000A supports out-of-band access in case the LAN goes down, with external modem support as backup.

To help you manage and control widely distributed servers efficiently from a remote console, a built-in single-port power switch provides remote power management of a server connected locally, allowing you to turn a server On or Off, and reboot it. In addition, you can add an ATEN PDU unit to manage the power status of even more devices. The KN1000A also provides serial console management over the Internet which can remotely control serial console devices such as network switches.

The KN1000A makes it easy to work on many tasks simultaneously, featuring a unique LUC (Laptop USB Console) port for quick KVM access via a laptop, user-friendly OSD, virtual media functionality without additional cables, and video resolutions up to 1920 x 1200.

The KN1000A's Virtual Media function allows you to perform file transfers, system diagnostic testing, software patches and application installations, all from the remote console. There is no need to physically mount an optical drive directly at the server to perform data related tasks. Now you can conveniently troubleshoot and resolve OS and BIOS-level problems from any remote location.

Both Windows GUI Client and Java Client Applet are available from a browser based and Windows application program to provide easy and flexible remote access. Each application provides a unique way to login and access the remote server from anywhere over a network. The inclusion of a Java-based client ensures that the KN1000A platform is independent and able to work with most operating systems.

In addition, the KN1000A 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 (refer to ATEN's website to get more information on the KVM over IP Console Station).

The KN1000A is also compatible with the ATEN PadClient. It is an application for iPad that provides secure remote access to computers connected to compatible KVM over IP switches. Refer to the ATEN website for more information about the ATEN PadClient.

Front View



Rear View



## 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) 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
- High video resolution – up to 1920 x 1200 @ 60 Hz with 24 bit color depth for the local console; up to 1920 x 1200 @ 60 Hz with 24 bit color depth for remote sessions

### Note:

1. For a list of compatible products, refer to the list on the website.

### 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
- Remote firmware upgradable
- Serial console management – serial terminal access. Access the device connected to KN1000A 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 ATEN CC2000 Centralized Management Software
- Integration with ATEN PDU for remote power control
- Remote power on and off control function with Wake on LAN
- On / Off scheduling for power outlet. Power management tasks can be scheduled on a daily, weekly, monthly or user specified time basis
- Safe shutdown supports
- Auto-Ping pings a device to determine its status, if the ping test fails after a set amount of time – it automatically takes an action assigned
- DDNS (Dynamic Domain Name System)
- Export / import user account and configuration settings
- Manage browser access methods (disable browser, http, or https)

### Easy-to-Use Interface

- Browser-based and AP GUIs offer a unified multilanguage interface to minimize user training time and increase productivity
- Multi-platform client supports (Windows, Mac OS X, Linux, Sun)
- Multi-browser supports: Internet Explorer, Chrome, Firefox, Safari, Opera, 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 window
- Magic Panel – a special hideaway control panel with configurable function icon

### Advanced Security

- Smart Card / CAC Reader supports
- External authentication supports: 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 DES, 3DES, AES, RC4, or Random for independent KB / Mouse, video, and virtual media data encryption
- IP / MAC Filter for enhanced security protection
- Supports password protection
- Private Certificate Authority

### Virtual Media

- Virtual media enables file applications, OS patching, software installation and diagnostic testing
- Works with USB enabled servers at the operating system and BIOS levels
- Supports USB 2.0 DVD / CD drives, USB mass storage devices, PC hard drives and ISO images

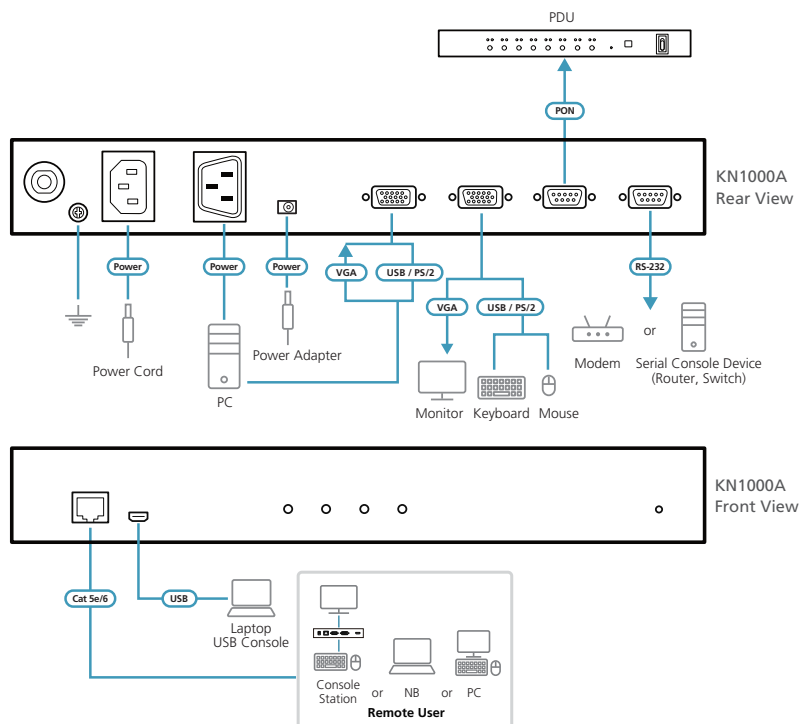
### Virtual Remote Desktop

- BIOS-level access
- Video quality and video tolerance can be adjusted to optimize data transfer speeds; 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

## Highlights

<b>Over-IP Capability For Legacy KVM Switches</b>	Protects your original KVM switch investment. No need to purchase new KVM switches to achieve the benefits of over-IP connectivity.
<b>Remote Power Control</b>	A built-in single-port Power Switch allows remote power management of a server installation connected locally at the KN1000A. In addition, you can add an ATEN PDU unit and remotely control the power status (On, Off, Reboot) of all devices connected to the installation, and monitor the current power status as well.
<b>Multi-Keyboard Language Support — On-Screen Keyboard</b>	The KN1000A 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 – and you can key data in any of these languages with the KN1000A's convenient on-screen keyboard.
<b>External Authentication Support</b>	In addition to its own security protection, the KN1000A allows you to set up login authentication and authorization management from external sources such as RADIUS, LDAP, LDAPS and MS Active Directory.
<b>Ease-to-Use User Interface</b>	A user-friendly intuitive GUI provides convenient access, configuration and operation. Local Console, browser-based and AP GUIs offer a unified multi-language interface to minimize user training time and increase productivity.

<b>Virtual Remote Desktop</b>	<p>The remote desktop can appear full-screen or as a window with a flexible scaling video display. Advanced features such as a 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.</p>
<b>Superior Video Resolution</b>	<p>With enhanced fps throughput for crisp responsive video display, the switches offer resolutions of up to 1920 x 1200 @ 60 Hz; and vibrant 24-bit color depth for rich remote session displays.</p>
<b>Configurable Network Bandwidth settings</b>	<p>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.</p>
<b>Mouse DynaSync™</b>	<p>Automatically synchronizes the local and remote mouse movements for perfect alignment of mouse pointers, regardless of server mouse acceleration settings.</p>
<b>Message Board</b>	<p>To alleviate the problem of access conflicts arising from multiple logins, the Message Board functions like an Internet chat program, allowing users who are logged in to instantly communicate with each other.</p>
<b>Virtual Media</b>	<p>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.</p>
<b>Smart Card Reader</b>	<p>The smart card reader function allows a reader plugged into a local client computer's USB port to be redirected, and appear as if it were plugged into the remote server. One purpose of smart cards (Common Access Cards, for example), is to allow authentication to the remote server from the local client.</p>



## Specifications

KN1000A	
<b>Connectors</b>	
Console Ports	1 x SPHD Male (Yellow)
KVM (Computer) Ports	1 x SPHD Female (Yellow)
Laptop USB Console (LUC) Port	1 x USB Mini-B Female
PON	1 x DB-9 Male
RS-232	1 x DB-9 Male
LAN Ports	1 x RJ-45 Female
Power Inlets	1 x IEC60320/ C14
Power Outlets	1 x IEC60320/ C13
Power	1 x DC Jack
<b>Switches</b>	
Reset	1 x Semi-recessed Pushbutton
<b>LEDs</b>	
Power	1 (Orange)
Power Outlets	1 (Orange)
Link	1 (Green)
10 / 100 / 1000 Mbps	1 (Orange / Orange+Green /Green)
<b>Emulation</b>	
Keyboard / Mouse	USB; PS/2
<b>Video</b>	1920 x 1200 @ 60 Hz; DDC2B
<b>Maximum Input Power Rating</b>	100 – 240 V~; 50 – 60 Hz; 10A
<b>Output</b>	100 – 240 V~; 50 – 60 Hz; 9A
<b>Power Consumption</b>	DC5.3V:4.48W
<b>Environmental</b>	
Operating Temperature	0 – 40° C
Storage Temperature	- 20 – 60° C
Humidity	0 – 80% RH, Non-condensing
<b>Physical Properties</b>	
Housing	Metal
Weight	0.88 kg
Dimensions (L x W x H)	31.00 x 8.39 x 4.20 cm

### ATEN International Co., Ltd.

3F., No.125, Sec. 2, Datung Rd., Sijhih District., New Taipei City 221, Taiwan  
 Phone: 886-2-8692-6789 Fax: 886-2-8692-6767  
 www.aten.com E-mail: marketing@aten.com

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