

Control Center Over the NET™



CC2000 Management Software

In the modern workplace, enterprise level corporations require a solution that reduces IT operation costs at the same time that it increases IT productivity. Now, ALTUSEN offers just that with a complete web-enabled Centralized IT Infrastructure Management Solution for convenient, economical, centralized remote access and management of your IT devices in multiple data centers and distributed remote offices.

When used in conjunction with any Over the NET™ product (KVM Over the NET™, Serial Over the NET™, Power Over the NET™), the CC2000 management software allows IT administrators to remotely monitor and control all installed devices. The Master-Slave paradigm also safeguards your data transmissions through its built-in redundancy factors, including automated database backup of Master, Slaves and devices, and real-time database updating. Redundancy ensures that should any of the CC2000 servers go down, the CC2000 management system keeps functioning since the redundant slave unit takes over to provide the required services until the downed unit comes back up. This double redundancy feature, in which each slave server can have its own redundant slave, ensures smooth, uninterrupted access and management of all your devices.



Control Center Over the NET™

A secure and centralized management solution that enables you to manage all the equipment connected to Over the NET™ devices through a single portal.



Power Over the NET™

Remotely manage the power status of IT devices in server rooms throughout the world.

Serial Over the NET™

Manage and control all the serial devices inside the server room from anywhere at anytime.

KVM Over the NET™

Access and manage different types of server platform in remote data centers with ease.

Centralized Control and Management

CC2000 management software provides centralized management of remotely distributed IT devices. This includes ATEN/ALTUSEN "Over the NET™" devices – such as Power Over the NET™, Serial Over the NET™, and KVM over the NET™ – as well as redirection to other generic devices.

Master-Slave Architecture

CC2000 management software uses a Master-Slave architecture to offer service redundancy with real-time database updating. With this feature, a Slave server can automatically substitute for the Master if the Master server fails. Redundancy also means that should any of the CC2000 servers go down, its function and information is not lost – a redundant slave unit can take over to provide the required management services until the downed unit comes back up. In addition, double redundancy ensures uninterrupted, smooth, system management, since if a slave server in a remote site goes down, its redundant slave server will take over to provide the required management services.

Easy to use interface

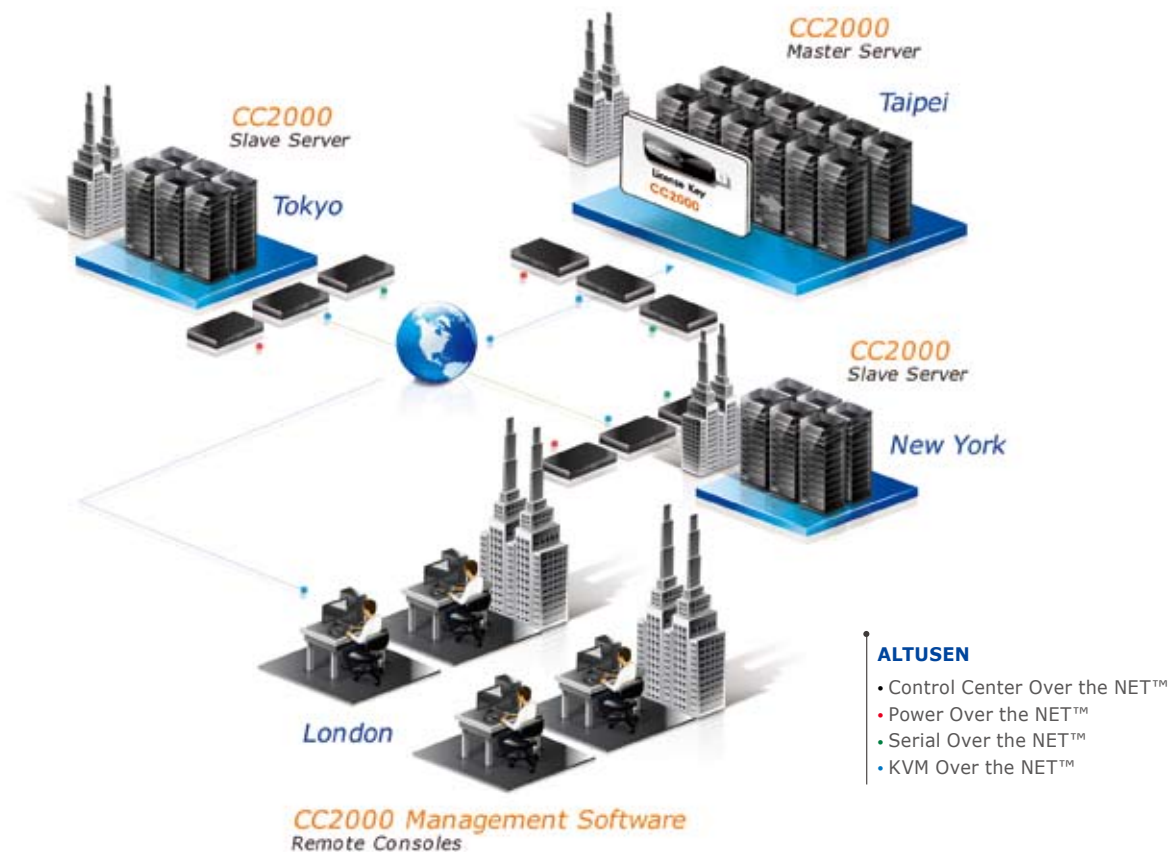
The CC2000 offers a user-friendly, intuitive, browser-based GUI for simplified access to IT equipment in global data centers and remote offices. The browser-based GUI offers a multilanguage interface to minimize user training time and increase productivity.

Task Scheduling

Time and date scheduling of routine tasks, updates, configurations and file loading that can be performed across the installation couldn't be easier. Automatic scheduling of system and maintenance tasks include: exporting event logs, power controlling devices, upgrading the firmware of selected devices, and the backup of device configuration and account information.

Logging, Audits and Alerts

The CC2000 offers a wide array of flexible logging and reporting options with audit trails for diagnostics and troubleshooting. Powerful search functions and extensive sorting and filtering of log categories to quickly pinpoint the events you are searching for are also provided. Complete logs, as well as log search results can be exported for audit and analysis.





CC2000 Management Software



Features

Centralized Management

- Complete control of your enterprise – consolidates the management of ATEN/ALTUSEN devices
- Single portal, single sign-on, single IP address to securely access every device on the installation
- All devices are integrated into a single tree view for centralized access, administration, and management of a worldwide network from anywhere at anytime
- Master/slave topology provides redundancy – including real-time database updating
- Double Redundancy – the CC2000 not only provides a redundant slave for the master server, each slave server can also have a redundant slave
- The KVM port, serial port and power outlet of an IT device can be associated and presented in the same web page, which enables IT administrators to completely control an IT device from a single user interface
- Multiplatform installation support: Windows / Linux
- Multiplatform client support (Windows, Mac OS X, Linux, Sun)
- Multi-browser support: Firefox, Internet Explorer, Mozilla, Netscape
- Email notification of specified system events
- Automatic scheduling of system, configuration, and maintenance tasks
- Logging and auditing of system events for the CC2000 and managed devices
- Session logs provide serial device history
- ATEN/ALTUSEN device auto-discovery with device-availability status, and alarms
- View, manage, and terminate active user sessions in real time
- Role-Based Access and Control (RBAC)
- Browser-based GUI offers a multilanguage interface to minimize user training time and increase productivity
- Generic Device support – users can be redirected to 3rd party data center devices from the CC2000
- Flexible logging and reporting options

Powerful Security

- Powerful security features include both internal and external authentication – external authentication support includes LDAP, LDAPS, Active Directory, RADIUS, TACACS+, and NT Domain – only after being authenticated can users gain access to the devices
- Option to force users of all CC managed devices to be authenticated through the CC – users cannot log in to the devices directly
- Compliant with the X.509 Digital Certificate Standard
- 128-bit SSL encryption of all data on the web
- Flexible session time-outs
- Configurable user and group permissions for server access and control
- Supports strong password protection, SAS 70 compliance for configurable amount of failed login attempts and user ID lock out parameters
- Devices can identify themselves by Name, MAC address, or IP in the browser – the IP of KN/SN/PN devices can be hidden from people passing by
- IP and Mac filtering
- Remote access logged and authenticated
- Private CA support

Server Management Features

- BIOS level support
- 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
- Virtual Media
- Virtual Remote Desktop
- Exit Macro support
- Mouse DynaSync™
- Panel Array Mode
- Message Board
- Scalable Video Display

Server Requirements

Systems that the CC2000 server will be installed on should meet the following requirements:

Hardware Requirements

- CPU: Pentium 4, 2.60 GHz or higher
- Memory: At least 512MB (1GB or more recommended)
- Hard drive: 500MB or more free space
- Ethernet: At least 1 Ethernet adapter (100Mbps or higher) – Giga LAN recommended

Operating System Requirements

- Windows: 2000, XP, 2000 Server, Server 2003, Server 2008, or Windows Vista with Java Runtime Environment (JRE) 6, Update 11, or higher (with the latest service package for each installed)
- Linux (with Java Runtime Environment (JRE) 6, Update 11, or higher)
 - Red Hat Enterprise Linux V. 4 and 5
 - Novell SUSE Enterprise Server 9 and 10

CC2000 Capable ALTUSEN IP Products

- CN8000*, IP8000*, KN2116A, KN2132, KN4116, KN4132, KN2124v, KN2140v, KN4124v, KN4140v
- PN0108, PN9108
- SN0108, SN0116

Browsers

Supported browsers for users that log into the CC2000 include the following:

Browser	Version
IE	6 and higher
Firefox	1.5 and higher
Mozilla	1.7 and higher
Netscape	8.1 and higher

USB License Key Specifications

	Function	CC2000 USB License Key
Environment	Operating Temp.	0–40°C
	Storage Temp.	-20–60° C
	Humidity	0–80% RH, Non-condensing
Physical Properties	Composition	Metal & Plastic
	Weight	14 g
	Dimensions	8.36 x 2.77 x 1.36 cm

Product specifications and appearance are subject to change without notice.

CC2000 USB License Options

- CC2000-XL (Extra Lite Pack: 1 Master, 64 Nodes)
- CC2000-LE (Lite Pack: 1 Master, 128 Nodes)
- CC2000-LS (Lite Plus Pack: 1 Master, 512 Nodes)
- CC2000-SD (Standard Pack: 1 Master/1 Slave, 512 Nodes)
- CC2000-PS (Plus Pack: 1 Master/5 Slaves, 2048 Nodes)
- CC2000-PM (Premium Pack: 1 Master/9 Slaves, 5120 Nodes)
- CC2000-PL (Platinum Pack: 1 Master/15 Slaves, Unlimited Nodes)
- CC2000-MX (Maximum Pack: 1 Master/31 Slaves, Unlimited Nodes)

Accessories



1. CC2000 USB License Key x 1
2. Software CD x 1

* Please see ATEN catalog or www.aten.com for more details.

KVM Over the NET™



**KN2124v/KN2140v/KN4124v/KN4140v
KN2116A/KN2132/KN4116/KN4132 • KH1508i/KH1516i**

The KVM Over the NET™ series consists of IP-based KVM control units. They allow both local and remote operators to monitor and access multiple computers from remote locations using a standard Internet browser. Since KVM Over the NET™ products use TCP/ IP for their communications protocol, they can be accessed from any computer on the Net — whether that computer is located down the hall, down the street, or halfway around the world.

- Enables a faster response to mission-critical data center emergencies
- Eliminates the distance restrictions of server room management
- Allows fewer administrators to manage more devices in multiple locations
- Facilitates the sharing of technical know-how between locations
- Provides secure, centralized management through a single interface

Comparison

Functions		KN2124v / KN2140v / KN4124v / KN4140v	KN2116A/KN2132 / KN4116 / KN4132	KH1508i/KH1516i
Computer Connections	Direct	24/40/24/40	16/32/16/32	8/16
	Max.	384/640/384/640 (Cascade*)	256/512/256/512 (Cascade*)	128/256 (Daisy-chain)
Multiple Sessions	Local	1	1	1 (Share)
	Remote	2/2/4/4	2/2/4/4	
Computer	Connector	RJ-45	RJ-45	RJ-45
	Platform	PS/2, USB, Sun, Serial*	PS/2, USB, Sun, Serial*	PS/2, USB, Sun, Serial*
Local Console		PS/2, USB	PS/2, USB	PS/2
Advanced Security		•	•	•
RADIUS Support		•	•	•
BIOS Level Control		•	•	•
Graphical OSD		•	•	• (Remote)
Concurrent Access		32	32	32
Share Mode Support		•	•	•
Message Board		•	•	•
Panel Array Mode		•	•	•
External PON		•	•	•
Virtual Media		•	--	--
LDAP/AD		•	•	--
External Modem Support		•	•	--
On-Screen Keyboard		•	•	--
Mouse DynaSync™		•	•	--
Virtual Remote Desktop		•	•	•
Magic Panel		•	•	--
Multilingual Support		•	•	--
Dual NIC Design		•	•	--
Dual Power		•	--	--
Audio		•	--	--
Independent Bus Switching		•	•	--
Adapter ID		•	•	--
Green IT - Fan Speed		•	--	--

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

* Requires KA9140 Serial Adapter Module.

* Requires KA9140 or KA7140 Serial Adapter Module.

Multiple Sessions, Concurrent Access

KVM Over the NET™ switches support up to 5 buses, allowing 1 local and 4 remote user access. With multiple login support, up to 32 users can log in at the same time to securely monitor, manage, troubleshoot, or run applications for connected devices.

Share Mode Support

Three types of Share Mode are available for each port: Exclusive, Occupy and Share, Exclusive: The first user to switch to the port has exclusive control over the port. Occupy: The first user to switch to the port has control over the port. Up to 32 users may view the port's video output. Share: Up to 32 users simultaneously share control.

Panel Array Mode

Panel array mode permits simultaneous monitoring of the video output of the installations' servers. Operators can monitor the screen display of up to 40 servers for server monitoring.

Message Board

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.

Power Over the NET™ Support

The Power Over the NET™ module was designed to work seamlessly with our KVM Over the NET™ products. With the addition of a PN0108 module, administrators can remotely control the power status of any attached device – including safe shutdown and reboot of servers.

Dual IP/Dual Power

Dual IP/ Dual Power supply operation provides the backup redundancy, and reliability. Should one of the IP or one of the power supplies become unavailable, the other will take over in order to keep the system functioning normally.

Magic Panel

A special hideaway control panel with configurable function icon enables you to control and manage the servers more conveniently.

Ease-to-use user interface

A user-friendly, intuitive, GUI provides convenient, access, configuration and operation. Local Console, browser-based and AP GUIs offer a unified multilanguage interface to minimize user training time and increase productivity.

Multi-Keyboard Language Support – On-Screen Keyboard

The switches 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.

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.

* Not all products support all the "Virtual Remote Desktop" features.



Panel Array Mode



Sizable Remote Desktop Window

Mouse DynaSync™

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

Intelligent Bus Assignment – Flexible Port Switching

With Intelligent Bus Assignment users are automatically assigned to one of four buses as they log in. With Flexible Port Switching, up to 32 users can be flexibly distributed over 4 separate bus sessions and multiple users are allowed to share access to one server for maximizing system efficiency.

Adapter ID

The Adapter ID Function stores port information such as the Adapter ID, OS, keyboard language, adapter name, operation modes, and etc. This enables administrators to relocate the servers to different ports, without having to re-configure the adapters and the switches.

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.

Green IT – Variable Fan Speed

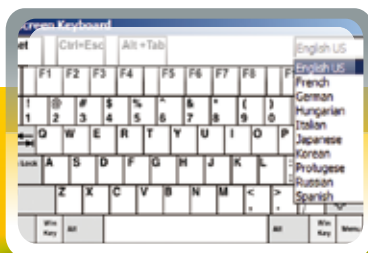
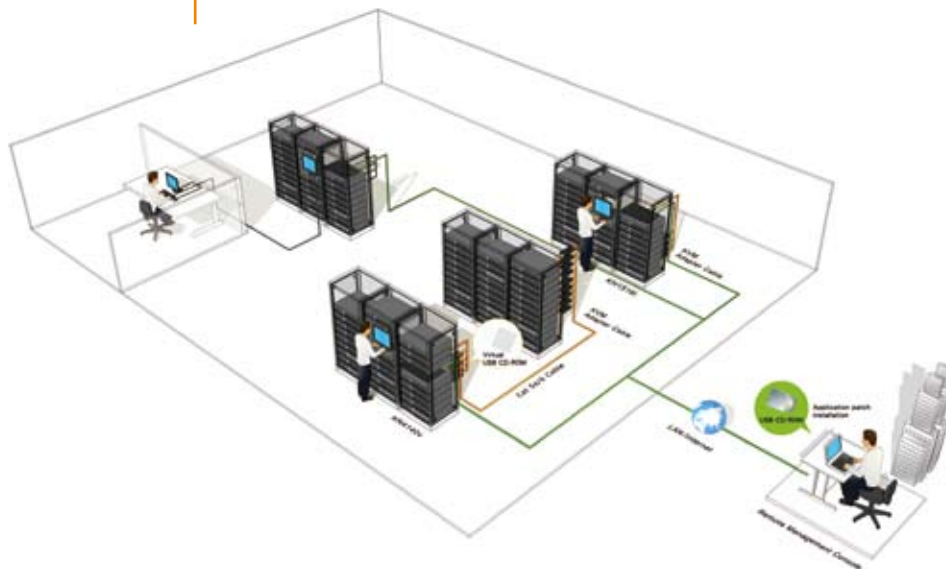
The switches have support for four temperature sensors that can control up to six fans. The sensors regulate the fans to run at optimum speed, using energy more efficiently and prolonging the life of both the fans and the switch.

Audio Enabled

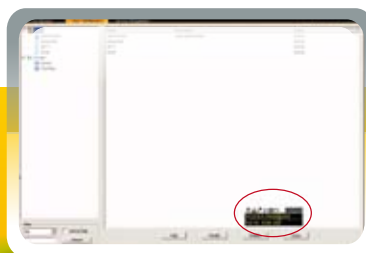
The switches are audio enabled. On the local unit, speakers and a microphone are supported; while remote units offer support for speakers only.

Not all products support these features. Please see the comparison table for difference.

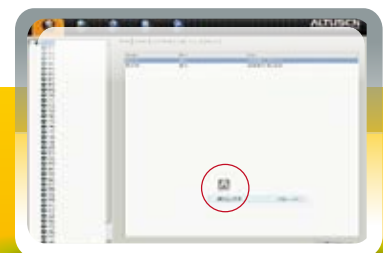
Application Diagram KVM Over the NET™



 On-Screen Keyboard



 Magic Panel – Adjustable Transparent Toolbar



 Magic Panel – Toolbar
Minimizes to Desktop Icon

KN2124v/KN2140v/KN4124v/KN4140v

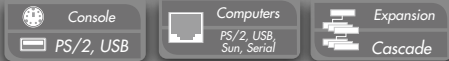
New Generation KVM Over the NET™



Features



• KN4140v



KN4140v

- 40 ports
- 1 local and 4 remote user access
- Audio, virtual media, dual power and fan speed control support

KN4124v

- 24 ports
- 1 local and 4 remote user access
- Audio, virtual media, dual power and fan speed control support

KN2140v

- 40 ports
- 1 local and 2 remote user access
- Audio, virtual media, dual power and fan speed control support

KN2124v

- 24 ports
- 1 local and 2 remote user access
- Audio, virtual media, dual power and fan speed control support

Hardware

- High port density – RJ-45 connectors and Cat 5e/6 cable for up to 40 ports in a 1U housing
 - Two or four separate buses for remote KVM over IP access
 - Two 10/100/1000 Mbps NICs for redundant LAN or two IP operation
 - 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
 - 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 24 or 40 computers on a single level, or control up to 640 computers in a two-level cascade*
- * Cascade-compatible KVM Switches include the following: CS9134, CS9138, CS88A, KH1508, and KH1516. Some KVM Over the NET™ features may not be supported, depending on the functionality of the cascaded KVM switch.

Management

- Up to 64 user accounts – up to 32 users simultaneously share the control
- Fan speed varies according to temperature
- End session feature – administrators can terminate running sessions
- Event logging and Windows-based Log Server support
- Critical system events sent by email and SNMP trap; and Syslog support
- Firmware upgradeable
- Modem dial-in/dial back support
- Adapter ID
- 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

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)
- Multibrowser support (IE, Mozilla, Firefox, Safari, Opera, 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

Advanced Security

- Remote authentication support: RADIUS, LDAP, LDAPS, and MS Active Directory
- Advanced security features include password protection and advanced encryption technologies– 1024 bit RSA; 56 bit DES; 256 bit AES; and 128 bit SSL
- 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 strong password protection
- Configurable user and group permissions for server access and control
- Local and remote access logged and authenticated
- Private CA

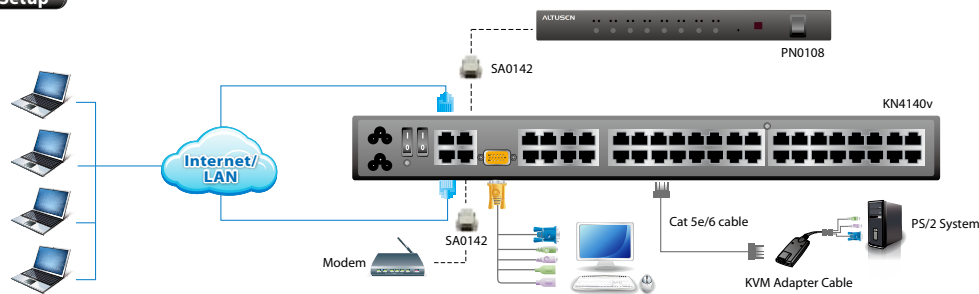
Virtual Media

- Virtual media enables file applications, OS patching, software installation and diagnostic testing
- Works with USB enabled servers in operating system and BIOS level
- Supports 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™
- Keyboard pass through support
- Exit Macros support
- On-screen keyboard with multilanguage support
- BIOS-level access

Setup



4 remote buses – 4 remote consoles can simultaneously access separate ports – up to 32 users can share the remote buses.

Optional Equipment/Software

• KVM Adapter Cables:

Model	Function
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

* See Page 54 for KVM Adapter Cable Details

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Accessories



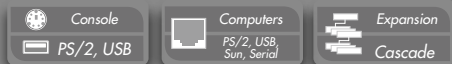
1. 5-in-1 Console Cable x 1
2. SA0142 Serial Adapters (RJ45-F to DB9-M; DTE to DCE) x 2
3. Power Cords x 2
4. Utility Power Cords x 2
5. Rack Mount Kit x 1
6. Foot Pad Set (4 pcs.) x 1
7. Grounding Wire x 1

KN2116A/KN2132/KN4116/KN4132

New Generation KVM Over the NET™



Features



KN4132

- 32 ports
- 1 local and 4 remote user access

KN4116

- 16 ports
- 1 local and 4 remote user access

KN2132

- 32 ports
- 1 local and 2 remote user access

KN2116A

- 16 ports
- 1 local and 2 remote user access

Hardware

- High port density – RJ-45 connectors and Cat 5e/6 cable for up to 32 ports in a 1U housing
- Two or four separate buses for remote KVM over IP access
- Two 10/100/1000 Mbps NICs for redundant LAN or two IP operation
- 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 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 or 32 computers on a single level, or control up to 512 computers in a two-level cascade*
- * Cascade-compatible KVM Switches include the following: CS9134, CS9138, CS88A, KH1508, and KH1516. Some KVM Over the NET™ features may not be supported, depending on the functionality of the cascaded KVM switch.

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 events sent by email and SNMP trap; and Syslog support
- Firmware upgradeable
- Modem dial-in/dial back support
- Adapter ID
- 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

Ease-to-Use Interface

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- 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

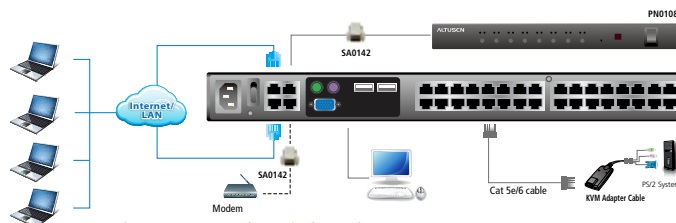
Advanced Security

- Remote authentication support: RADIUS, LDAP, LDAPS, and MS Active Directory
- Advanced security features include password protection and advanced encryption technologies– 1024 bit RSA; 56 bit DES; 256 bit AES; and 128 bit SSL
- 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 strong password protection
- Configurable user and group permissions for server access and control
- Local and remote access logged and authenticated
- Private CA

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™
- Keyboard pass through support
- Exit Macros support
- On-screen keyboard with multilanguage support
- BIOS-level access

Setup



4 remote buses – 4 remote consoles can simultaneously access separate ports – up to 32 users can share the remote buses.

Optional Equipment/Software

• KVM Adapter Cables:

Model	Function
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

* See Page 54 for KVM Adapter Cable Details

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Accessories



1. SA0142 Serial Adapters (RJ45-F to DB9-M; DTE to DCE) x 2
2. Power Cord x 1
3. Rack Mount Kit x 1
4. Foot Pad Set (4 pcs.) x 1
5. Grounding Wire x 1

KH1508i/KH1516i

Cat 5 High-Density KVM Over the NET™

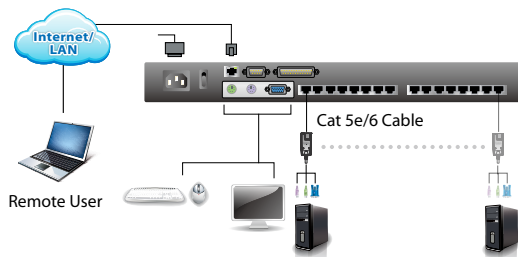


Features

- 8/16-port remote access KVM switch – monitor and control up to 8/16 computers from a single KVM (Keyboard, Video, Mouse) console
- Remotely access computers via LAN, WAN, or the Internet; control your installation when and where you want
- Internet browser access; Windows client and Java client provided; Java client works with most operating systems
- No software required – convenient computer selection via port selection switches, hotkeys and intuitive On Screen Display (OSD) menus
- Supports all major server platforms and VT100 based serial devices
- Supports multiplatform server environments including PS/2, USB, Sun, and Serial
- RJ-45 connectors allow a full 16 port implementation – Cat 5e/6 cable reduces cable bulk
- Dedicated chain ports – daisy-chain up to 15 additional units – control up to 256 computers from a single console*
- Extends the distance between computers and switch – up to 40 m
- Up to 64 user accounts – up to 32 concurrent logins
- Panel Array Mode – view all 8 or 16 ports at the same time
- Message board feature allows logged in users to communicate with each other and allows a user to take exclusive control of the KVM functions
- Windows-based Log Server
- Remote power control for attached Power Over the NET™ devices
- Three-level security – multi-administrator, multi-user, and multi-viewer
- Advanced security features include password protection and advanced encryption technologies – 1024-bit RSA, 256-bit AES, 56-bit DES, and 128-bit SSL
- RADIUS server support
- Firmware upgradeable
- Network Interfaces – TCP/IP, HTTP, HTTPS, UDP, RADIUS, DHCP, SSL, ARP, DNS, 10Base-T/100Base-TX, auto sense, Ping
- High video resolution – up to 1600 x 1200 @ 60Hz

* Compatible KVM Switches: ACS1208A, ACS1216A, KH1508, KH1516.

Setup



Optional Equipment/Software

• KVM Adapter Cables:

Model	Function
KA9520	PS/2 KVM Adapter Cable
KA9570	USB KVM Adapter Cable
KA9130	Sun Legacy KVM Adapter Cable
KA9170	USB KVM Adapter Cable (PC/Mac/Sun)
KA9140	Serial KVM Adapter Module

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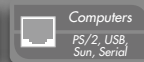
* See Page 54 for KVM Adapter Cable Details

Accessories



1. Firmware Upgrade Cable x 1
2. Power Cord x 1

3. Rack Mount Kit x 1
4. Foot Pad Set (4 pcs.) x 1



KH1508i

- 8 ports
- 1 local/remote user access

KH1516i

- 16 ports
- 1 local/remote user access

KVM Over the NET™ Specifications

Function		KN2124v/ KN4124v/ KN2140v/ KN4140v	KN2116A/KN4116/ KN2132/KN4132	KH1508i/ KH1516i	
Computer Connections	Direct	24/40	16/32	8/16	
	Max	384/640 (Cascade)	256/512 (Cascade)	128/256 (Daisy-chain)	
Port Selection		Pushbutton / GUI / Hotkey			
Connectors	Console Ports	Keyboard	1 x PS/2 (F) 1 x USB (F)	1 x PS/2 (F)	
		Video	1 x HDB-15 (F)	1 x HDB-15 (F)	
		Mouse	1 x PS/2 (F) 1 x USB (F)	1 x PS/2 (F)	
	KVM Ports		24/40 x RJ-45 (F)	16/32 x RJ-45 (F)	8/16 x RJ-45 (F)
	Power		2 x 3-prong AC socket	1 x 3-prong AC socket	
	LAN		2 x RJ-45 (F)		1x RJ-45 (F)
	PON		1 x RJ-45 (F)		1 x DB-9 (M)
	Modem		1 x RJ-45 (F)		--
	USB		3 x USB (F)		--
	Audio		2 x Audio Jack (F)	--	--
Emulation	Keyboard/Mouse	PS/2 / USB			
Video		1600x1200 @ 60Hz			
I/P Rating		100–240V AC; 50–60 Hz; 1.0 A		100–240V AC; 50–60 Hz	
Power Consumption		*		120V/12W; 230V/12W	
Environment	Operating Temp.	0–50° C			
	Storage Temp.	-20–60° C			
	Humidity	0–80% RH Non-condensing			
Physical Properties	Housing	Metal			
	Weight	*		2.80 kg	
	Dimensions (L x W x H)	*		43.72 x 16.10 x 4.40 cm (19"/1U)	

* Power Consumption & Physical Properties

Model	Description	Dimensions (L x W x H)	Weight	Power Consumption
KN2116A	16 KVM ports, 1 Local and 2 Remote User Access	43.36 x 41.35 x 4.40 cm	5.46 kg	110V/33W 230V/33.80W
KN2132	32 KVM ports, 1 Local and 2 Remote User Access	43.36 x 41.35 x 4.40 cm	5.59 kg	110V/33.40W 230V/34.20W
KN4116	16 KVM ports, 1 Local and 4 Remote User Access	43.36 x 41.35 x 4.40 cm	5.52 kg	110V/39.60W 230V/40.00W
KN4132	32 KVM ports, 1 Local and 4 Remote User Access	43.36 x 41.35 x 4.40 cm	5.63 kg	110V/45.80W 230V/46.30W
KN2124v	24 KVM ports, 1 Local and 2 Remote User Access	43.36 x 41.35 x 4.40 cm	5.99 kg	Single Power: 115V/36.4W; 230V/37.2W Dual Power: 115V/41.8W; 230V/42.5W
KN2140v	40 KVM ports, 1 Local and 2 Remote User Access	43.36 x 41.35 x 4.40 cm	6.08 kg	Single Power: 115V/36.8W; 230V/37.7W Dual Power: 115V/42.2W; 230V/43W
KN4124v	24 KVM ports, 1 Local and 4 Remote User Access	43.36 x 41.35 x 4.40 cm	6.04 kg	Single Power: 115V/43.7W; 230V/44.6W Dual Power: 115V/49.1W; 230V/50W
KN4140v	40 KVM ports, 1 Local and 4 Remote User Access	43.36 x 41.35 x 4.40 cm	6.12 kg	Single Power: 115V/49W; 230V/50W Dual Power: 115V/54W; 230V/56W

Product specifications and appearance are subject to change without notice.