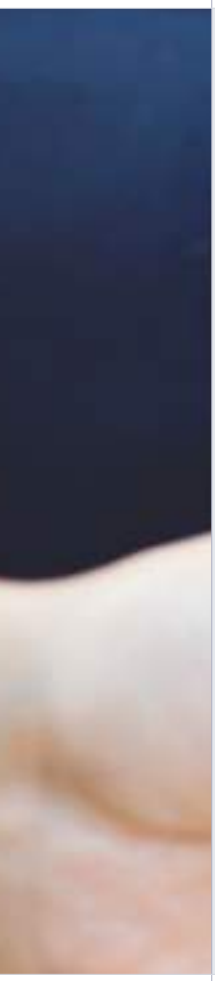
ATEN Solutions Book

For KVM Solutions

Issue 1



ATEN Solutions Book



ATEN, established in 1979, has specialized in connectivity and management solutions for information technology, professional audio/video, and green energy products; supplying consumers, small/home offices (SOHO), small to medium sized businesses (SMB), and enterprise customers.

This compilation of our products applied in real life case studies and success stories was created to help our business partners and customers do business more effectively and flexibly. We created two books which feature: professional audio/video product applications and Enterprise KVM solutions applications.

The professional audio/video case studies offer an insight to our integrated solutions for a wide variety of corporate, education, hospitality, commercial and home theater applications. Our high quality audio/video splitters, extenders and converters are available with VGA, DVI, HDMI, and high definition component interfaces.

The Enterprise KVM solutions provide a show case of the many different industries and applications our products are used for to support and streamline management of IT equipment.

We distribute our products through a global sales network to meet a broad range of customer needs. ATEN delivers and we care about our customers. We are committed to the best customer support in the industry.



Simply Better Connections

"Simply Better Connections" has always been at the heart of the ATEN brand. It means providing innovative solutions for you to make better connections, efficiently and seamlessly, to the information and people that you value. As a result, ATEN connects you to the world, anytime and anywhere, by providing technologies that enable you to share and to care. ATEN makes professional and personal life easier, simpler and better connected.



Why Choose ATEN KVM Solutions



- **30 Year Legacy of Innovative Solutions**

  With over 30 years of experience, ATEN is considered today the worldwide leading KVM solutions provider. ATEN offers the most complete range of KVM solutions starting at the entry level and going all the way to the enterprise. Our lineup of KVM products offers a multitude of flexible, integrated solutions for diversified applications.

- **ASIC Onboard**

  The ASIC represents a new level in product reliability. By incorporating our own patented ASIC into each new design, we enhance the functionality and compatibility of ATEN KVM products.

- **Flexible Deployment**

  ATEN KVM products are offered in a wide range of port, module, and connection types – no matter the size of your installation. Flexible expansion is available via daisy-chaining or cascading units. As your installation grows, simply add additional switches to match the new number of servers.

- **Multiplatform Integration**

  Many ATEN Rack KVM Switches make use of the KVM Adapter Cables or custom cables to allow any combination of Windows, Mac, Sun, or Linux systems to easily coexist and be integrated into the KVM switch management system.

- **Space-Saving Design**

  ATEN's LCD KVM Switches provide a streamlined method to conserve server room rack space by integrating a retractable keyboard, LCD monitor, and touchpad with a KVM switch in a Single or Dual Rail housing, in 1U of rack space.



▪ Eliminate Cable Clutter

ATEN's Cat 5 KVM Switches use RJ-45 connectors and either Cat 5e or Cat 6 cable to provide complete KVM connectivity to your installed devices- eliminating the tangled mess and bulk of traditional KVM connection methods, while providing a neat and efficient work environment.

▪ Remote Management

Many ATEN KVM solutions offer platform-independent, browser-based access via the Internet or LAN. Remote access and management of all servers allows fewer operators to manage a greater number of servers from anywhere; at any time.

▪ Simultaneous Monitoring

ATEN's patented Panel Array Mode™ feature allows operators to view the output of multiple ports in individual panels all on the same screen.

▪ Centralized Management

CC2000 management software consolidates the management of all ATEN IT devices through a single portal, single sign on, single IP address to securely access and control every device on the installation.

▪ Exceptional Price Performance

Our knowhow and high-tech automated manufacturing process enable us to produce superior products. We believe an efficient solution is a great benefit to server room management, and providing the most economical and exceptional price performance solutions is one of our missions.

Contents

Industry Applications

Banking

Axis Bank 01
ABBank 02
Commerical Bank 03

Media

MY CARTOON KIDS TV 04
YangZhou Broadcasting TV Network 05
Japan Digital Serve Corporation 06
Yuzu TV 07
Media Center 08
Post-Production House 09
Coaching Football 10

Government

City Government 11
Land Administration Department 12
National Defense Department 13
Police Headquarters 14
Government Institution 15

Manufacturing

Semiconductor Manufacturing Company 16
LCD Panel Company 17
ODM Manufacturer 18

Transportation

Mass Rapid Transit Corp. 19
Dredging and Development Company 20

Utility & Resource

Mining Company 21
Thermal Power Corporation 22

Healthcare

Blood Centers 23

Telecommunication

Telecom Company 24

Product Introductions

Control Center Over the NET™

CC2000 25

KVM Over the NET™

KN2132 / KN4132 26
KN2116A / KN4116 26
KN2140v / KN4140v 27
KN2124v / KN4142v 27

Power Over the NET™

PN0108 / PN9108 28

Serial Over the NET™

SN0108 / SN0116 29

KVM On the NET™

CN8000 29

Matrix KVM Switches

KM0932 / KM0532 30

High-Density KVM Switches

KH2516A 31
KH1508A 31

Rack KVM Switches

CS1768 / CS1758 32
CS1708A / CS1716A 33

LCD KVM Switches

CL5716 34
KL1100 34
CL5800 35
CL1000 35

Desktop KVM Switch

CM0264 36

Cable KVM Switch

CS682 36

KVM Extenders

CE600 37
CE100 37

Computer Sharing Device

CS231 38

Video Products

VS82 39
VE022 39

Axis Bank

Axis Bank is a leading private bank in India with more than 1,600 branches nationwide. It has set up a huge data center in Mumbai, with around 900 servers and 16 serial devices, which are managed by multiple remote users. This data center has to ensure that communication between different branches is highly secure and, at the same time, that there are no significant lags during communication. Also since the data center is a 24x7 operating environment, any failure or issues with regards to the equipment have to be dealt with immediately.

ATEN Solution

KN4124v
24-Port KVM Over the NET™
1 local and 4 remote user access



(See Page 27)

SN0116
16-Port Serial Over the NET™



(See Page 29)

CC2000
Control Center Over the NET™
Management Software



(See Page 25)

Benefits

- **Reduces manpower** – saving on manpower costs due to smaller number of administrators needed to manage the total server from a central location
- **Blade server integration supports:**
  - Centralized server control
  - Full power management – to power on/off the server
  - Sensor and log readings for service processor management
- **Advanced security** – configurable user and group permissions for server access and control
- **Clear intuitive interface** – all devices are integrated into a single tree view for centralized access, administration, and management

Solution Setup



ABBANK

ABBANK is one of the leading commercial joint-stock banks and among the top ten largest commercial banks in terms of charter capital in Vietnam. ABBank was looking for a total remote management solution to efficiently control over 90 servers installed in its old and new data centers at different locations. The requirements include:

- Increase access and operations speed; facilitate simpler management
- Provide complete remote control capability for all servers and network devices
- High security and stability

ATEN Solution

KN4132
32-Port KVM Over the NET™
1 local and 4 remote user access



(See Page 26)

SN0108
8-Port Serial Over the NET™



(See Page 29)

CC2000
Control Center Over the NET™
Management Software

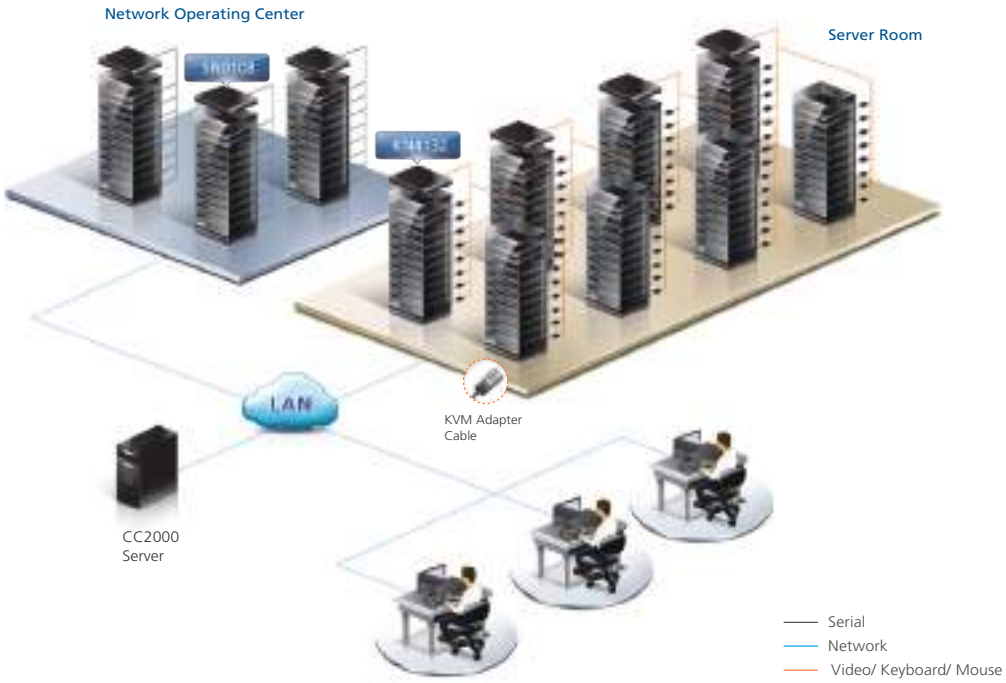


(See Page 25)

Benefits

- **Centralized control** – allows IT staff to carry out all of their controlling, monitoring and management work through a single portal
- **Saves time and cost** – reduces time and effort for IT staff and significantly increases speed of operations; therefore optimizes efficiency of the IT and network system with lower costs
- **Minimizes downtime** – 24x7 reliability is guaranteed through dual NICs, dual power supplies and out-of-band-access for BIOS troubleshooting when a node on the network is down
- **Advanced security** – Primary/Secondary topology of CC2000 provides redundancy of real-time database updating, which ensures high security of client data

Solution Setup



Commerical Bank

A publicly listed bank is one of the leading local banks in Hong Kong. In addition to Hong Kong, the bank has banking businesses in Macau and China. The bank's IT office, primary data center and back-up data center are located at different places; they are looking for a management solution to meet the following goals :

- Remotely monitor and control all servers and network devices installed at different data centers
- Provide non-stop IT operation to maintain continuous customer service



ATEN Solution

KN2116A
16-Port KVM Over the NET™
1 local and 2 remote user access



(See Page 26)

CS1716A
16-Port PS/2-USB KVM Switch

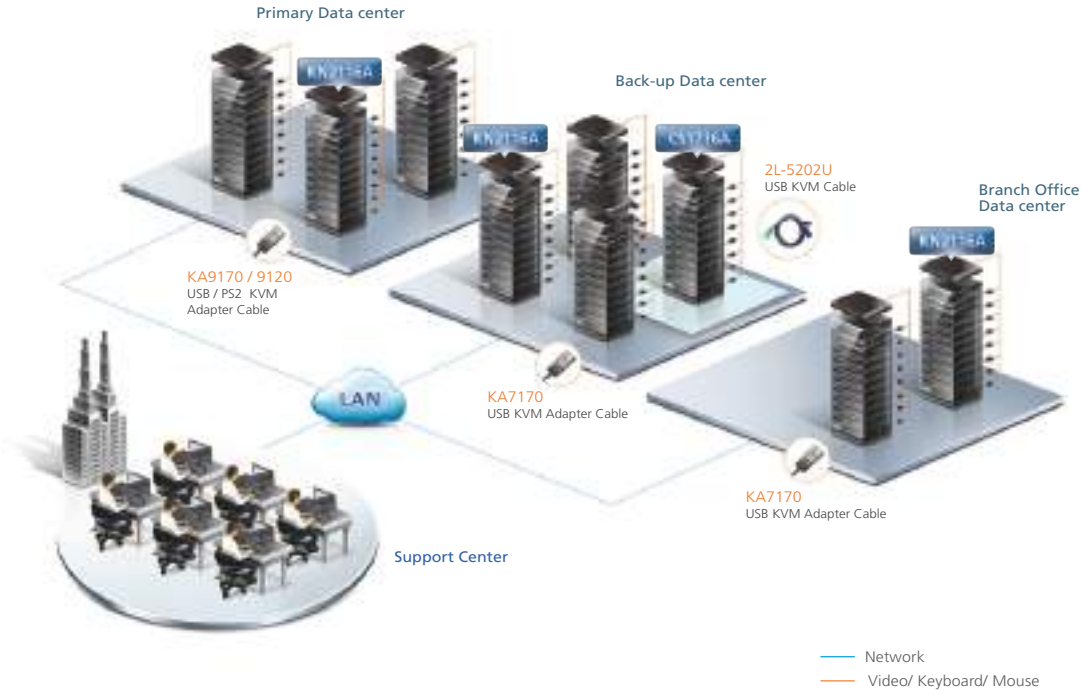


(See Page 33)

Benefits

- **Saves time and costs** – IT staff does not need to go to the primary data center and the back-up data center for maintenance and troubleshooting. Instead, they can stay at the office to perform all these jobs
- **Ensures non-stop operation** – if any critical technical issues occur at the primary data center, IT staff can promptly take the appropriate action to switch the IT operation from the primary data center to the back-up data center
- **Flexible expansion** – with the expansion of data centers, ATEN KVM switches make it easy for the bank to expand their access and control of the increasing servers simply by cascading additional switches

Solution Setup



MY CARTOON KIDS TV

MY CARTOON KIDS TV is the first TV station in Taiwan to implement the "HD Tapeless" workflow; a process that transmits all video content as a digital file through fiber-optic networks, in order to reduce the workload required to broadcast productions. The TV station needs a solution that would allow multiple administrators simultaneous access to servers in order to perform specific broadcasting functions.

ATEN Solution

KM0932
9-Console 32-Port
Matrix KVM Switch



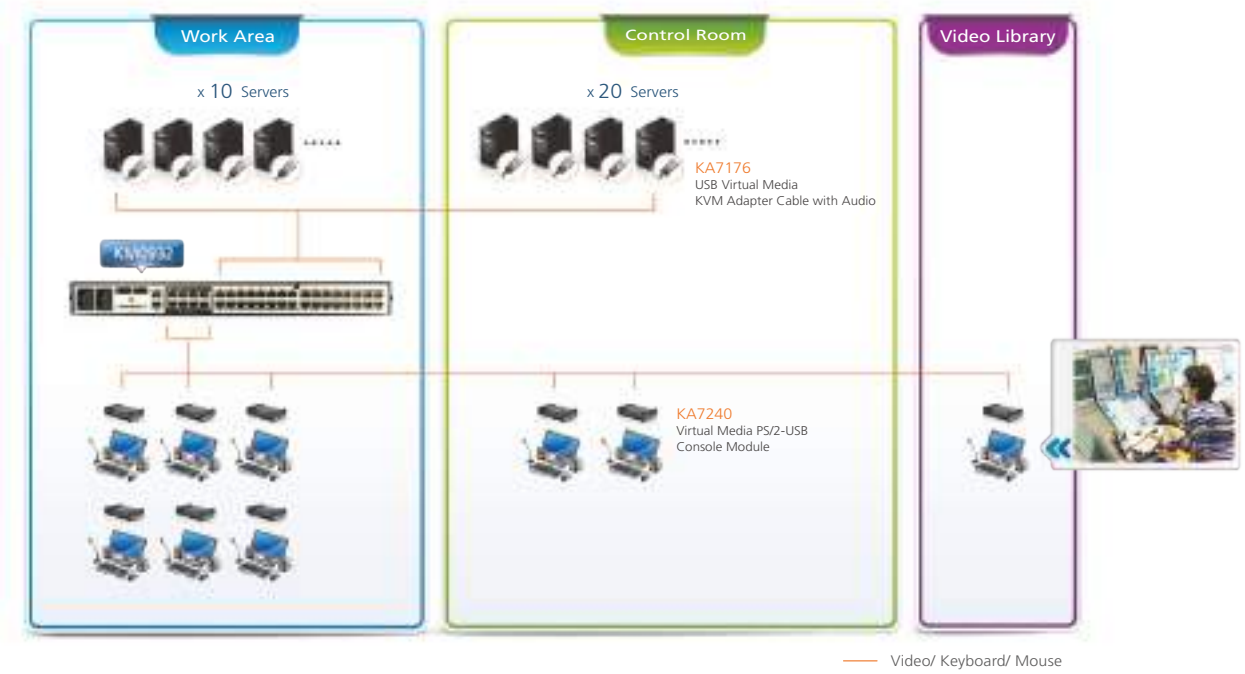
(See Page 30)

- 9 consoles independently and simultaneously control up to 32 servers
- Superior video quality - 1280 x 1024@60Hz for up to 300m
- Audio support for multimedia-capable devices
- Composite tree view - all connected devices are integrated in a single device tree for convenient access and control

Benefits

- **Increased management efficiency** – allows 9 consoles access among cross-regional servers
- **Flexible deployment** – Cat 5e/6 cable simplifies installation and extends management to 300 meters
- **High quality video** – ATEN's patented Deskew technology allows engineers to edit the video, audio and subtitles conveniently with smooth transmissions. It assures real-time and true video quality when switching multimedia animation signals over long distances
- **Ease-to-use interface** – full screen GUI offers an integrated tree view of all ports for convenient navigation and access
- **Dependable operation** – the KM0932 allows 24-hour monitoring of video playback from the control room, and immediately activates the backup system when problems occur

Solution Setup



YangZhou Broadcasting TV Network



YangZhou Broadcasting Television Network CO., Ltd. (YZBTN) was established in 2002, providing broadcasting, digital TV, Internet, video surveillance, and video conferencing services. With their growing business, the amount of data center equipment will increase, and they will need to upgrade to a centralized management system, which involves a lot of effort. YZBTN needs a solution to keep IT costs under control without compromising on management efficiency.
ATEN Solution Combines digital and analog KVM Switches, and provides centralized remote management software to effectively control 200 servers.

ATEN Solution

KN4132
32-Port KVM Over the NET™
1 local and 4 remote user access



(See Page 26)

CS1758
8-port PS/2-USB
KVM Switch



(See Page 32)

CS1716A
16-port PS/2-USB
KVM Switch



(See Page 33)

KL1100
Dual Rail LCD PS/2-USB Console



(See Page 34)

CC2000
Control Center Over the NET™



(See Page 25)

Benefits

- **Save costs and time** – Significantly reduces management costs and maintenance time; saves 5% of total IT costs and 50% of traffic time
- **Save space** – the Dual-Rail design of the LCD console and cat 5 cable connection used by the KN4132, reduces the server room footprint by nearly 20%
- **Centralized management** – the CC2000 management software provides convenient, centralized access and management of all servers through a single portal

Solution Setup



Japan Digital Serve Corp.

Japan Digital Serve Corporation (JDS) was established in 2000 to support the digitization of cable TV. Recently JDS started to provide "Integrated Cloud Service" by using cloud computing. All their servers are installed in a server room located away from their office, and connect to the office via VPN line. JDS is looking for a secure and stable remote access solution to replace the current VNC software solution.

ATEN Solution

KN4124v
24-Port KVM Over the NET™
1 local and 4 remote user access



(See Page 27)

KL1100
Dual Rail LCD PS/2-USB Console



(See Page 34)

CC2000
Control Center Over the NET™

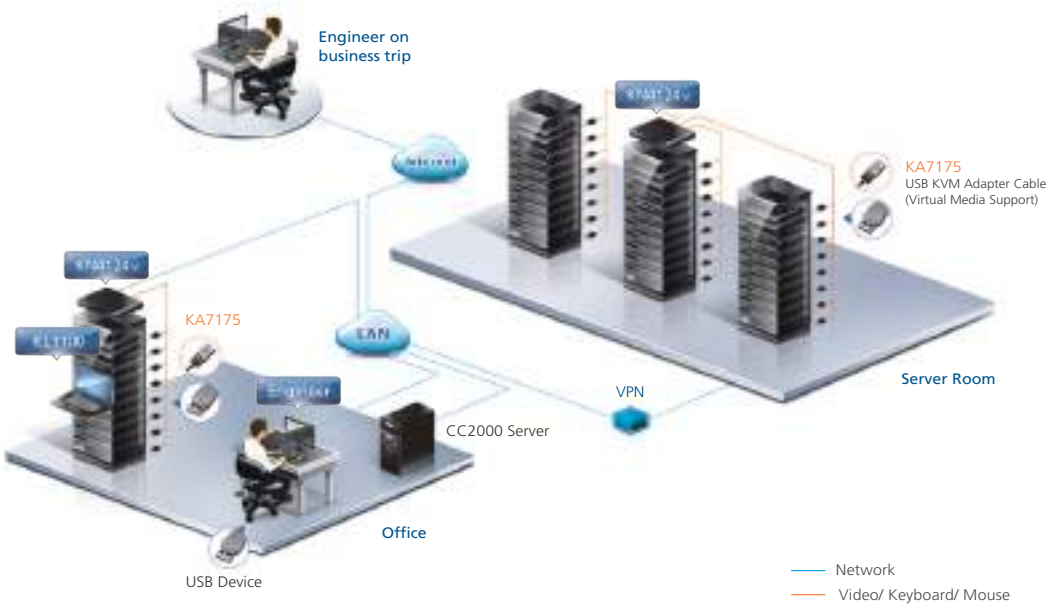


(See Page 25)

Benefits

- **Centralized management** – IT administrators are able to take complete control of all installed devices and add more KVM switches to the existing installation with ease, using CC2000 management software
- **Centralized real time updating and maintenance** – Virtual media function allows IT administrators to perform file transfers and real time maintenance from any location for collecting data instantly, saving on maintenance costs
- **Advanced security** – provides configurable user and group permissions for server access and control with flexible encryption design to enhance data security
- **Dependable operation** – two NICs for redundant LAN or two IP operation provides comprehensive reliability through backup redundancy. If the primary LAN fails, the secondary LAN can keep the operation up and running
- **Centralized server monitoring** – Panel Array Mode™ allows administrators to display the video output of up to 24 servers on their monitors at the same time

Solution Setup



Yuzu TV

Yuzu TV is a local cable TV station in Saitama, Japan. With limited manpower, Yuzu TV wanted to take advantage of its parent company's support resources in order to boost its content delivery services without having to increase its expenditure on human resources. The TV station needs a solution that allows a fewer number of administrators to manage a greater number of systems and gives them the ability to respond to any type of server room emergency from anywhere, at any time.

ゆずの里ケーブルテレビ

ATEN Solution

KN2116A 16-port KVM Over the NET™ 1 local and 2 remote user access  (See Page 26)	• Two separate buses for remote KVM over IP access • Power Association enables the switch's KVM ports to be associated with PDUs power outlets for remote power management of the servers • BIOS-level access
PN0108 8-port Power Over the NET™  (See Page 28)	• Remote power on / off / reboot control for eight outlets • Individual control of each port • Overcurrent protection and recovery for each AC port (110 V model only)
CL5800 Dual Rail LCD PS/2-USB Console  (See Page 35)	• Integrates a LCD monitor, keyboard, touchpad and KVM control unit in a dual rail housing that takes up just 1U of space • Dual rail design allows LCD monitor and keyboard/touch pad modules to operate independently

Benefits

- **Boost efficiency and manpower** – build an infrastructure that supports remote server and power management to overcome the manpower limitation and boost overall efficiency
- **Dependable operation** – keep compatibility with parent company to maintain a common IT infrastructure and to ensure service ability. When the TV station's administrators are not available, support staff from parent company can continue to operate
- **Save space** – Dual rail design of LCD KVM console enhances flexibility and efficient use of rack space reduces the amount of space required

Solution Setup



Media Center

Central Asia's largest media center was opened in Astana, the capital city of Kazakhstan. The media center occupied 80 thousand square meters of space; equipped with modern facilities serving various types of studios. The ever increasing automation of production control and broadcasting brings more and more content stored on media servers, that must be edited and ready to be played on demand. This system highly relies on different applications to manage the complex workflow. These media servers and application servers are located in one large server room, housing approximately 200 servers, and 6 smaller server rooms host another 200. Therefore, they require a solution to efficiently manage the huge amount of IT equipment in use.



ATEN Solution

KN2140v
40-Port KVM Over the NET™
1 local and 2 remote user access



(See Page 27)

KL1100
Dual Rail LCD PS/2-USB Console



(See Page 34)

CL5716
16-Port LCD KVM Switch

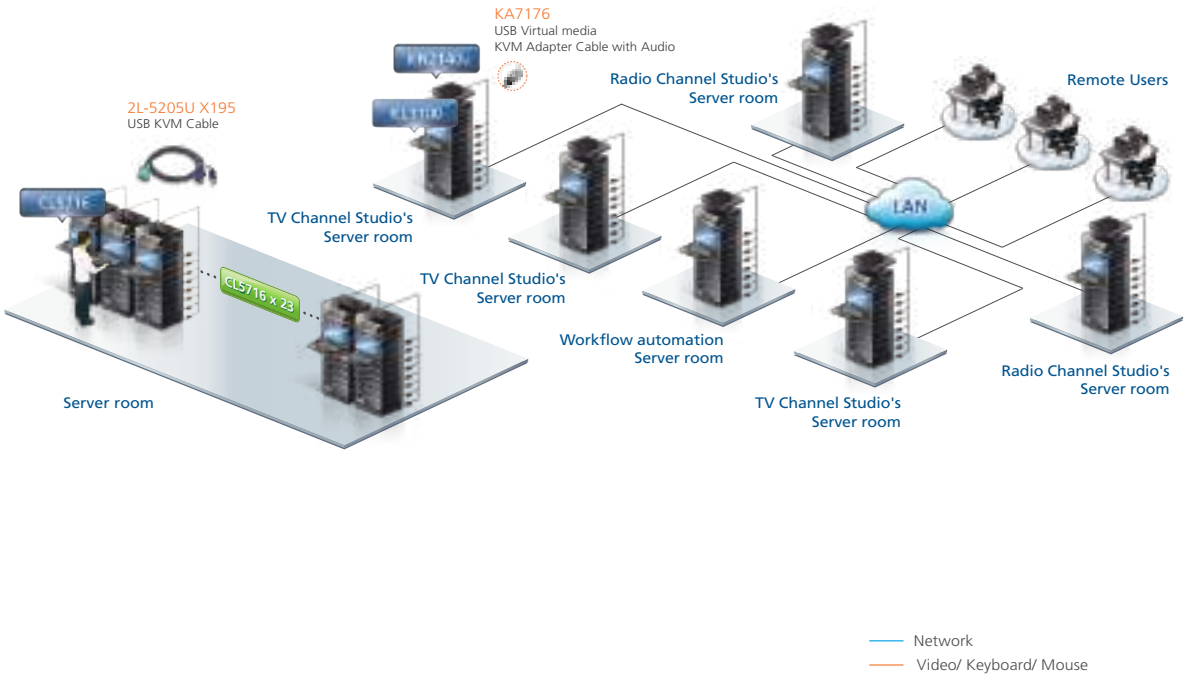


(See Page 34)

Benefits

- **Save time and costs** – remote KVM over IP access of multiple servers by multiple users to save time, effort and cost
- **Efficient management** – virtual media support for flexible maintenance and software updates remotely
- **Save space** – high port density and space-saving housing designed to optimize rack capacity

Solution Setup



Post-Production House



A post-production house creates all the commercial and promotional materials for a multimedia project. The environment requires KVM solutions in order to function as a professional multimedia facility and to provide better working conditions:

- Post-production engineers operate and switch between multiple computers with a variety of signals including keyboard/mouse, high-end video graphic cards via single-link DVI, audio and USB 2.0.
- The computers used for post-production require powerful processors using powerful fans that produce background noises and excessive heat. They require a solution that extends the distance between the actual desktop work area and computers, which allows the computers to be moved to a separate computer room.

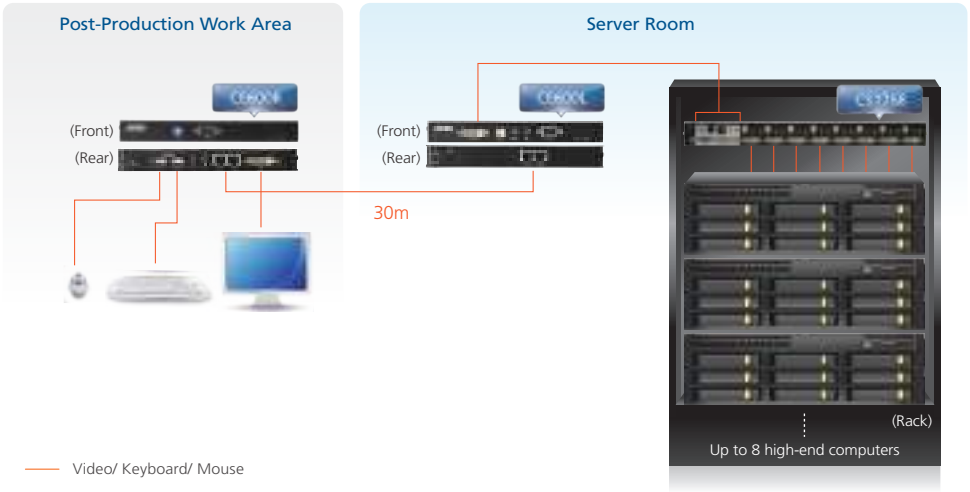
ATEN Solution

CS1768 8-Port USB DVI KVM Switch  (See Page 28)	• One USB console controls eight Single Link DVI or VGA computers and two additional USB 2.0 devices • Supports both digital (DVI) and analog (VGA) video – mixed operation possible • Superior video quality – 1920 x 1200 • Independent switching of KVM and USB focus
CE600 DVI KVM Extender  (See Page 37)	• Local and Remote Units connect at distances up to 60 m using Cat 5e cable • Superior video quality up to 1920 x 1200 @ 60 Hz at 30 m; 1024 x 768 @ 60Hz at 60 m • Audio Enabled – supports stereo speakers and microphone

Benefits

- **Easy switching** – with the DVI KVM switch, engineers are able to operate from a console on the desktop and easily switch among multiple computers and USB devices
- **Better working environment** – with the KVM extender, computers can be moved to a separate computer room creating a quiet and neatly arranged post-production workplace; allowing staff to work more efficiently and effectively

Solution Setup



Coaching Football

Coaches consistently review each game to find every advantage they can to win games. Utilizing cutting edge video technology with an easy and ready to use format gives a team the clear advantage of unique analysis. Hence the football team decided to acquire a solution to present and review pre/post-game strategy more effectively with their players.



ATEN Solution

CM0264
2x4 DVI-HDMI Matrix KVMP™ Switch



(See Page 36)

- Simultaneously controls two DVI computers, two HD computers or devices, and two additional USB devices
- Dual display – simultaneously control one computer on one display and view another source on the other display
- Innovative desktop control features include on-screen file transfer and copy-paste functionality, and cursor shift function in dual display mode
- Cursor shift function – in dual-display mode, the mouse cursor can move back and forth across both displays, shifting the KVM focus
- Video DynaSync™ – Exclusive ATEN technology eliminates boot-up display problems and optimizes resolution when switching between ports

Benefits

- **Easy content control on dual display** – the coach can now call on two devices to display side by side, on two screens and utilize content for cross comparison
- **Video Matrix** – the coach can drag windows in and out of the screen to display various contents on a high definition TV
- **User friendly** – A 3n1 Picture-in-Picture View mode can be displayed on the desktop; allowing the coach to quickly click on a choice of videos he wants to view from his desktop, bringing up a full screen display of each to easily discuss with players
- **Flexible Independent switching of KVM and audio** – the coach can work on the office laptop and listen to music from his personal laptop

Solution Setup



City Government

Changwon City is an important industrial city in South Korea. To increase overall work efficiency, IT administrators need remote access from their control room computers to the data center servers. In addition, to ensure secure access, administrators would be given different levels of authority and permissions to perform tasks.

창원시

ATEN Solution

KN4140v
40-port KVM Over the NET™
1 local and 4 remote user access



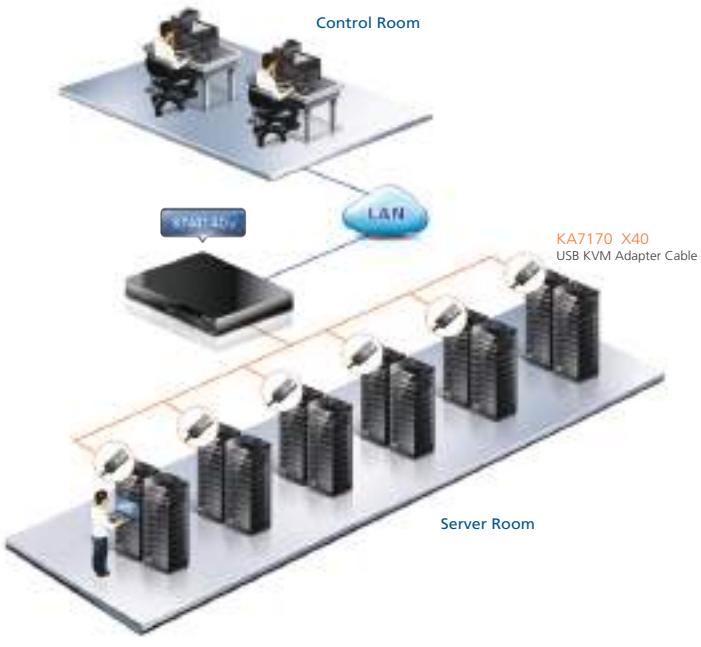
(See Page 27)

- Four separate buses for remote KVM over IP access
- Port Share Mode allows multiple users to gain access to a server simultaneously
- Configurable user and group permissions for server access and control
- Supports IP/MAC Filter

Benefits

- **Boosts efficiency** to reduce cost and time
  - The Over-IP function allows administrators to conveniently control remote servers from various administrative computers in the control room and saves time spent traveling back and forth to the date center
  - Panel Array Mode™ permits simultaneous visual monitoring of all connected severs, helping IT administrators monitor the screen displays of up to 40 servers at once
  - The multi-language GUI effectively reduces the over-all operation and learning curve
- **Simultaneous access** – different administrators can access the servers locally and remotely at the same time
- **Advanced security** – IP/ MAC Filter functions and configurable user and group permissions for secure server access and control

Solution Setup



Land Administration Department

The Dept. of Land Administration (DOL) of Taiwan government has long been committed to providing citizens with convenient, responsive and accessible e-services. DOL servers have continued to increase as the volume of land registration data and service requests have continued to grow – resulting in a corresponding increase in the complexity of equipment management. The DOL required a KVM solution with independent, reliable and highly secure management infrastructure – one that is highly scalable and provide multiplatform support as well.



ATEN Solution

KM0932
9-Console 32-Port Matrix KVM Switch



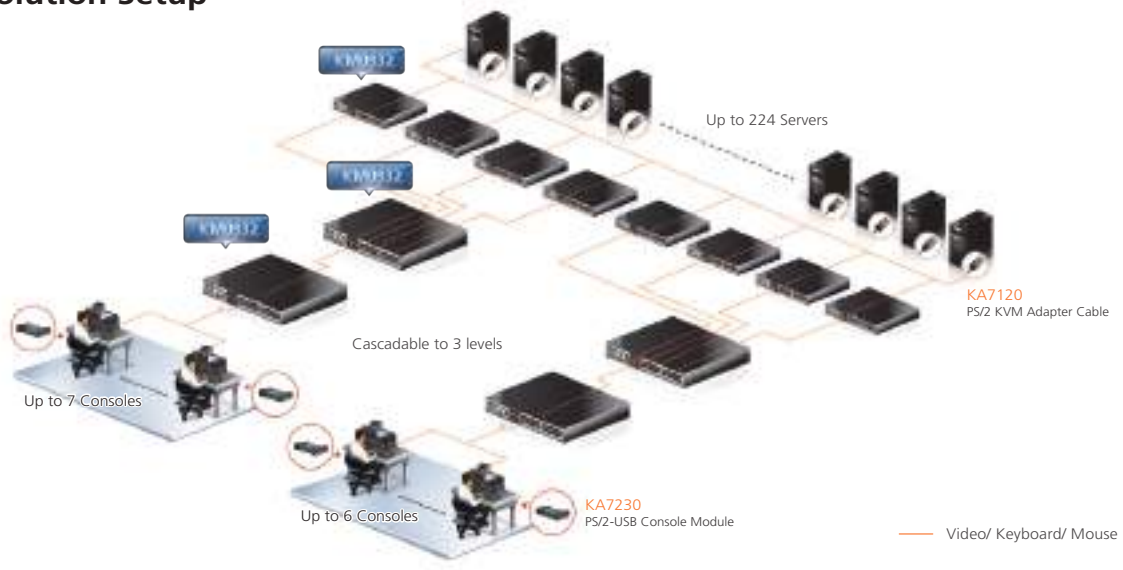
(See Page 30)

- 9 consoles independently and simultaneously control multiple servers
- Dual power supply provides backup redundancy, ensuring downtime is kept to a minimum
- Power Association enables the switch's KVM ports to be associated with PDUs power outlets for remote power management of the servers
- Virtual Media function allows USB storage devices to be shared among all the servers
- Extend the distance between console and servers up to 300m

Benefits

- **Flexible expansion** – the KM0932 can be daisy chained, cascaded, or both, providing flexible expansion configurations that allow up to 9 consoles to control thousands of servers
- **High reliability** – Dual power supply, power association, and virtual media deliver more reliable server administration
- **Reduces server room chaos & Extends management range** – Cat 5 cable connection eliminates cable clutter, providing a neat and tidy work environment. It also allows administrators to access any server from their consoles up to 300m away
- **User-friendly interface** – the KM0932 offers an intuitive, full screen GUI for both Console and Browser-based sessions. The composite integrated tree view of all ports offers convenient navigation and access
- **Multiplatform integration** – use of KVM Adapter Cables to connect to the servers allows any combination of Windows, Mac, Sun, Linux and serial devices to easily coexist on the installation

Solution Setup



National Defense Department

A government plans to upgrade and expand their data center infrastructure for the national defense department. The new KVM solution must integrate with the existing setup; and is going to be installed in a control room separate from the data center in order to reduce physical access to the data center.



ATEN Solution

KM0932 x 4
9-Console 32-Port Matrix KVM Switch



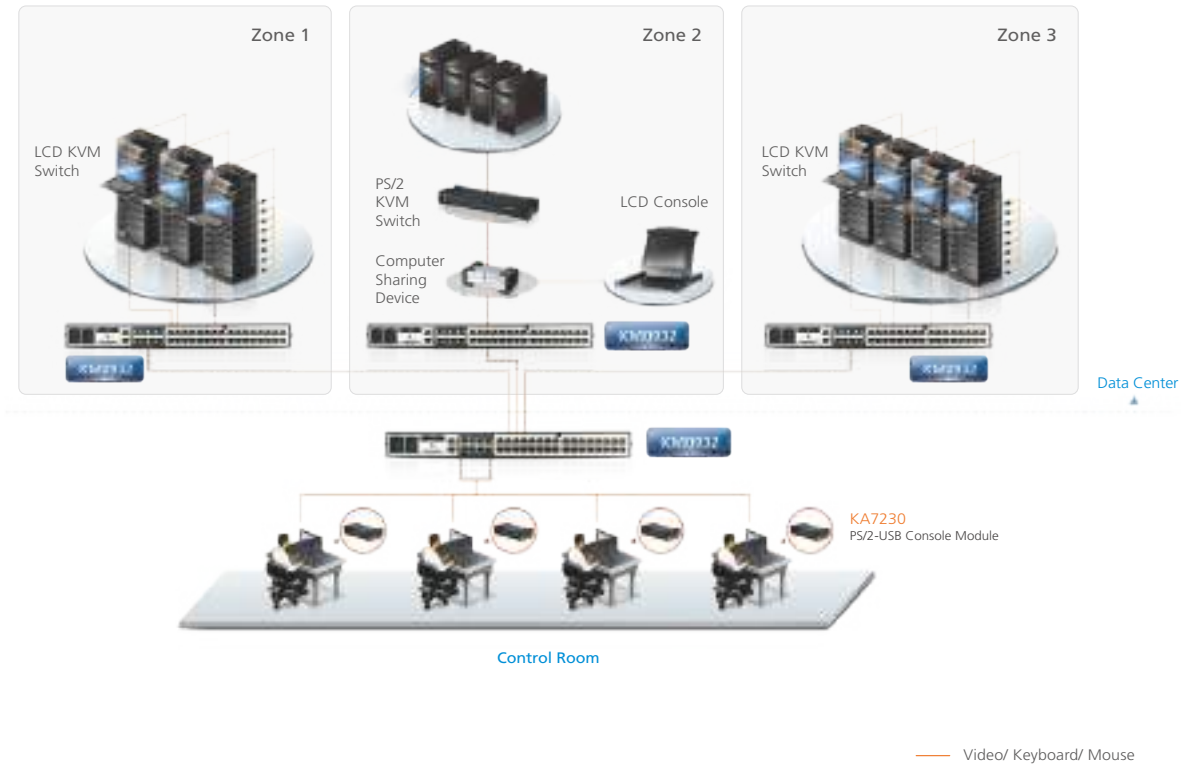
(See Page 30)

- Additional switches can be daisy chained, cascaded, or both in tandem; allows up to 9 consoles to control thousands of servers.
- Cat 5e/6 cable connection extends the distance between console and servers up to 300m

Benefits

- **Flexible expansion** – 4 KM0932 units added to a cascaded combination to provide efficient and secure access to the existing KVM installation and all servers in the data center
- **Multiplatform integration** – use of KVM Adapter Cables to connect to the servers allows any combination of Windows, Mac, Sun, Linux and serial devices to easily coexist on the installation
- **Long distance transmission** – Cat 5e/6 cable connections extend the server management distance; administrators can access data center servers from a distance in the control room

Solution Setup



Police Headquarters

Given the increasing need of police officers to share information across departments, more and more police districts like the T Police Headquarters are setting up larger, more complex information systems centers deployed by their own IT professionals. To house new advanced application and database servers, the T Police Headquarters' IT division planned to build a new centralized data center and needed to look for an efficient solution that enables multiple operators to manage up to 300 servers at the same time.



ATEN Solution

KN4132
32port
KVM Over the NET™



(See Page 26)

KM0532
5-Console 32-Port
Matrix KVM Switch



(See Page 30)

CC2000
Control Center
Over the NET™



(See Page 25)

CL5800
Dual Rail PS/2-USB
LCD Console

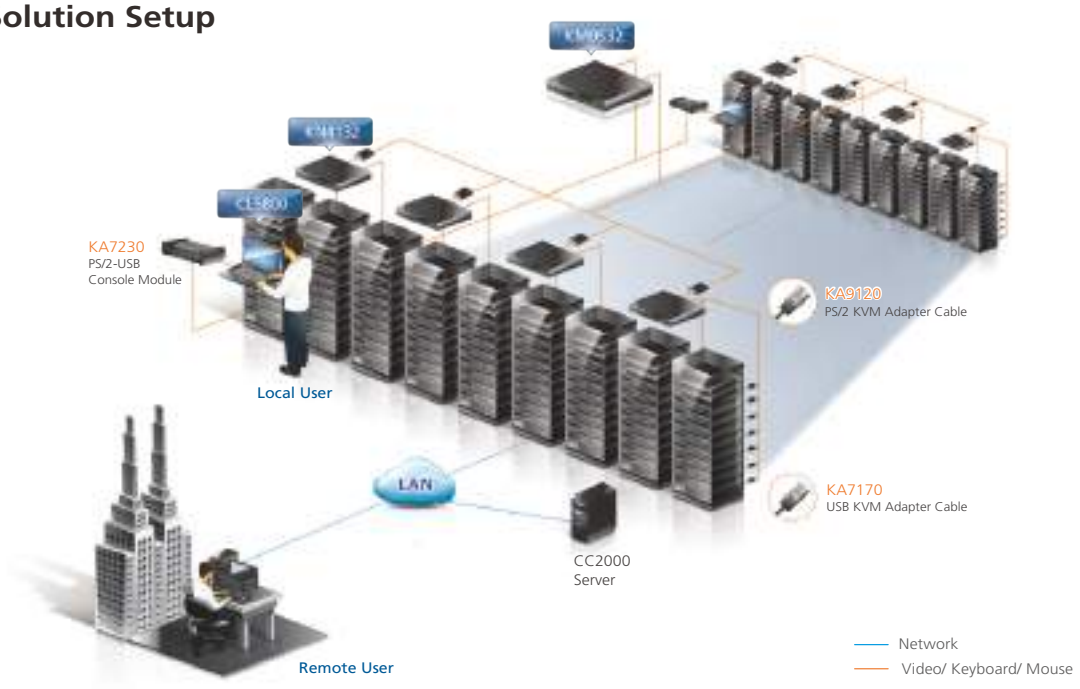


(See Page 35)

Benefits

- **Boosts management efficiency** – IT administrators are able to control up to 512 servers through a single portal - the CC2000 for remote logon; the KM0532's GUI locally
- **High quality video** – KM0532 cascading to KN4132 provides local users a better user experience of responsiveness eliminating data compression for network transmissions, superior video quality with higher color depth, and without double-mouse-cursor annoyances
- **Flexible expansion** – IT administrators can easily add additional CL5800 units into the installation; or add more KN4132 units via KVM adapter cables to existing setups to increase efficiency
- **Centralized server monitoring** – Panel Array Mode™ allows administrators to display the video output of up to 32 servers on their monitors at the same time
- **Efficient collaboration** – KN4132 allows an operator to exclusively control a system or share access with other operators to successfully complete tasks

Solution Setup



Government Institution

As the Internet has expanded, so have security requirements for government institutions' computer hardware and software. Information protection and security control need to be considered in order to avoid endangering national security andpersonal interests caused by the leakage of confidential information. Therefore, government institutions are required to separate the Internet-linked computers from computers at workstations that may contain sensitive data. However in order not to affect the implementation of work, the staffs need to be able to instantly access a target computer through a switching device.



ATEN Solution

CS682
2-Port USB 2.0 DVI KVM Switch



(See Page 36)

- One DVI video console controls two USB computers
- Computer selection via remote port selector, hotkeys, and USB mouse
- USB 2.0 mouse port can be used for USB hub and USB peripheral sharing
- Video DynaSync™ exclusive ATEN technology eliminates boot-up display problems and optimizes resolution when switching between ports
- Audio support

Benefits

- **High security** – allows seamless switching between two computers to ensure data security
- **User friendly** – easy port switching via either remote port selector, hotkeys, and mouse
- **Flexible control** – independent switching of KVM and audio allows government staff to work on a computer at a workstation and play audio signal from another computer

Solution Setup



Semiconductor Manufacturing Company



A leading semiconductor manufacturing company builds next generation fabs to sustain competitive advantages. To help engineers efficiently perform production equipment management, the company is looking for a solution that meets the following requirements:

- **Over-IP KVM Management:**
  - Consolidate remote monitoring and remote control methods for various types of fab production equipment
  - Remote access over TCP/IP Ethernet network from either an office area outside of the clean room or a working area within the fab clean room
  - Panel Array Mode function
- **Console Privilege Control:** When field engineers are performing necessary maintenance and repairs in front of the equipment, they need to take exclusive control of the equipment to avoid redundant remote operation

ATEN Solution

KN2116A/KN4116
16-Port KVM Over the NET™
1 local and 2/4 remote user access



(See Page 26)

CS231
Console Privilege Control Device

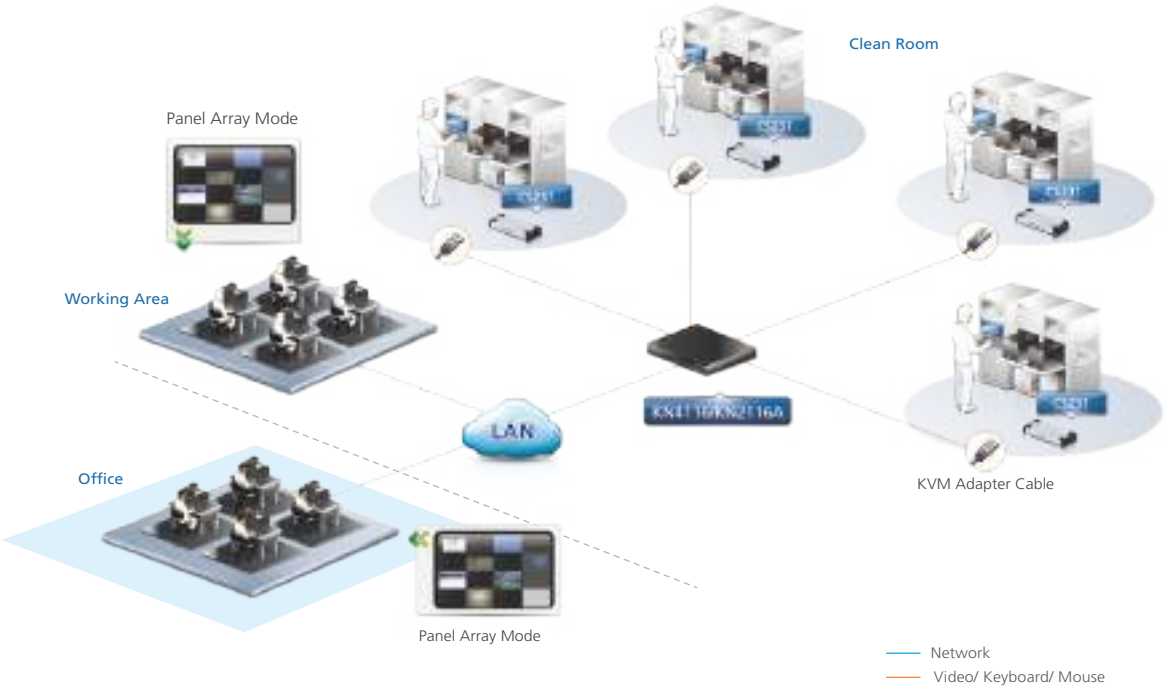


(See Page 38)

Benefits

- **Reduces costs** – reduces the number of engineers working on fab production lines to save labor costs; use the Cat 5e/6 cabling to save installation costs
- **Boosts efficiency** – Panel Array Mode™ allows remote monitoring of multiple equipment simultaneously; engineers can remotely control equipment to boost efficiency
- **Increases safety** – Console Privilege Control Device allows the local operation to take exclusive control over a remote operation; avoids redundant operations and increases safety

Solution Setup



LCD Panel Company

L Company is one of the leading LCD panel companies, which has several plants across the world including manufacturing plants and module assembly plants. The production equipment is extremely expensive and requires 3-shift engineers for full time operation. Two engineers are involved in handling the control system for individual equipment: one in Fab clean room doing field operation and the other one in the control room doing remote monitoring. L Company is seeking for an Over-IP KVM solution to meet the following needs:

- Use Cat 5e/6 cabling and TCP/IP network
- Supervisors can access the network remotely
- Privilege control of remote and local operations
- Minimize space requirements and maximize personnel efficiency



ATEN Solution

CN8000 x 2000+
KVM on the NET™



(See Page 29)

Priority Control Device



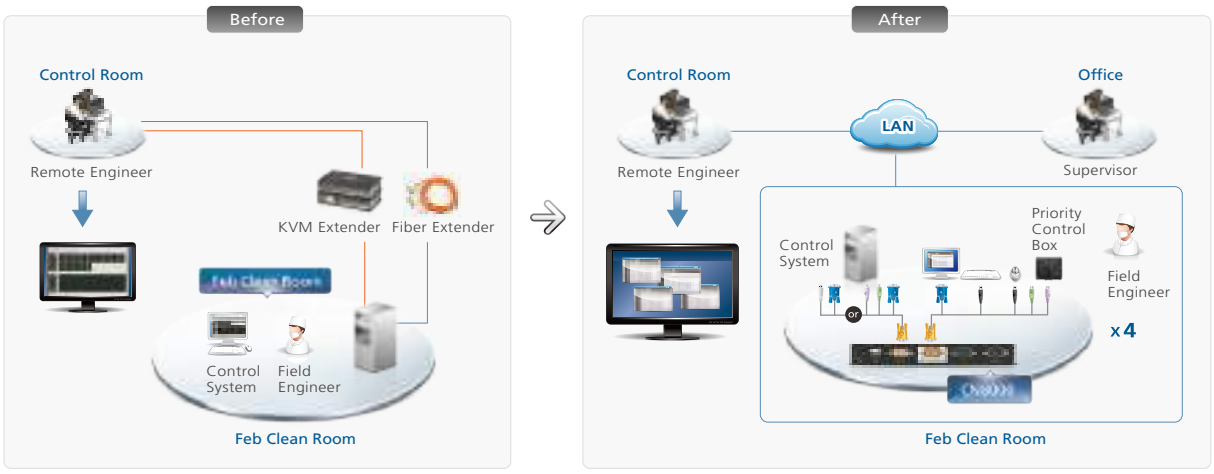
- Assign the control priority between Fab cleaning room and control room

Interface: PS/2
Cable length: 3m

Benefits

- **Reduces costs** – reduces the number of engineers in the control room to save labor cost and lower the installation cost by using Cat5e/6 cables for connection
- **Enhances manageability** – supervisors can remotely access the network to enhance manageability
- **Operational accuracy** – provide customized firmware for the CN8000 to work with Priority Control Box to prevent misoperation
- **Ease of Installation** – use the plant TCP/IP Ethernet network to ease installation
- **Increases productivity** – one remote engineer can open four browsers to monitor four control systems in one display by using the web-based GUI

Solution Setup



ODM Manufacturer

Company W is a leading ODM manufacturer that designs and releases multiple product lines – PCs, NBs and Servers for several well-known brands. With the increasing number of servers housed in its server room, along with the operators needed to work on them, Company W plans to build a new data center and adopt an efficient solution that meets the following requirements:

- Allow multiple operators to manage up to 480 servers concurrently
- Provide secure access and high quality data throughput between the consoles and the servers over extended distances
- IT administrators working from different locations need to control or monitor the servers located in the data center, all at the same time



ATEN Solution

KN4116 x 48
16-Port KVM Over the NET™
1 local and 4 remote user access



(See Page 26)

KM0532 / KM0032 x 1
5-Console 32-Port Matrix KVM Switch
32-Port Matrix Expansion KVM Switch



(See Page 30)

CC2000
Control Center Over the NET™

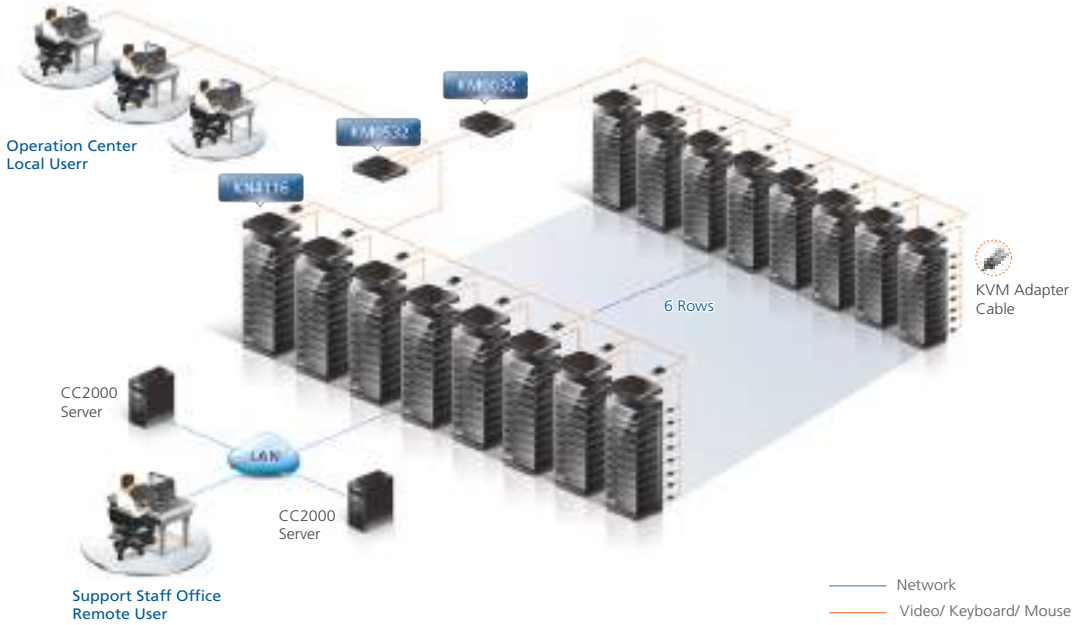


(See Page 25)

Benefits

- **Increases management efficiency** – allows fewer administrators to manage hundreds of servers from multiple locations, and provides secure and solid management through a single interface
- **Extends distance without sacrificing quality** – extends the distance between the servers and the consoles, which are located in a control room up to 300 meters away without sacrificing video quality
- **Customized solution that meets local/remote access requirements** – Digital KVM switches can be cascaded from Analog KVM switches for an integrated solution that allows both local and remote operators to easily access all servers
- **Flexible Scalability** – flexible expansion allows adding additional consoles and servers to match future data center's growth

Solution Setup



Mass Rapid Transit Corp.

Mass Rapid Transit (MRT) Corporation needs to build a data center at Main Station for centralized management of servers performing complex administrative tasks for the whole system, and set up a server room at each MRT station to consolidate servers performing necessary tasks. To enable IT support engineers to efficiently manage a total of 562 servers widely distributed at different locations, a stable, secure and efficient management and control solution is required.



ATEN Solution

KN2132
32-Port KVM on the NET™
1 local and 2 remote user access



(See Page 26)

CL1000
LCD Console



(See Page 35)

CC2000
Control Center Over the NET™

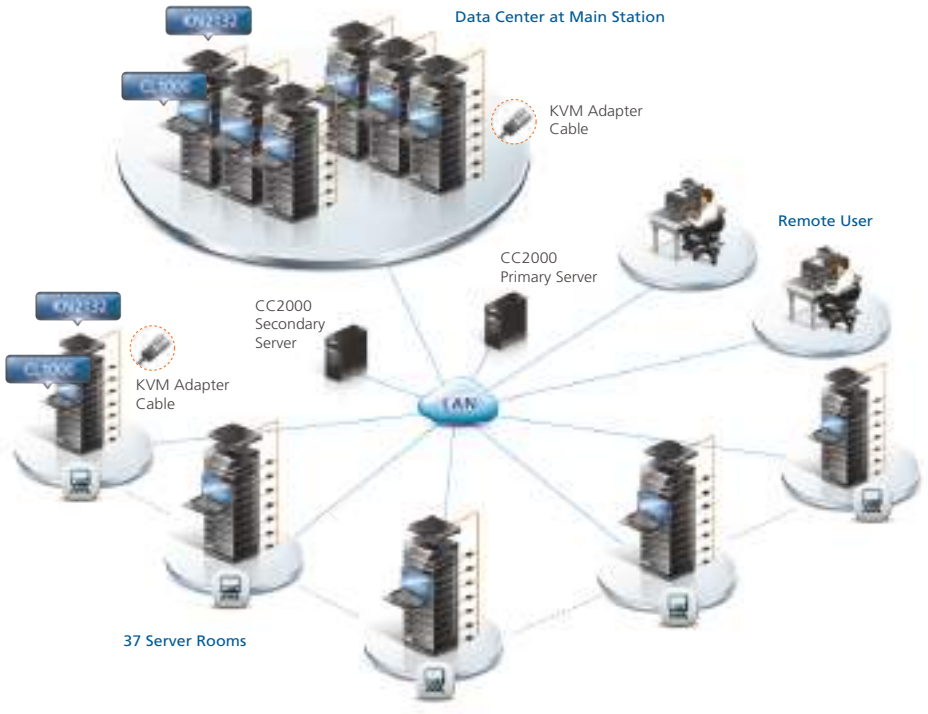


(See Page 25)

Benefits

- **Reduces manpower** – remote control and centralized management of all server rooms allows fewer administrators to manage more servers and eliminates the need to be on site
- **Boosts efficiency** – centralized, single portal access and control of servers deployed at multiple locations.
- **Minimizes downtime** – SNMP Trap notification enables a faster response to mission-critical server room emergencies
- **Flexible control** – space-saving LCD consoles were set up in each server room offering flexible on-site use.
- **Increases availability** – redundant LAN and Out-of-Band support increases device availability.

Solution Setup



Dredging and Development Company

One of the world's largest dredging and development companies owns a fleet of more than 80 ships providing international construction and maintenance services to maritime infrastructure. To expand the number of servers on a ship to comply with new job requirements, they are looking for a solution that enables multiple users' secure and real-time remote control of servers from the bridge, to eliminate time and distance restrictions.



ATEN Solution

KM0932
9-Console 32-Port Matrix KVM Switch



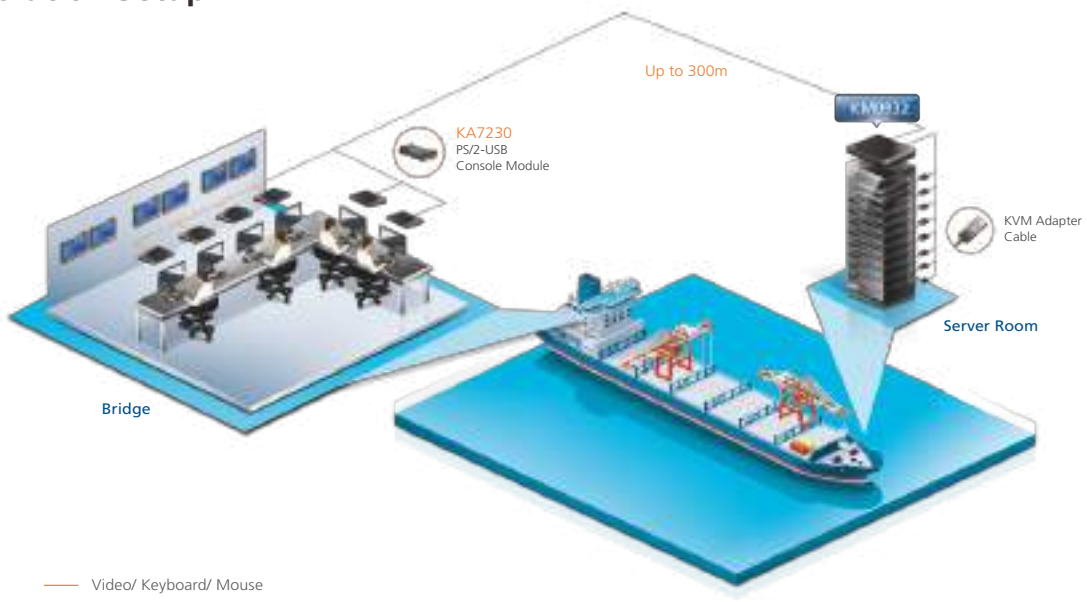
(See Page 30)

- The distance between console and servers can be extended up to 300m
- Superior video quality - 1280 x 1024 @ 60Hz for up to 300m
- Versatile port operation modes for flexible server management – Scan/ Exclusive/ Occupy/ Share
- Multiplatform support – mixed combinations supported on both the console and computer sides. User can have PS/2 and USB interfaces; PC, Mac, Sun, and Serial platforms

Benefits

- **Distance extension** – permits staff to control and access servers from a longer distance - a technician can maintain computers in the computer room without disturbing crew at the bridge
- **Secure access** – the switch can be operated completely independent of the ship's network - protecting the servers and allowing access with problems that may arise on the network infrastructure
- **Boosts management efficiency** – versatile port operation modes enable users to collaborate with each other for the most efficient management solutions possible
- **High-quality, real-time video sessions** – Auto Signal Compensation (ASC) and automatic skew compensation functions assure optimum video output over long distance transmissions - benefits staff that spend long hours working on servers while performing critical operations
- **Flexible scalability** – with Daisy Chain, Cascade and Dual Root configuration support, the solution allows the company to expand the number of servers on the installation quickly and easily as the network grows
- **Integrated control of different system** – modular design allows for a high degree of platform and interface; easily supporting a variety of systems and servers needed on any ship

Solution Setup



Mining Company

A leading European mining company is looking for a solution to consolidate remote monitoring and remote control methods for various types of analytical server. All servers need to be controlled via two operators and monitored on a 14 screen video wall in the control room with access over IP when requested by their HQ in Stockholm, Sweden.



ATEN Solution

KH2516A
2-console 16-port Cat 5 High-Density KVM Switch



(See Page 31)

CN8000
KVM on the NET™



(See Page 29)

CE100
KVM Extender



(See Page 37)

VS82
2-Port Video Splitter



(See Page 39)

VE022
Mini Cat 5 A/V Extender

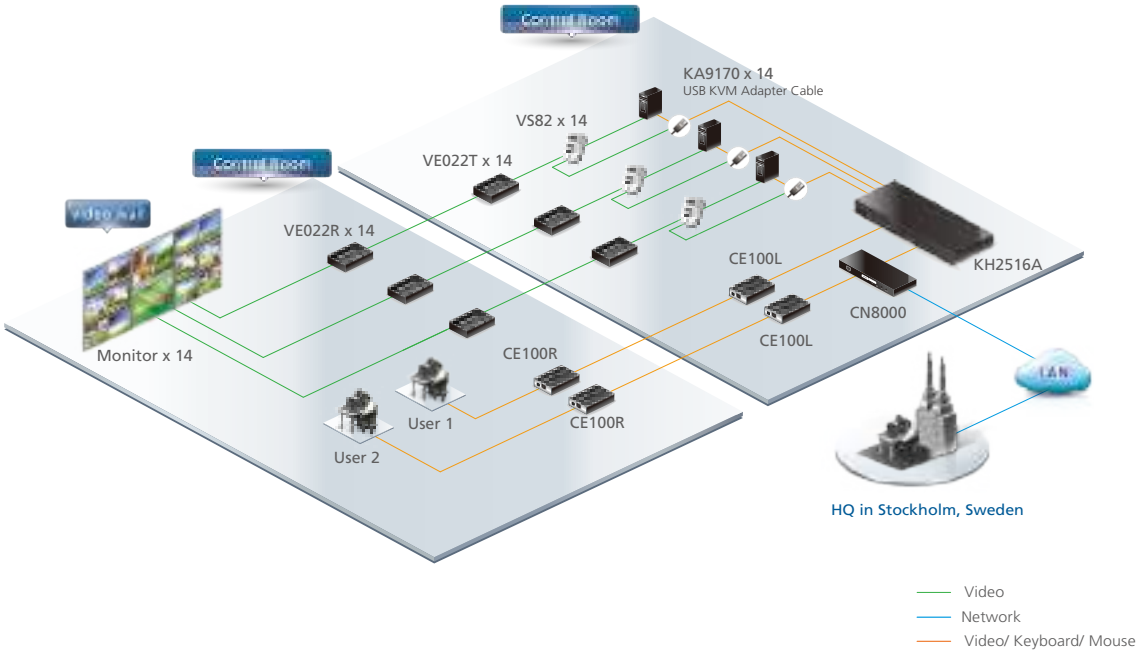


(See Page 39)

Benefits

- **Highly compatible** – compatible with all standard VGA displays available on the market
- **Multiple display support** – leaves possibility to add video matrix switch for additional video wall control
- **Saves space** – compact extenders are small in size, robust and flexible for any installation; allow operators to use a thin-client setup saving desk space and unnecessary hardware
- **Increases management efficiency** – the device installation, operation and testing process are simple; monitoring is convenient and devices can be easily accessed

Solution Setup



Thermal Power Corporation

A national thermal power corporation has a total of 90 workstations in a room. These workstations are used by 30 simultaneous users for coding and programming. They need a KVM switch to ensure the connection between Dell workstation, USB keyboard & Mouse, and monitor is working smoothly in order to conserve space.



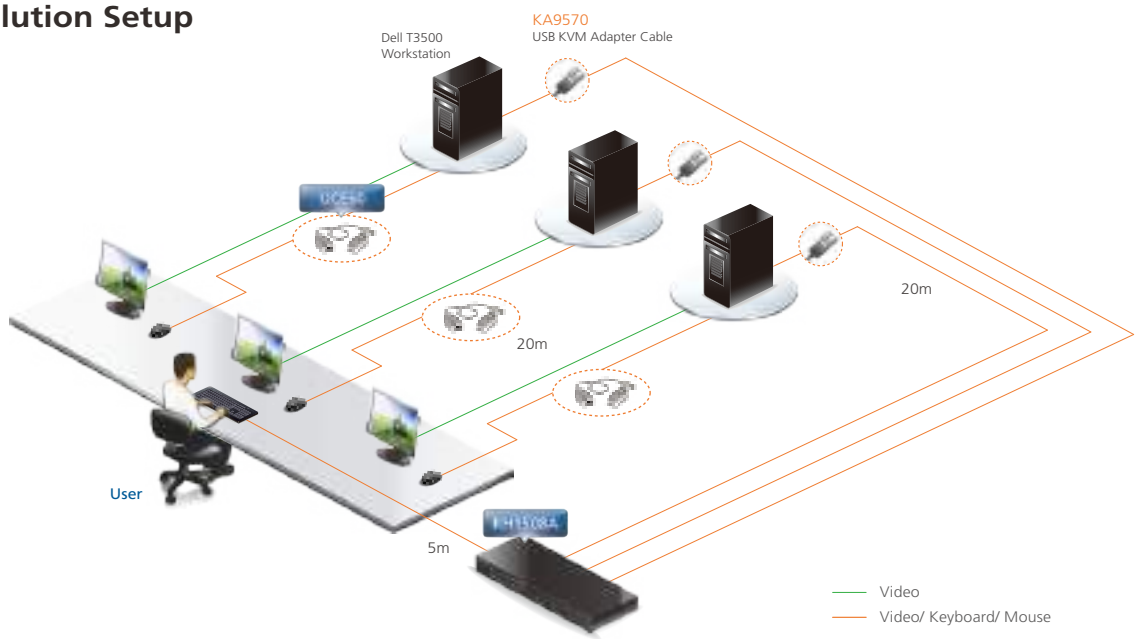
ATEN Solution

KH1508A 8-port Cat 5 High-Density KVM Switch  (See Page 31)	· One KVM console control up to 8 directly connected computers · Space-saving RJ-45 connectors and Cat 5e/6 cabling · Three port selection methods: Manual (via front panel pushbuttons), Hotkey, and multi-language OSD (On Screen Display)
UCE60 USB Extender 	· Embedded USB Transceivers prevent signal loss · Lowest cost solution for extending USB signals · No additional software installation required

Benefits

- **Saves space** – with KH1508A, operator can save space by using one keyboard to control three workstations.
- **Effortless installation** – the KH1508A intercepts Dell keyboard input directly, no complex software installation routines, and no concern about incompatibility problems
- **Flexible deployment** – Cat 5e/6 cable connection allows the operator to be located away from workstations to have a cozy working environment; with UCE60 USB Extenders, the transmission distance of three USB mice can be extended up to 20m
- **Increases management efficiency** – port selection by pressing port selection pushbuttons directly on the switch, or from a KVM console with hotkey entered from the keyboard; or by using the OSD system on monitor to allow instant access to any server on the installation

Solution Setup



Blood Centers

Blood Centers need to provide centralized and consistent control over servers installed for blood transfusion networks, to operate and manage the immense database a blood bank center collects. Therefore, they need a solution that can provide swift and reliable remote access to servers through a combination of redundant KVM, RS-232, and Ethernet. In addition, they so readily depend on the database, they need quick remote restoration of the operating systems in case of a system failure.



ATEN Solution

CN8000
KVM on the NET™



(See Page 29)

CS1708A
8-Port PS/2-USB KVM Switch



(See Page 33)

PN9108
8-Port Power Over the NET™



(See Page 28)

SN0108
8-Port Serial Over the NET™



(See Page 29)

Benefits

- **Remote access, total control** – offers remote access from the BIOS to the Operating System, with full remote power management capabilities for total control of servers from a single location
- **Central power management** – 8-outlet PDU distributes power and control between a UPS and IT equipment in the network center. It allows remote rebooting, BIOS access, and the ability to power-on devices which are turned off
- **High efficiency** – an alternative modem connection method is also provided by SN0108 in case the Ethernet connection stops functioning
- **High flexibility** – flexible expansion allows IT administrators to easily add switches and IT devices for future growth

Solution Setup



Telecom Company

Responding to the need to increase a great number of servers, a Telecommunications Company decided to build a new data center. In order to enable a small number of administrators to manage the huge number of servers at different locations, they need a solution to gain remote, centralize, KVM and power management access and control of all the widely distributed IT equipment.



ATEN Solution

KN2116A
16-Port
KVM Over the NET™



(See Page 26)

PN0108/PN9108
8-Port
Power Over the NET™



(See Page 28)

CL1000
LCD Console



(See Page 35)

CC2000
Control Center Over the NET™

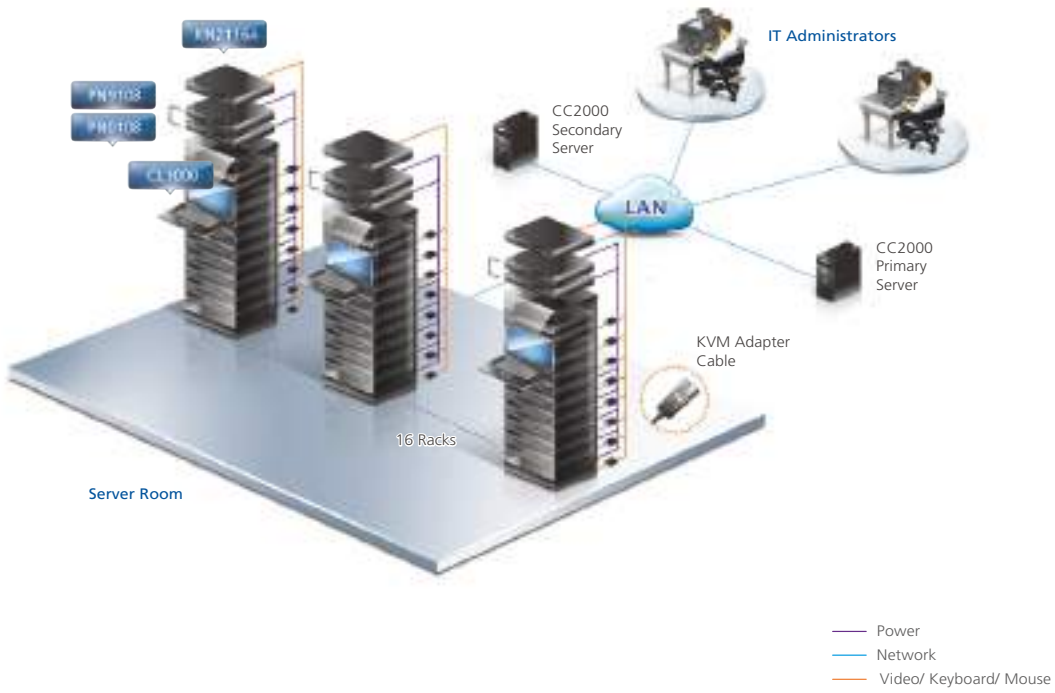


(See Page 25)

Benefits

- **Total control** – offers remote BIOS-level access and power management capabilities for total control of all IT equipment
- **Integrated KVM and Power Management** – administrators can have a single interface for both KVM and power management by associating a port on the switch with a power outlet on a connected PDU.
- **Cost savings** – daisy chain PN0108 units from the original PN9108 when adding power ports
- **Centralized server monitoring** – Panel Array Mode™ allows administrators to display the video output of up to 16 servers on their monitors at the same time
- **Space efficiency** – rack mountable LCD console saves precious server room space

Solution Setup



Control Center Over the NET™

CC2000

Control Center Over the NET™
Management Software



- 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
- Primary/Secondary topology provides redundancy – including real-time database updating
- Email notification of specified system events
- Logging and auditing of system events of CC2000 and managed devices
- Data export/import to remote server or local in real time or on schedule. AES/DES encryption support for data export
- Automatic scheduling of system, configuration, and maintenance tasks
- Session logs provide serial device keystroke history
- ATEN/ALTUSEN device auto-discovery with device-availability status, and alarms
- Blade server support
- APC PDU (AP79xx, AP89xx, AP86xx) support
- Integrates all access right – Web, SSH/Telnet, VNC/RDP, IPMI/SPM,
- KVM, serial, power to target device
- VMware Virtual Infrastructure includes Center Servers, ESX Servers,
- Virtual Machines and Citrix XenServer
- Panel DynaArray™ – view the output of multiple ports in individual panels on the same screen
- IPv6 support
- IP/MAC Filter for enhanced security protection

Industry Applications		Page Number
Banking	Axis Bank	01
	ABBANK	02
Media	YangZhou Broadcasting TV Network	05
	Japan Digital Serve Corp.	06
Government	Poice Headquarters	14
Manufacturing	ODM Manufacturer	18
Transportation	Mass Rapid Transit Corp.	19
Telecommunication	Telecom Company	24

KVM Over the NET™

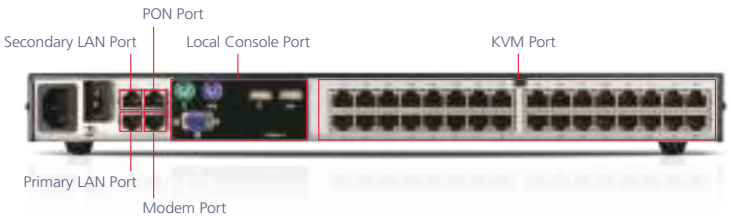
KN2132 / KN4132

32-Port KVM Over the NET™
1 local and 2 / 4 remote user access



- Two or four separate buses for remote KVM over IP access
- Panel Array Mode available to both local console operators and remote access users
- Message Board for communication among remote users
- Customizable event notification
- Adapter ID Function
- IP/Mac Filter for enhanced security protection
- Out-of-Band Access-Modem dial-in/dial out/dial back support
- Video syncing with the local console
- Configurable user and group permissions for server access and control
- Blade server support

Rear View



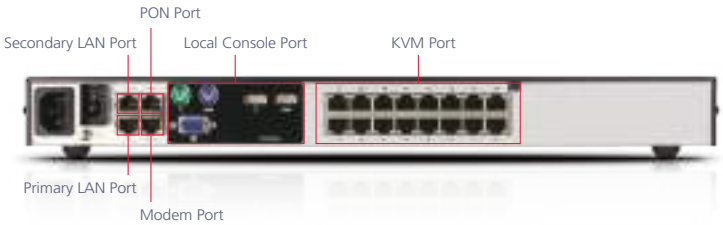
KN2116A / KN4116

16-port KVM Over the NET™
1 local and 2 / 4 remote user access



- Two or four separate buses for remote KVM over IP access
- Panel Array Mode available to both local console operators and remote access users
- Message Board for communication among remote users
- Customizable event notification
- Adapter ID Function
- IP/Mac Filter for enhanced security protection
- Out-of-Band Access-Modem dial-in/dial out/dial back support
- Video syncing with the local console
- Configurable user and group permissions for server access and control
- Blade server support

Rear View



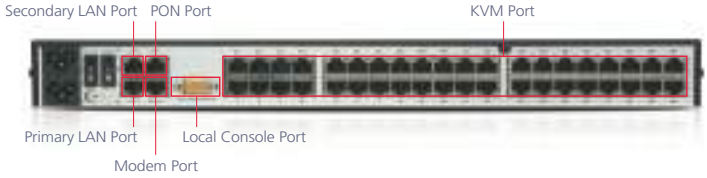
KN2140v / KN4140v

40-Port KVM Over the NET™
1 local and 2 / 4 remote user access



- Two or four separate buses for remote KVM over IP access
- Virtual Media support
- Panel Array Mode available to both local console operators and remote access users
- Message Board for communication among remote users
- Customizable event notification
- Adapter ID Function
- IP/Mac Filter for enhanced security protection
- Out-of-Band Access-Modem dial-in/dial out/dial back support
- Video syncing with the local console
- Configurable user and group permissions for server access and control
- Blade server support
- Audio enable
- Dual Power Supply

Front View



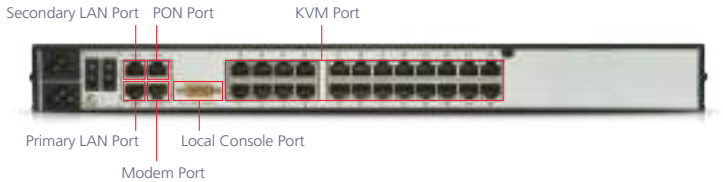
KN2124v / KN4124v

24-port KVM Over the NET™
1 local and 2 / 4 remote user access



- Two or four separate buses for remote KVM over IP access
- Virtual Media support
- Panel Array Mode available to both local console operators and remote access users
- Message Board for communication among remote users
- Customizable event notification
- Adapter ID Function
- IP/Mac Filter for enhanced security protection
- Out-of-Band Access-Modem dial-in/dial out/dial back support
- Video syncing with the local console
- Configurable user and group permissions for server access and control
- Blade server support
- Audio enable
- Dual Power Supply

Front View



Industry Applications		Page Number
Banking	Axis Bank	01
	ABBANK	02
	Commerical Bank	03
Media	YangZhou Broadcasting TV Network	05
	Japan Digital Serve Corp.	06
	Yuzu TV	07
	Media Center	08

Industry Applications		Page Number
Government	City Government	11
	Poice Headquarters	14
Manufacturing	Semiconductor Manufacturing Company	16
	ODM Manufacturer	18
Transportation	Mass Rapid Transit Corp.	19
Telecommunication	Telecom Company	24

Power Over the NET™

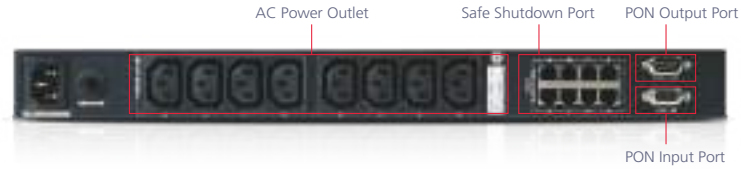
PN0108

8-Port Power Over the NET™



- Daisy chain up to 15 additional stations to control up to 128 outlets
- Remote power on / off / reboot control for eight outlets via TCP/IP
- Individual control of each port
- Overcurrent protection and recovery for each AC port (110V model only) plus total port overcurrent protection
- On/Off scheduling
- Separate circuits for the unit's power and the power to the devices
- Safe shutdown and rebooting for Windows systems if the Power Monitor utility has been installed

Rear View



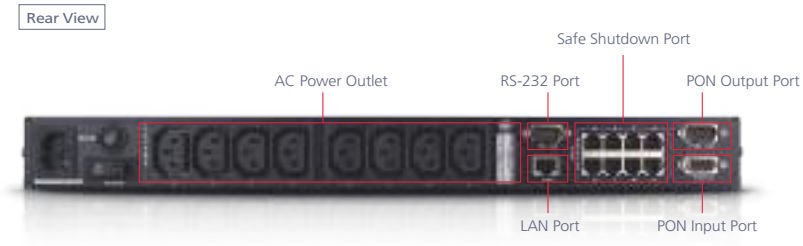
PN9108

8-Port Power Over the NET™



- Daisy chain up to 15 additional stations to control up to 128 outlets
- Remote power on / off / reboot control for eight outlets via TCP/IP and a built in 10/100 Ethernet port
- Individual control of each port
- Overcurrent protection and recovery for each AC port (110V model only) plus total port overcurrent protection
- On/Off scheduling
- Separate circuits for the unit's power and the power to the devices
- Cumulative load measurement
- Detachable front panel for convenient rack mounting

Rear View



Industry Applications		Page Number
Media	Yuzu TV	07
Healthcare	Blood Centers	23
Telecommunication	Telecom Company	24

Serial Over the NET™

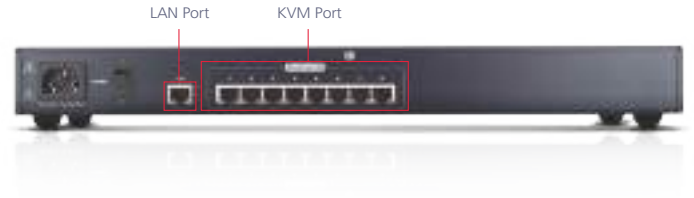
SN0108/SN0116

8/16-Port
Serial Over the NET™



- Remote serial access over the Internet for up to 8 or 16 servers or other serial IT devices
- Port-specific access rights
- Session history
- Telnet client-SSH, Telnet and third party (PuTTY, etc.) client support
- Direct port addressing
- Hardware break suppression ensures uninterrupted Solaris server operation
- Hot-pluggable – gadd and remove servers without rebooting

Front View



Industry Applications		Page Number
Banking	Axis Bank	01
	ABBANK	02
Healthcare	Blood Centers	23

KVM on the NET™

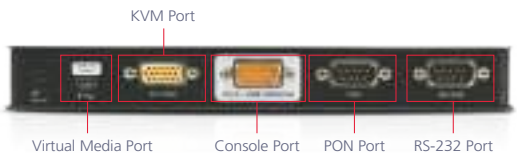
CN8000

KVM on the NET™



- Provides over-IP capability to KVM switches that do not have built in over-IP functionality
- Up to 64 user accounts - up to 32 concurrent user logins for single-bus sharing
- Critical system events sent by email and SNMP trap; and Syslog Support
- PPP mode (modem) dial-in/dial back/dial out support for out-of-band, and low bandwidth operation
- Virtual media via USB 2.0 data transmission
- PON support via Java; Smart Card /CAC Reader Support
- Message board allows logged in users to communicate with each other, and allows a user to take exclusive control of the KVM functions
- Serial console management–Access server via built-in serial viewer or third party software (such as PUTTY)for Telnet and SSH sessions
- External authentication support: RADIUS; LDAP; LDAPS; MS Active Directory
- Exit macros support; Mouse DynaSync™

Front View



Industry Applications		Page Number
Manufacturing	LCD Panel Company	17
Utility & Resource	Mining Company	21
Healthcare	Blood Centers	23

Matrix KVM Switches

KM0932

9-Console 32-Port Matrix KVM Switch



- 9 consoles independently and simultaneously control up to 32 directly connected servers
- Redundant power supply for 24 x 7 reliability
- Composite tree view – all connected devices are integrated in a single device tree for convenient management access and control
- Supports up to 1024 user and 255 group accounts
- Superior video quality – 1280 x 1024 @ 60 Hz for up to 300 m
- Broadcast support enables executing the same command on multiple servers, at the same time
- Flexible expansion – the installation can grow as your needs grow:
  - Up to 7 Matrix Expansion KVM switches can be daisy chained from a master switch
  - Switches can be cascaded to three levels
  - Supports cascading other switches
- Adapter ID
- Port level access control – users can only access the ports they have been authorized for

Rear View



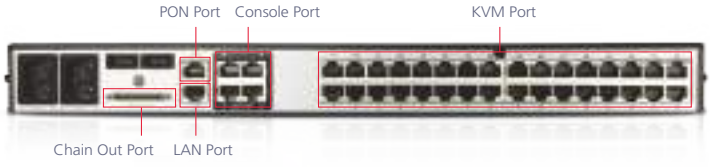
KM0532

5-Console 32-Port Matrix KVM Switch



- 5 consoles independently and simultaneously control up to 32 directly connected servers
- Redundant power supply for 24 x 7 reliability
- Composite tree view – all connected devices are integrated in a single device tree for convenient management access and control
- Supports up to 1024 user and 255 group accounts
- Superior video quality – 1280 x 1024 @ 60 Hz for up to 300 m
- Broadcast support enables executing the same command on multiple servers, at the same time
- Flexible expansion - the installation can grow as your needs grow:
  - Up to 7 Matrix Expansion KVM switches can be daisy chained from a master switch
  - Switches can be cascaded to three levels
  - Supports cascading other switches
- Adapter ID
- Port level access control- users can only access the ports they have been authorized for

Rear View



Industry Applications		Page Number
Media	MY CARTOON KIDS TV	04
Government	Land Administration Department	12
Government	National Defense Department	13
Government	Police Headquarters	14
Manufacturing	ODM Manufacturer	18
Transportation	Dredging and Development Company	20

High-Density KVM Switches

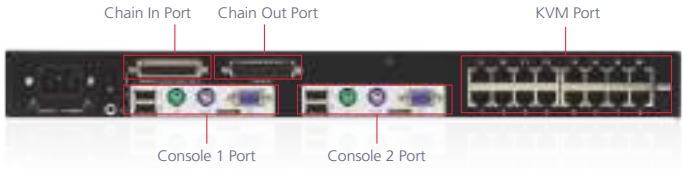
KH2516A

2-console 16-port Cat 5 High-Density KVM Switch



- Two KVM consoles control up to 16 directly connected computers
- Space-Saving RJ-45 connectors and Cat 5e/6 cabling
- Adapter ID
- Multiplatform support – PC, Mac, Sun, and serial
- Broadcast Mode sends commands from the console to all computers
- Two-Level Password Security
- Configure port access rights for users on a port-by-port basis
- Auto Scan mode enables continuous monitoring of user-selected computers

Front View



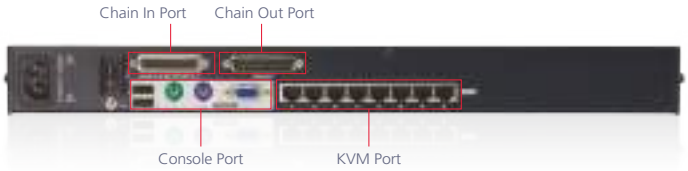
KH1508A

8-port Cat 5 High-Density KVM Switch



- One KVM console control up to 8 directly connected computers
- Space-Saving RJ-45 connectors and Cat 5e/6 cabling
- Adapter ID
- Multiplatform support – PC, Mac, Sun, and serial
- Broadcast Mode sends commands from the console to all computers
- Two-Level Password Security
- Configure port access rights for users on a port-by-port basis
- Auto Scan mode enables continuous monitoring of user-selected computers

Front View



Industry Applications		Page Number
Utility & Resource	Mining Company	21
	Thermal Power Corp.	22

Rack KVM Switches

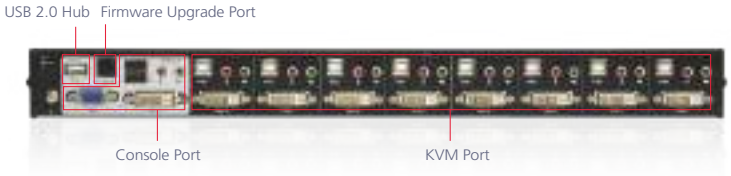
CS1768

8-Port USB DVI KVM Switch



- One USB console controls eight Single Link DVI or VGA computers and two additional USB 2.0 devices
- Cascadable to three levels – control up to 512 computers
- Supports both digital (DVI) and analog (VGA) video- mixed operation possible
- DVI digital and analog monitor support – fully compliant with the DVI specifications
- HDCP compatible
- 2-port USB 2.0 hub built in
- Fully compliant with the USB 2.0 specification
- Video DynaSync™ – exclusive ATEN technology eliminates boot-up display problems and optimizes resolution when switching between ports
- With speaker and microphone support

Rear View



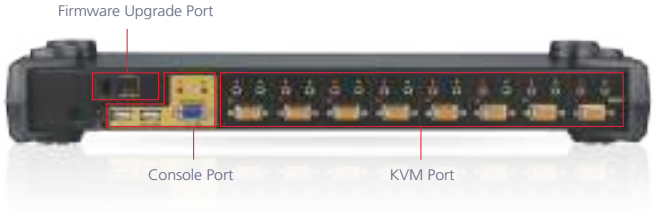
CS1758

8-Port PS/2-USB KVM Switch



- One USB console controls 8 computers
- Cascadable up to 3 levels – provides up to 512 computers
- Dual Interface – supports computers with PS/2 or USB keyboard and mouse
- Computer selection via front panel pushbuttons, hotkeys and OSD
- With speaker and microphone support
- USB or PS/2 keyboard and mouse emulation

Rear View



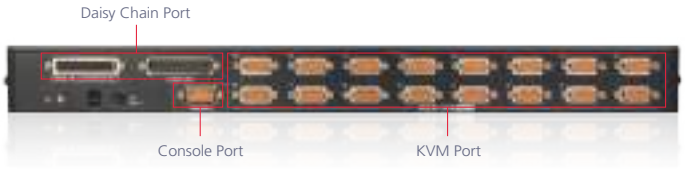
CS1708A / CS1716A

8/16-Port PS/2-USB
KVM Switch



- One USB-PS/2 console controls up to 8/16 computers
- Daisy-chain up to 31 additional units – control up to 256//512 computers from a single console
- Multiplatform support – Windows, Linux, Mac and Sun
- Video DynaSync™
- Auto-senses station's position on daisy-chained installations
- Port names automatically reconfigured when station sequence is changed
- Broadcast Mode

Front View



Industry Applications		Page Number
Banking	Commerical Bank	03
Media	YangZhou Broadcasting TV Network	05
	Post-Production House	09
Healthcare	Blood Centers	23

LCD KVM Switches

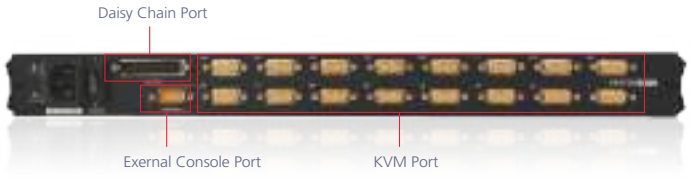
CL5716

16-Port LCD KVM Switch



- Keyboard and mouse emulation (PS/2 and USB) for smooth switching and simultaneous booting of multiple computers even when the console focus is elsewhere
- Multiplatform support – Windows, Linux, Mac, and Sun
- Broadcast support – commands from the keyboard can be broadcast to all available computers on the installation
- LCD module USB port allows each computer to access USB Peripherals
- Superior video quality – supports resolutions up to 1280 x 1024 @ 75 Hz

Rear View



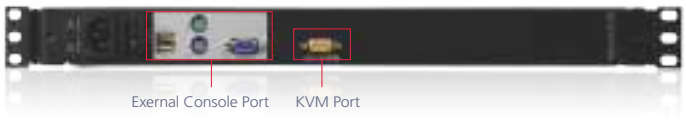
KL1100

Dual Rail LCD PS/2-USB Console



- Compatible with all ATEN KVM switches and most KVM switches in the market
- DDC emulation – video settings of each computer are automatically adjusted for optimal output to the monitor
- Multiplatform support: Windows 2000/XP/Vista, Linux, Unix, Novell, Sun, FreeBSD
- Dual Interface – Supports computers and KVM switches with PS/2 or USB connectors
- Extra console port – manage computers from an external console
- Superior video quality – supports resolutions of up to 1280 x 1024 @75Hz, DDC2B

Rear View



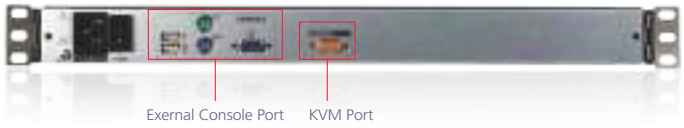
CL5800

Dual Rail PS/2-USB
LCD Console



- Integrated KVM console with a 19" LCD monitor in a dual rail housing with top and bottom clearance for smooth operation in a 1U high system rack
- Dual interface – Supports computers and KVM switches with PS/2 or USB keyboards and mice
- Additional hot-pluggable USB mouse port on front panel
- Dual rail design allows LCD monitor and keyboard/touch pad modules to operate independently
- Adjustable depth to fit within the rack
- Superior video quality – supports resolutions up to 1280 x 1024 @ 75 Hz, DDC, DDC2, DDC2B

Front View



CL1000

LCD Console



- Integrated KVM console with 17" LCD monitor
- Compatible with most PS/2 KVM Switches
- Internal power built in
- DDC emulation – VGA settings of every connected computer are automatically adjusted for optimal output to the LCD monitor
- Superior video quality – supports resolutions up to 1280 x 1024 @ 75 Hz, DDC, DDC2, DDC2B

Front View



Industry Applications		Page Number
Media	YangZhou Broadcasting TV Network	05
	Japan Digital Serve Corp.	06
	Yuzu TV	07
	Media Center	08
Government	Police Headquarters	14
Transportatoin	Mass Rapid Transit Corp	19
Telecommunication	Telecom Company	24

Desktop KVM Switch

CM0264

2x4 DVI-HD Audio/ Video Matrix KVMP™ Switch



- One Dual Display USB console independently and simultaneously controls two DVI computers, two HD computers or devices, and two additional USB devices
- Dual Display – simultaneously control one computer on one display and view another source on the other display
- Graphical User Interface (GUI) for convenient, user-friendly operation
- Cursor Shift Function
- Video DynaSync™
- Console keyboard port emulation/bypass feature supports most gaming/multimedia keyboards

Rear View



Industry Applications		Page Number
Media	Coaching Football	10

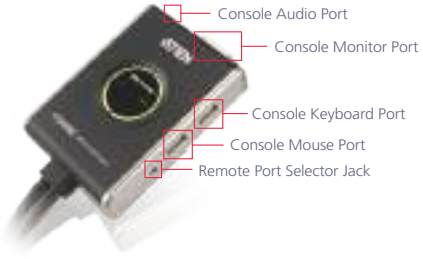
Cable KVM Switch

CS682

2-Port USB 2.0 DVI KVM Switch



- Computer selection via remote port selector, hotkeys, and USB mouse
- USB 2.0 mouse port can be used for USB hub and USB peripheral sharing
- Independent switching of the KVM and Audio focus
- Video DynaSync™
- Firmware upgradable
- Compact design, built-in all-in-on cables



Industry Applications		Page Number
Government	Government Institution	15

KVM Extenders

CE600

DVI KVM Extender



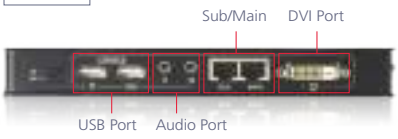
- Local and Remote Units connect at distances up to 60m using Cat 5e cable
- Allows access to a computer or KVM installation from a remote console (up to 60m)
- RS-232 serial ports – connect to a serial terminal, or serial devices such as touchscreens and barcode scanners (Baud Rate 115200 bps)
- Built-in 8KV/15KV ESD protection (Contact voltage 8KV; Air voltage 15KV)
- Superior video quality of up to 1920 x 1200 @ 60Hz at 30m; 1024 x 768 @ 60Hz at 60m – get an excellent, crisp image on your screen over long distance transmissions

▾ CE600R Remote Unit

Front View

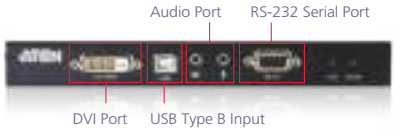


Rear View



▾ CE600L Remote Unit

Front View



Rear View



CE100

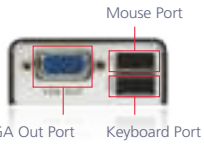
Mini USB KVM Extender



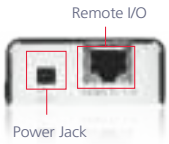
- Uses Cat 5e cable to connect the local and remote units, extend distance up to 100m
- Supports real time DDC communication
- Supports manual compensation adjustment for better video quality
- Superior video quality – up to 1920 x 1200
- Built-in 8KV/15KV ESD protection

▾ CE100R Remote Unit

Front View

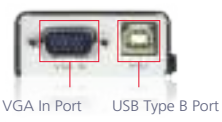


Rear View

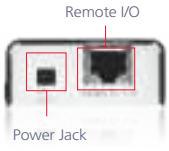


▾ CE100L Local Unit

Front View



Rear View



Industry Applications		Page Number
Media	Post-Production House	09
Utility & Resource	Mining Company	21

Computer Sharing Device

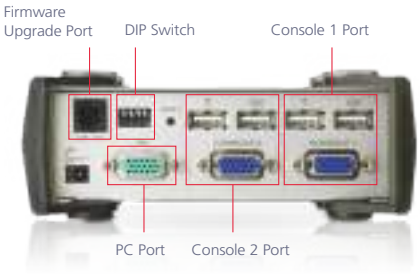
CS231

Console Privilege Control Device



- Single computer is shared by two USB consoles
- Supports USB and PS/2 computers
- Private Mode for a privileged user
- On-Screen-Display informs user when system is in us
- Manual or Auto console selection
- No Software required
- Firmware Upgradable

Rear View



Industry Applications		Page Number
Manufacturing	Semiconductor Manufacturing Company	16

Video Products

VS82

2-Port Video Splitter



- One video input to 2 video outputs
- Cascadable to 3 levels - provides up to 8 video signals
- Long distance transmission - up to 65m
- High video resolution - up to 1920 x 1440
- Supports VGA, XGA, SVGA, UXGA and multisync monitors



VE022

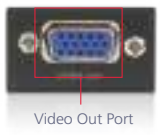
Mini Cat 5 A/V Extender



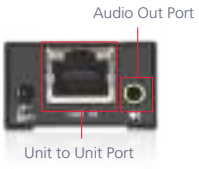
- Uses Cat 5e cable to extend audio and video transmission up to 150m
- Adjustable Gain Control lets you manually adjust signal strength to compensate for distance
- Convenient docking interface for mounting the VE022 on the display device
- Eliminates the need for bulky VGA cables
- Superior video quality – screen resolutions include 1920 x 1200 @ 60Hz (30m), 1600 x 1200 @ 60Hz (100m) and 1280 x 1024 @ 60Hz (150m)

▾ VE022 Receiver

Front View



Rear View



▾ VE022 Transmitter

Front View



Rear View



Industry Applications		Page Number
Utility & Resource	Mining Company	21

Memo

Memo

Memo

Memo

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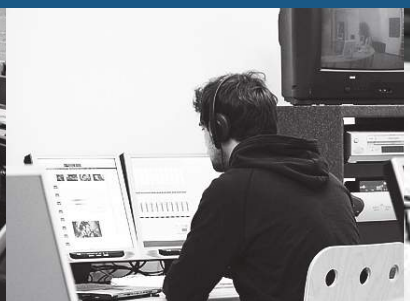
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