

# ATEN Solutions Book

## For Professional AV Systems

Issue 1



**conet**ica  
LA CONEXION

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# 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.



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# Why Choose ATEN VanCryst Professional AV Solutions



## ▪ **30 Years of Experience**

ATEN has consolidated its 30 years of video technology expertise into the VanCryst solutions range for a wide variety of applications

## ▪ **Quality Engineering**

ATEN provides innovative video products of the highest quality where you can get the reliability and performance you demand

## ▪ **Flexible, Integrated Solutions**

Full range of video products provides you with a multitude of flexible, integrated solutions for all video-related applications

## ▪ **Exceptional Price Performance**

ATEN offers the best price-to-value ratio in terms of quality, performance, and after-sales support

## ▪ **Total Customer Satisfaction**

Customer satisfaction has and always will be a number one priority at ATEN. To ensure this, excellence is pursued at every stage

## ▪ **Support for All Major Video Interfaces**

Incorporating all current video interfaces and matchless audio support allows you to seamlessly transition to the highest resolutions

## ▪ **Patented Technologies**

VanCryst Solutions benefit from various patented technologies that enhance both functionality and compatibility

# Unique Technologies from VanCryst



- **ATEN Exclusive Video Compensation technology**

Permits video signals to be transmitted over long distances. This technology not only improves brightness and also achieves high skew tolerance for video extender products.

- **FPGA Design Benefits**

This is used by the DVI and HDMI video interfaces and brings our video products better cascade compatibility, and extends digital signals to longer distances.

- **Superior CD Audio Quality**

Converts analog signals to digital signals to reduce electromagnetic interference and provides better CD audio quality at sample sizes of 24-bit, with sample rates up to 48 KHz.

- **ATEN Exclusive Deskew Technology**

Enables you to manually tune the R/G/B signals settings, ensuring stable, high quality video in video extender installations.

- **Audio Return Channel**

Allows an HDMI source device to receive content via air waves to send audio to your HDMI display devices without the need for an extra audio cable, which simplifies cabling and adds further depth to your home theater installation.

- **EDID Expert**

Allows you to choose an EDID recognition mode that optimizes display resolution throughout your installation and allows for faster, smoother switching between displays.

- **3D Support**

ATEN has recently launched HDMI devices that establish 3D capabilities for implementing 3D video in the home. They are ideal for 3D home theater integration, and commercial use.




## Insurance Company

An insurance company would like to set up LCD displays in the lobby and meeting room to introduce various insurance programs to their clients, and the transmission distance to each display is more than 60 m from the control room. Moreover, the company is considering the possibility of creating more meeting rooms on each floor, so the scalability of the hardware needs to be considered.



### ATEN Solution

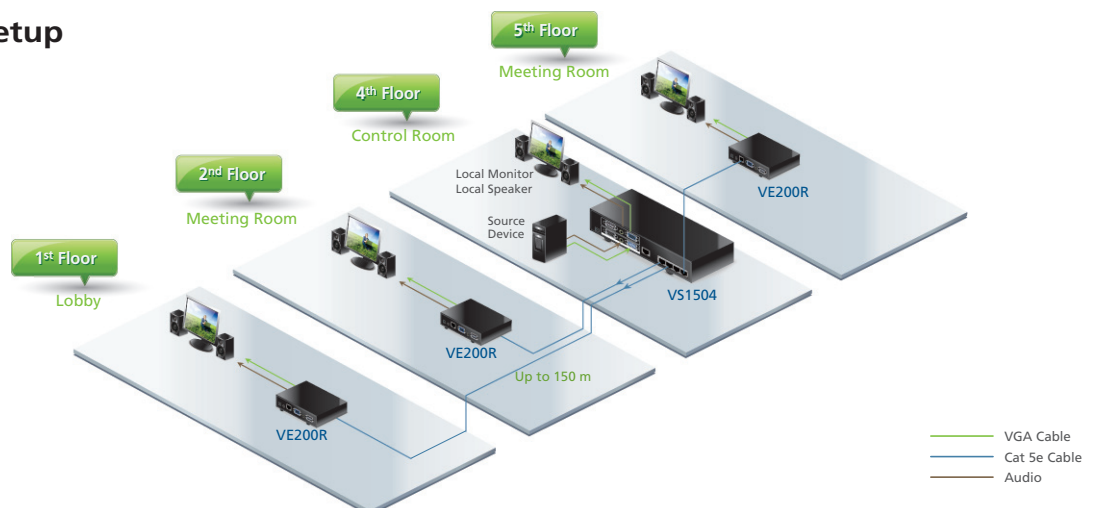
Media Distribution Solution delivers high quality A/V content over Cat 5e cable to multiple displays in real time

|   |  |
|---|--|
| <p><b>VS1504</b><br/>4-Port Cat 5 Audio/Video Splitter</p>  <p>(See Page 28)</p> | <ul style="list-style-type: none"> <li>• One video input to 4 video outputs via Cat 5e cable</li> <li>• Audio enabled</li> <li>• Uses Cat 5e cable to extend displays up to 150 m</li> <li>• Superior video quality – up to 1920x1200 @ 60Hz</li> </ul>              |
| <p><b>VE200R</b><br/>Audio/Video Receiver</p>  <p>(See Page 29)</p>             | <ul style="list-style-type: none"> <li>• Superior video quality – 1920x1200@60Hz at 30 m, 1600x1200 @ 60Hz at 150 m</li> <li>• Dual Audio/Video output</li> <li>• Audio and serial enabled</li> <li>• Two gain control model for sharpest picture quality</li> </ul> |
| <p><b>2L-2801</b><br/>Low Deskew Cat 5e Cable</p>  <p>(See Page 37)</p>        | <ul style="list-style-type: none"> <li>• Supports high quality RGB video transmission</li> <li>• Compatible with ATEN analog Cat 5 video extenders</li> <li>• Delay Skew – 1~350 MHz 20nS/100m Max</li> </ul>  |

### Benefits

- **Low skew cable** – Supports high quality RGB video transmission. Eliminates blur and bleeding images and ensures clarity of the video transmission by using 2L-2801 Low Skew Cat 5e Cable
- **Cascadable to three levels** – VS1504 provides up to thousands of video signals when combined in an installation with ATEN receiving devices
- **Long distance transmission** – Extends the distance between control room and lobby/meeting rooms.
- **Superior video quality** – Supports high video resolutions of up to 1920 x 1200 @ 60 Hz
- **Convenient control** – VE200R equipped with IR remote control for screen on/off and video adjustment at remote site.

### Solution Setup





## Lion Travel Group

A forerunner in Taiwan's tourism industry, Lion Travel Group was established in 1977. With a large number of various multimedia source devices for broadcasting scenic landscapes and tourism programs, Lion Travel needed a solution to integrate them, allowing administrators to easily switch and access the source devices, and effectively monitor the video display status of each device over long distances.



### ATEN Solution

#### Media Matrix Solution

##### VM0808T

8x8 Cat 5 AV Matrix Switch



(See Page 26)

##### VE300T

AV over Cat 5 Transmitter



(See Page 27)

##### VE300RQ

AV over Cat 5 Receiver  
(with RGB Deskew function)



(See Page 27)

##### VE022

Mini Cat 5 AV Extender



(See Page 35)

##### CS74E

4-Port PS/2 KVM Switch

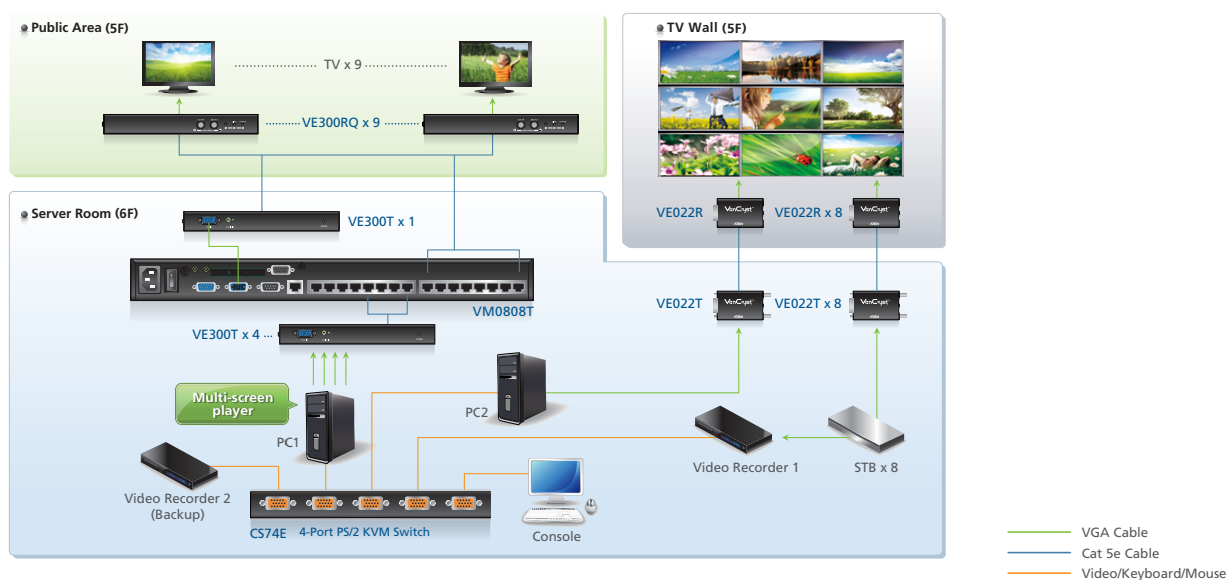


(See Page 39)

### Benefits

- **Long distance transmission** – Media Matrix Solution can transmit multiple sets of multimedia source signals up to 300 meters to display monitors on various floors, and simultaneously maintain high AV quality
- **High compatibility and easy installation** – The VE022 mini extender is compact and easy to install, steadily extending the signal transmission distance
- **Easy switching** – Easily connect and switch between multiple types of source devices through CS74E to ensure correct video output

### Solution Setup



## Lion Travel Group

A forerunner in Taiwan's tourism industry, Lion Travel Group was established in 1977. It built the Lion Travel Group building in 2010 in response to the rapid growth of sales personnel and employees. Located on the first floor of the building is an open space coffee bar, which is rented out occasionally for various activities. To meet the needs of these external activities, Lion Travel installed a modernized professional audio and video system, eliminating the trouble of renting or borrowing stereo equipment.



### ATEN Solution

#### VM0404H

4x4 HDMI Matrix Switch



(See Page 31)

- Connects any of 4 HDMI source devices and transmits multimedia content to the LED TV and projector
- Enables flexible and easy switching between the multimedia sources
- Superior video quality – 480p, 720p, 1080i, and 1080p (1920x1080)

#### VE800

HDMI Extender



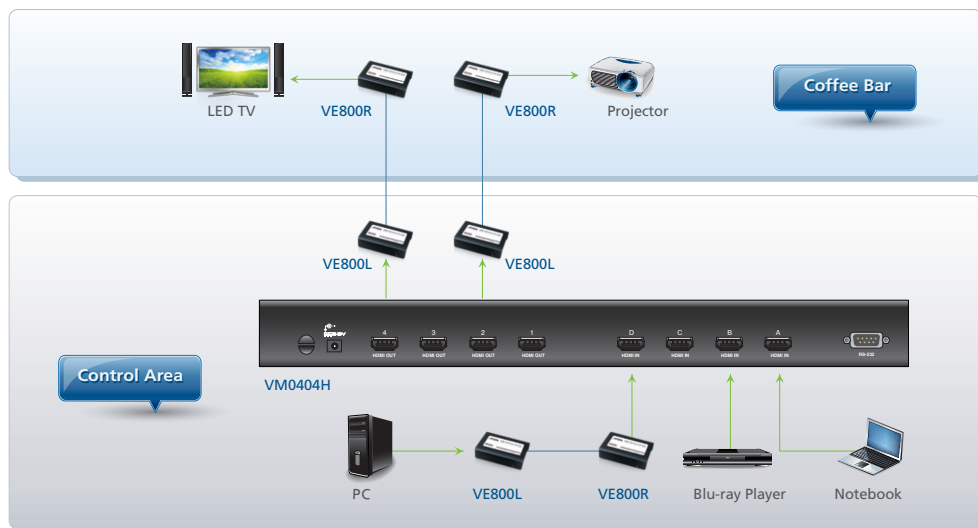
(See Page 35)

- Extends the distance between HDMI source and HDMI display up to 60 meters
- Uses Cat 5e cables to achieve long distance transmission
- Superior video quality – up to 1080p

### Benefits

- **Long distance transmission** – The VE800 extends the distance between the HDMI source and HDMI display by up to 60m
- **Superior AV quality** – Supports high video resolutions of up to 1080i and 1080p, and supports high quality audio
- **High stability and compatibility** – Compatible with most HDMI devices
- **Easy switching** – Easily connect 4 HDMI sources to 4 HDMI displays; real-time transmission with no distortion

### Solution Setup



— HDMI Cable  
— Cat 5e Cable

## HyperNet CO., LTD.

HyperNet CO., LTD. is a broad-band application and conference center systems integration planning company. In order to allow customers to experience the power of integrating communications in the conference room, they built a multifunction C&C(Communication & Conference) conference room with integrated video communications and multimedia equipment at its headquarter in Taipei. They are looking for a professional AV solution with centralized equipment control of the video conference system and the environment control system.



### ATEN Solution

#### VM0404H

4x4 HDMI Matrix Switch



(See Page 31)

- Connects any of four HDMI sources to any of four HDMI displays
- Built-in bi-directional RS-232 serial remote port for high-end system control
- Toggles between HDMI A/V sources and displays using remote control or front panel pushbuttons for easy selection

### Benefits

- **Easy switching** – Easily connect 4 HDMI sources from both local and remote sites to 4 HDMI displays; real-time transmission with no distortion
- **Easily expand and connect equipment, lower establishment cost** – Equipment can be connected through VM0404H's expansion in order to solve the restrictions on the numbers of equipment connected to the conference system, and lower setup cost
- **High stability and compatibility** – Supports RS-232 connection, able to easily integrate with the environment control system and help simplify equipment management

### Solution Setup



## Oil & Gas Service Company

An Oil & Gas Equipment & Service Company helps oil companies to find oil and gas reserves offshore worldwide. They required video extensions for operators to access data from their systems/computers that are situated in the control room.



### ATEN Solution

#### VS1204T 4-Port AV Over Cat 5 Splitter

(See Page 29)



- One audio/video input to 4 audio/video outputs via Cat 5e cable
- Supports local display + 4 remote displays
- Uses Cat 5e cable to extend displays up to 300 m
- Superior video quality – up to 1920 x 1200 @ 60Hz

#### VE170R / VE170RQ AV Over Cat 5 Receiver

(See Page 30)

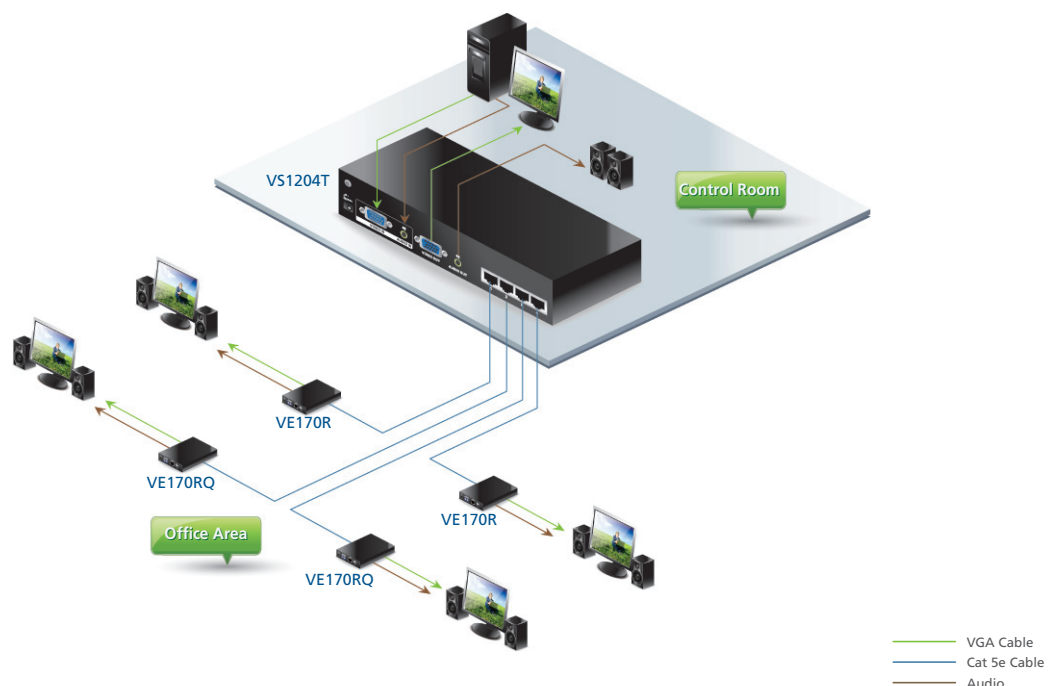


- Long distance transmission up to 300 m
- Superior RGB deskew function – automatically synchronizes the time delay of RGB signals to compensate for distance (VE170RQ)
- Superior video quality – up to 1920x1200 @ 60Hz
- Audio enabled (mono)

### Benefits

- **Increased efficiency** – Operators can access the legacy systems whilst sitting at their desk. They don't need to go to the control room each time they need to analyze important data
- **Easy installation** – Simplified Cat 5e cabling instead of bulky traditional cables to provide a neat and tidy work environment
- **Cost effective** – Economically transmit the signals from a single AV source to multiple outputs

### Solution Setup



## Digital Classroom

A university has established an IDC on its new campus. In addition to disseminating teaching materials, utilizing modern A/V technology can also improve the examination procedure. The university is looking for a professional A/V solution which can deliver exam content to specific displays situated in several different classrooms. The exam content servers need to be kept safe and secure in the IDC while the displays can be deployed up to 300 m away.



### ATEN Solution

Media Matrix Solution is a combination of an A/V Matrix Switch and A/V Over Cat 5 Extenders

#### VM0808T

8x8 Cat 5 A/V Matrix Switch



(See Page 26)

- Connects any of 8 Cat 5 A/V inputs to any of 8 Cat 5 A/V outputs in combination with ATEN VE500 A/V Over Cat 5 Extender system
- Superior video quality – up to 1920 x 1200 @ 60Hz
- Easily switch between multiple sources and multiple displays
- Supports additional local input and local display

#### VE500T / VE500RQ

A/V Over Cat 5 Transmitter / Receiver with Deskew function



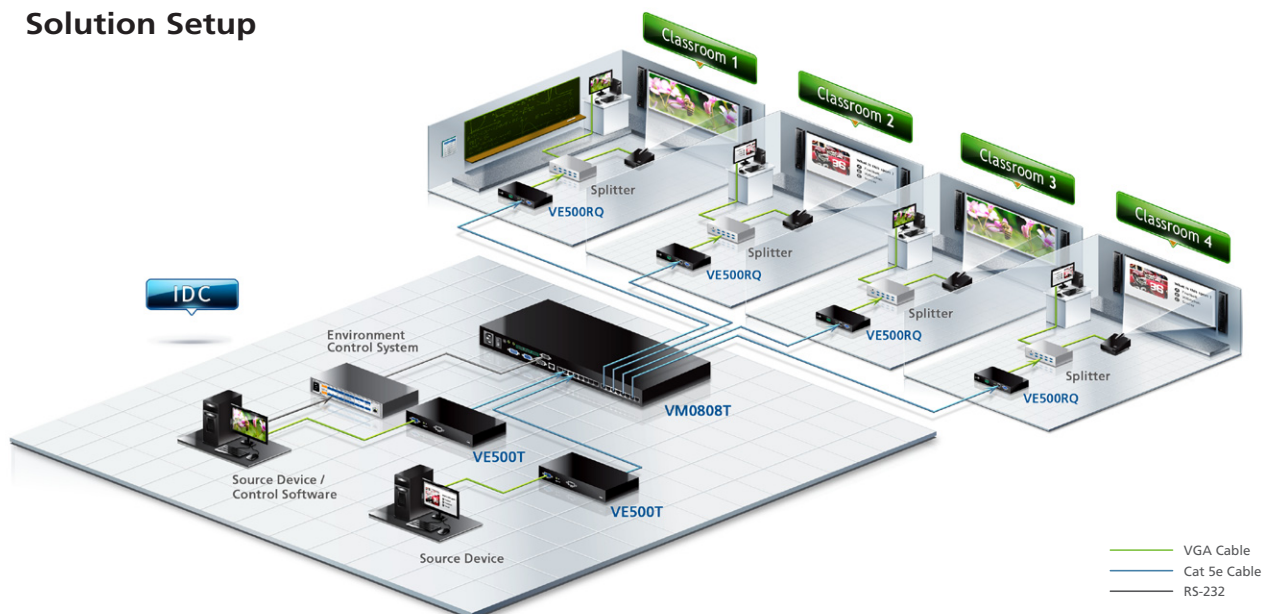
(See Page 26)

- Long distance transmission up to 300 m
- Uses Cat 5e cable to connect the transmitter and receiver
- Superior video quality – up to 1920x1200 @ 60Hz
- Superior RGB deskew function – automatically synchronizes the time delay of RGB signals to compensate for distance

### Benefits

- **Multiple video sources, multiple video outputs** – Different exam questions can be delivered to multiple classrooms and displayed on two screens in each classroom with the use of the existing video splitter
- **Long distance transmission** – A/V signals can be seamlessly delivered from IDC to the classrooms up to 300 m
- **High flexibility** – VM0808T allows independent switching of all audio and video sources, which provides the ultimate in flexibility
- **Serial connectivity** – VM0808T offers RS-232 command functionality and is compatible with most control systems on the market

### Solution Setup



## Campus Broadcasting

A university has classrooms located at different distances of 180 meters, 240 meters, 260 meters and 540 meters from the server room. The teaching materials need to be transferred from the servers to the classrooms. They need a professional A/V solution that can work over distances of at least 450 meters.



### ATEN Solution

Media Distribution Solution delivers high quality A/V content over Cat 5e cable to multiple displays in real time

#### VS1508

8-Port Cat 5 Audio/Video Splitter

(See Page 28)



#### VB552

VGA Over Cat 5 Repeater + Audio

(See Page 28)



#### VE200

Audio/Video Extender

(See Page 29)



#### VE510 (Optional)

Video Synchronizer

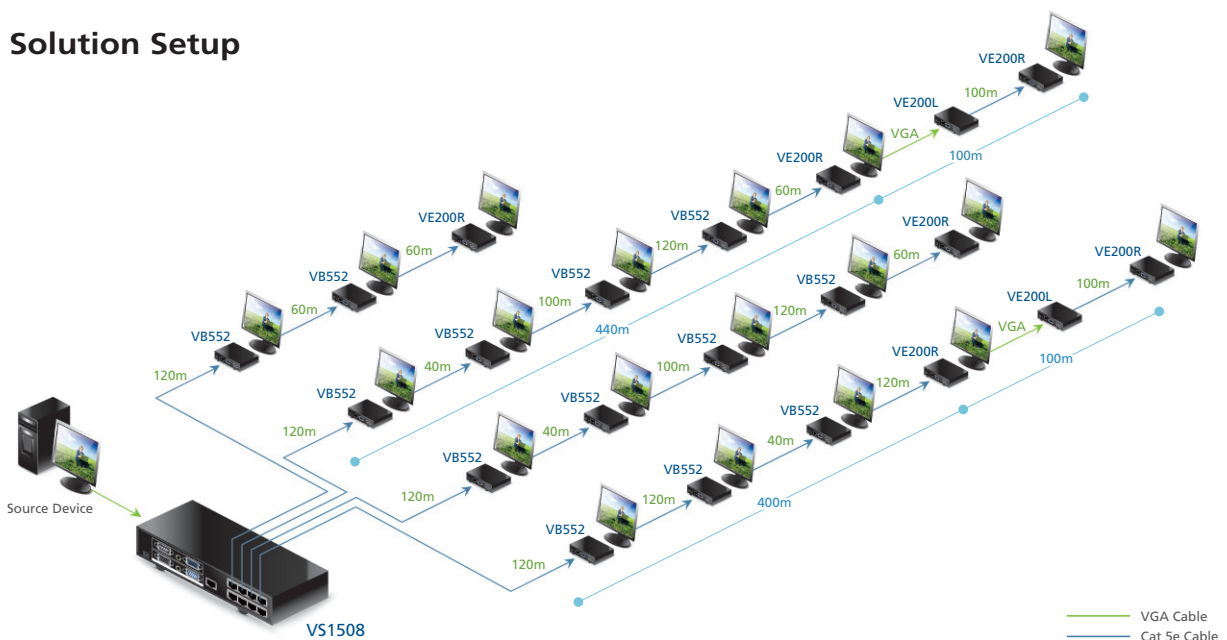
(See Page 37)



### Benefits

- **Supports long distance transmission over Cat 5e cable** – Extends displays up to 150 meters; and up to 500 meters when combined with ATEN receiving devices, VB552 and VE200
- **Cascadable to three levels** – VS1508 provides up to thousands of video signals when combined in an installation with ATEN receiving devices
- **High stability** – Stable connection and high resolution media sharing over long distances
- **Superior video quality** – Ensures quality over long distance by adding a VE510 and/or ATEN's low skew Cat 5e cable to minimize RGB skew issues

### Solution Setup



## Training Facility

In order to deliver customized teaching content for display on monitors set up in several different classrooms, the center's administrators need to retrieve the content from the multiple servers they are stored on. They then have to send different content to different target destinations. To make sure everything is working smoothly, they need to monitor the servers as well as the content sent to the targets from their control room.



### ATEN Solution

Media Distribution Solution delivers high quality A/V content over Cat 5e cable to multiple displays in real time

**VS1504**  
4-Port Cat 5 Audio/Video Splitter



(See Page 28)

**VB552**  
VGA Over Cat 5 Repeater + Audio



(See Page 28)

**VE200R**  
Audio/Video Receiver



(See Page 29)

**VS92A**  
2-Port Video Splitter



(See Page 34)

**CS9138**  
8-Port KVM Switch

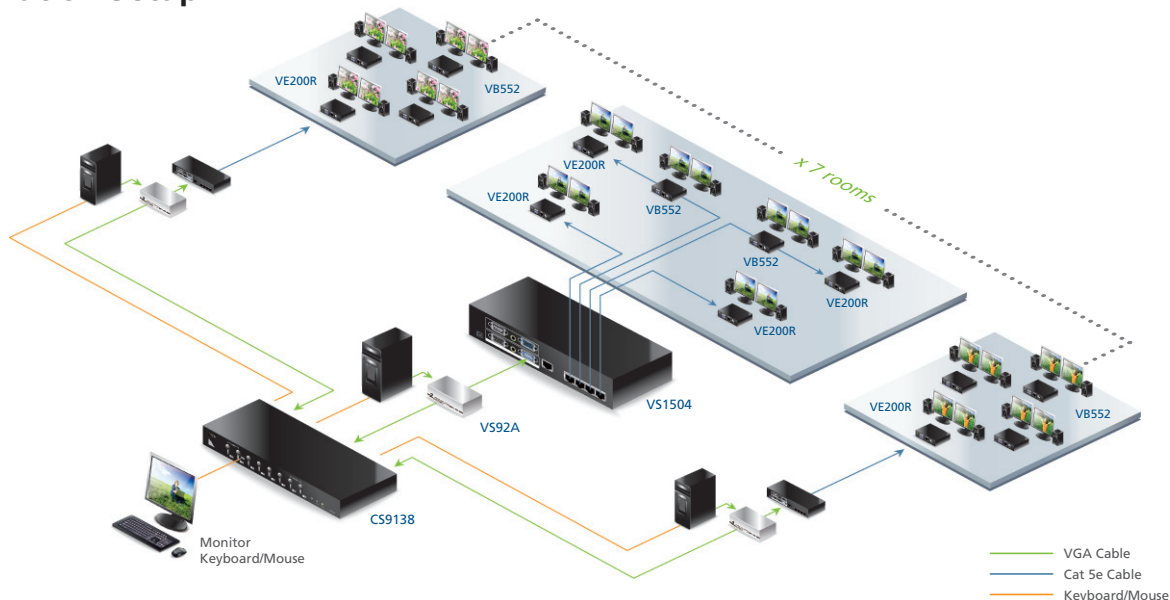


(See Page 38)

### Benefits

- Supports multiple displays – Flexible duplication of the A/V output to multiple destinations
- Long distance transmission – Extends the display distance up to 450 m
- Superior video quality – Supports high video resolutions of up to 1920 x 1200 @ 60 Hz
- Dual A/V output support – Increases views with less connection and receiver units
- Saves on cable cost – Connects all monitors to the cascaded receiving devices instead of cabling them all the way back to the source devices

### Solution Setup



## Computer Classroom

A computer classroom has 50-100 computers and monitors at the student's station and one set for the teacher. During class, the students work on their computers, and the teacher can switch all students' screens to the teaching screen, and explain the course and operating procedure. In addition, the screen needs to be easily switched back to the original screen for students to operate themselves. They also need a solution that can control the students' computers over the NET.



### ATEN Solution

Media Distribution Solution delivers high quality A/V content over Cat 5e cable to multiple displays in real time

#### VS1508

8-Port Cat 5 Audio/Video Splitter



(See Page 28)

#### VB552

VGA Over Cat 5 Repeater + Audio



(See Page 28)

#### VE200R

Audio/Video Receiver



(See Page 29)

#### VE510 (Optional)

Video Synchronizer



(See Page 37)

#### KH1516i

16-Port High-Density KVM Over the NET™



(See Page 38)

#### VS92A

2-Port Video Splitter



(See Page 34)

#### VS0202

Video Matrix Switch (2 inputs 2 outputs)



(See Page 31)

#### VS201

2-Port Video Switch

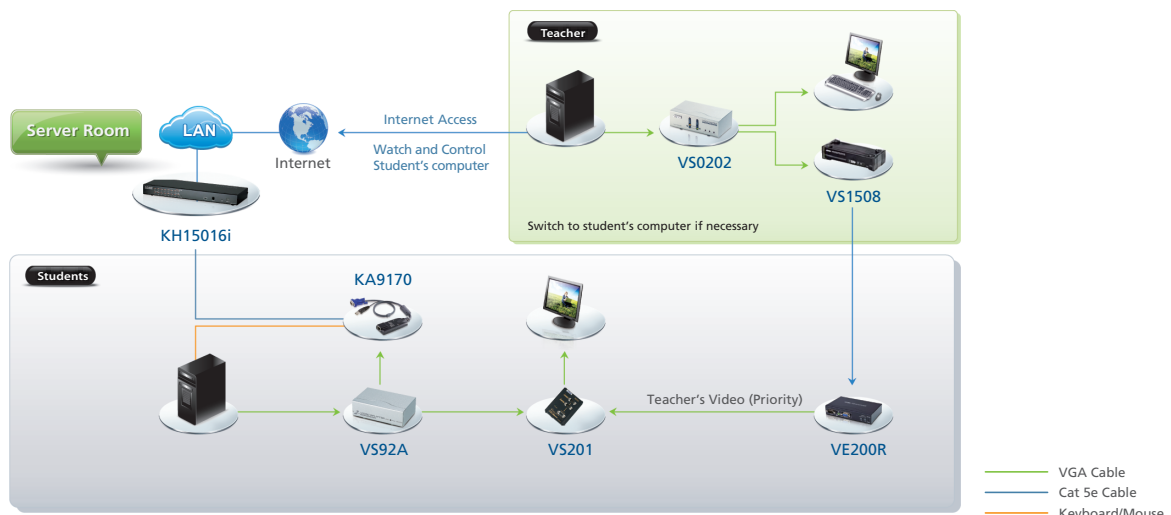


(See Page 32)

### Benefits

- **Supports multiple displays** – Ideal for any installation that requires multimedia content to be delivered to multiple destinations.
- **Superior video quality** – Supports high video resolutions of up to 1920 x 1200 @ 60 Hz
- **Effortless control of multiple sources to multiple outputs** – Each of the 2 video outputs can toggle between Student's Source 1 and Teacher's Source 2 using front panel pushbuttons
- **Over-IP control** – The teacher can remotely control students' computers via LAN, WAN, or the Internet
- **Easy to use** – Automatic incoming signal selection from the teacher

### Solution Setup





## Passport Office

To provide efficient customer service, the passport office needs to deliver multimedia content, consisting of the token number and advertisements, from one source computer to displays installed in the waiting area and staff working area over long distances.



### ATEN Solution

Media Distribution Solution delivers high quality A/V content over Cat 5e cable to multiple displays in real time

#### VS1508

8-Port Cat 5 Audio/Video Splitter



(See Page 28)

- One video input to 8 video outputs via Cat 5e cable
- Audio enabled
- Uses Cat 5e cable to extend displays up to 150 m
- Superior video quality – up to 1920x1200 @ 60Hz

#### VB552

VGA Over Cat 5 Repeater + Audio



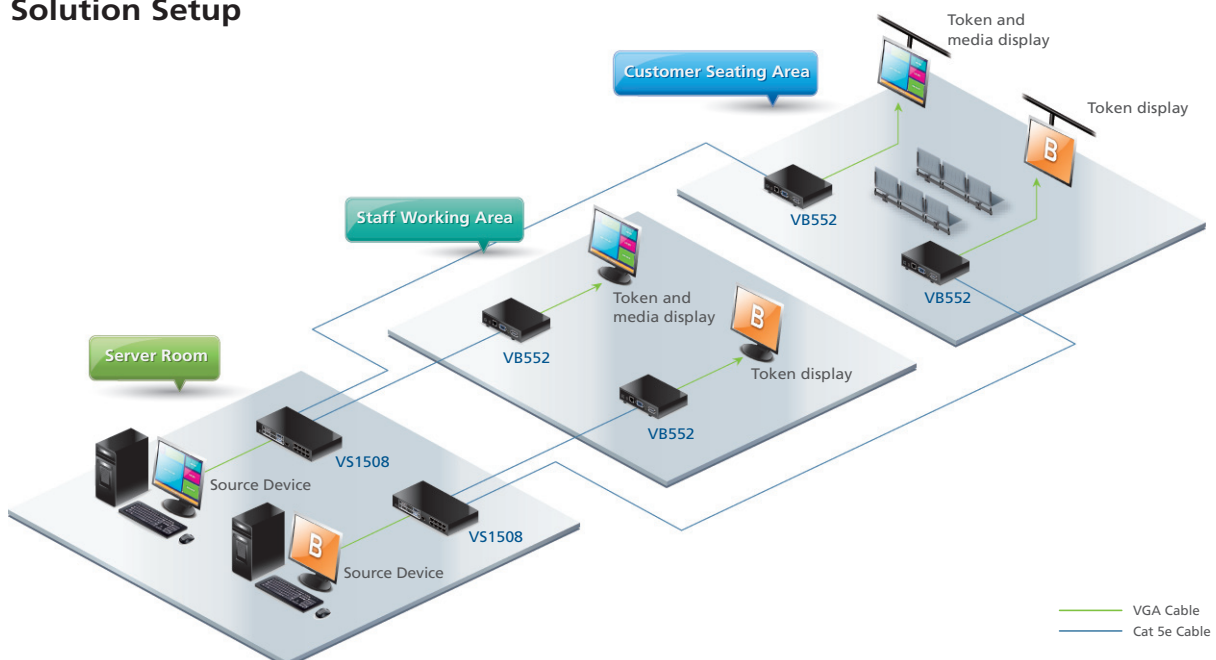
(See Page 28)

- Extends the transmission range an extra 150 m
- Dual Audio/Video output
- Audio and serial enabled

### Benefits

- **Supports multiple displays** – Customers in the waiting area can clearly see when their token number is called and in the meantime can enjoy the multimedia advertisements
- **Long distance transmission over Cat 5e cable** – The high quality A/V outputs can be transmitted from the source computer in the server room to displays at distances up to 150m
- **High compatibility** – Compatible with all leading brands of LCD display
- **Future expansion** – Uses VB552 to reserve an extra extension port for expansion

### Solution Setup



## Medical Services Company

A Medical Services Company in Japan provides a wide range of services to support medical facility management. The company carries a program distribution system called "Medicom" and originally installed A/V transmitters, splitters and receivers. However, one concern was the high cost of the recommended A/V devices. The company considered whether the equipment procurement costs could be reduced by exchanging the A/V devices with another solution.



### ATEN Solution

Media Distribution Solution delivers high quality A/V content over Cat 5e cable to multiple displays in real time

#### VS1508

8-Port Cat 5 Audio/Video Splitter



(See Page 28)

- One video input to 8 video outputs
- Audio enabled
- Uses Cat 5e cable to extend displays up to 150 m
- Superior video quality – up to 1920x1200 @ 60Hz

#### VE200R

Audio/Video Receiver



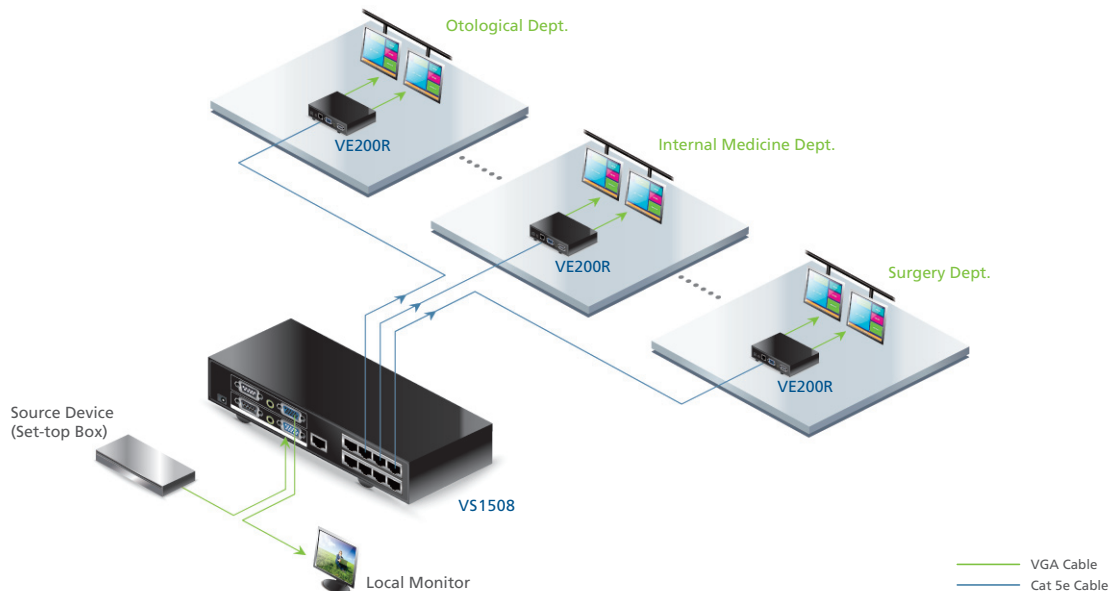
(See Page 29)

- Superior video quality – 1920x1200 @ 60Hz at 30 m, 1600x1200 @ 60Hz at 150 m
- Dual Audio/Video output
- Audio and serial enabled
- Two gain control models for sharpest picture quality

### Benefits

- **Supports multiple displays** – Distributes high quality audio and video across departments to multiple displays in the hospital
- **Saves space and cost** – VS1508 combines both transmitter and splitter features reducing space and cost
- **High compatibility** – Supports VGA output, Windows 7; compatible with existing set-top box
- **Cat 5e cabling** – Saves space, installation time and costs
- **Dual A/V output support** – Increases views with less connections and receiver units

### Solution Setup





## Night Club

Multiple displays for broadcasting music videos and commercials were installed in a popular nightclub. The various content needs to be flexibly delivered to monitors located in the stage and bar areas.



### ATEN Solution

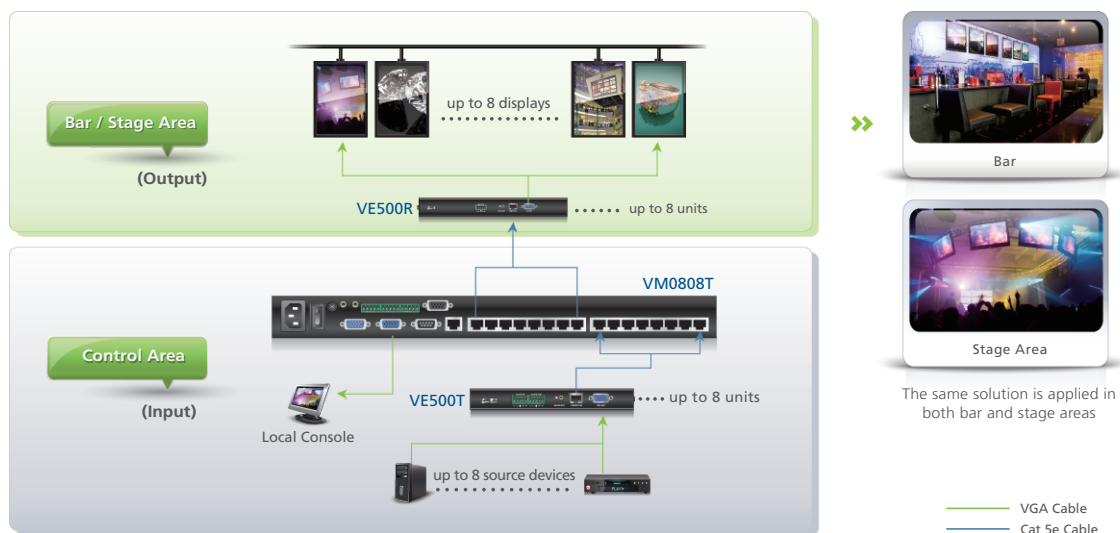
Media Matrix Solution is a combination of an A/V Matrix Switch and an A/V Over Cat 5 Extender

|  |   |
|--|---|
| <p><b>VM0808T</b><br/>8x8 Cat 5 A/V Matrix Switch</p>  <p>(See Page 26)</p>                     | <ul style="list-style-type: none"> <li>• Connects any of 8 Cat 5 A/V inputs to any of 8 Cat 5 A/V outputs in combination with ATEN VE500 A/V Over Cat 5 Extender system</li> <li>• Supports Video Quality – up to 1920 x 1200 @ 60Hz; DDC2B</li> <li>• Easily switch between multiple sources and multiple displays</li> <li>• Supports additional local input and local display</li> </ul> |
| <p><b>VE500T / VE500R</b><br/>A/V Over Cat 5 Transmitter / Receiver</p>  <p>(See Page 26)</p> | <ul style="list-style-type: none"> <li>• Long Distance Transmission up to 300 m</li> <li>• Uses Cat 5e cable to connect the Transmitter and Receiver</li> <li>• Superior video quality – up to 1920x1200 @ 60Hz</li> </ul>  |

### Benefits

- **Multiple content to multiple displays** – Different vivid multimedia content can be delivered to monitors located around the nightclub
- **Superior A/V quality** – High quality A/V signals can be seamlessly delivered over long distances
- **Flexible deployment** – Updates the latest entertainment videos to the monitors with ease and flexibility
- **Convenient local management** – Efficiently assists nightclub staff to check A/V signals from source devices locally

### Solution Setup



## Hilton Conrad, Dubai, UAE

Hilton Dubai is one of the most prestigious hotels in Dubai. In order to offer high levels of connectivity for the digital comfort of guests, Hilton Dubai hired the services of IBAHN, a reputed service provider for the hospitality industry, to implement an IPTV system in the entire hotel. IBAHN helped Hilton Dubai provide a comprehensive IPTV technology solution along with ATEN Professional HDMI Splitter.



### ATEN Solution

#### VS182 2-Port HDMI Splitter



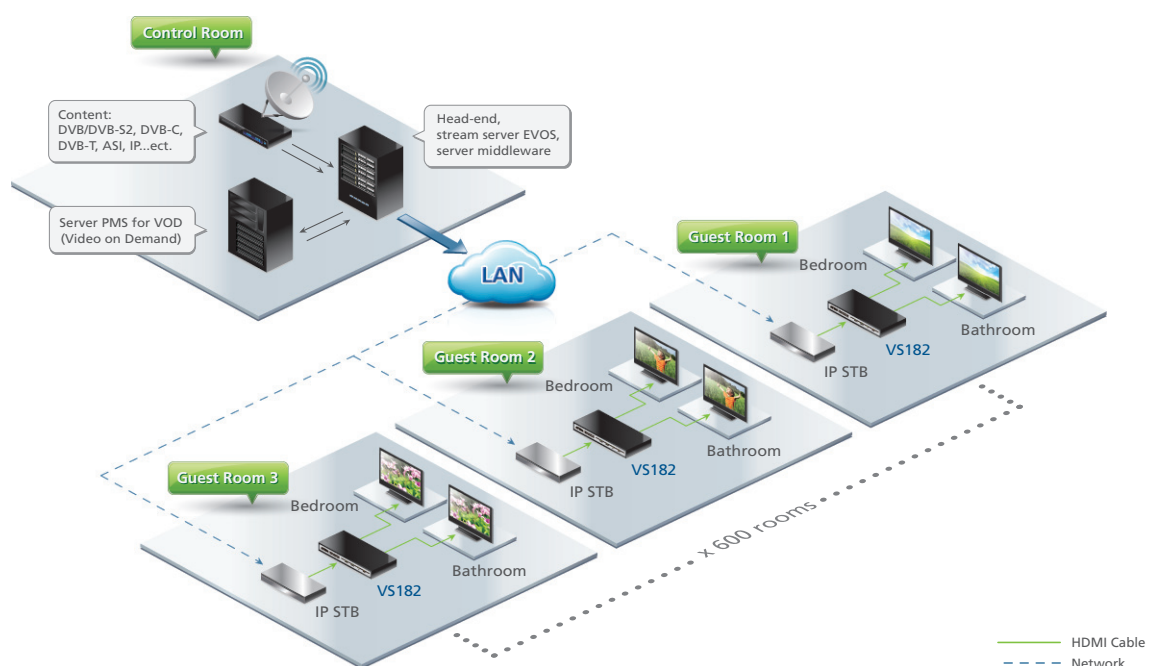
(See Page 33)

- Connects one HDMI source to two HDMI displays at the same time
- By using 600 VS182 units, high definition content was delivered to over 1200 televisions in the hotel
- VS182 allows each HDMI signal to be seamlessly duplicated to multiple televisions
- Superior video quality - 480p, 720p, 1080i, and 1080p (1920x1080)

### Benefits

- **Highly compatible** – Compatible with all standard HDMI devices and displays available on the market including IPTV Set top boxes.
- **High quality HDMI** – Supports 3D and HDTV for the highest video
- **Supports multiple displays** – A single HDMI A/V source can be simultaneously transmitted and displayed on up to 2 monitors
- **Long distance transmission** – Transmits HDMI signals up to 20m
- **Space saving** – Compact splitters are small in size, robust and flexible for any installation
- **Increases efficiency** – The device installation, operation and testing process are simple; problems are quickly resolved and digital signage content is easily updated

### Solution Setup






# Hotel

A hotel wants to share the internal schedule with employees in the Staff room, while the data will be coming from the Control room. They need a solution that works over long distance, and displays information using three monitors.



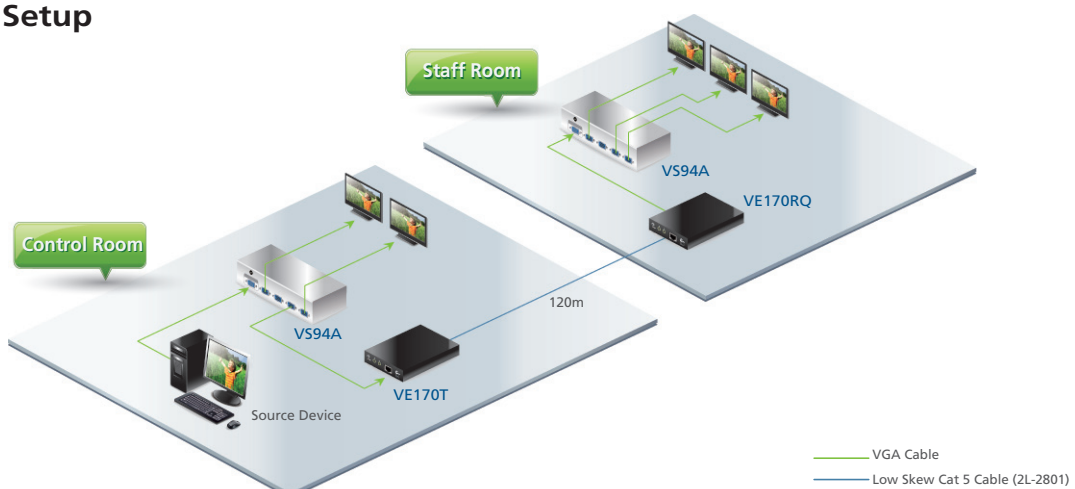
## ATEN Solution

|  |   |
|--|---|
| <p><b>VS94A</b><br/>4-Port Video Splitter</p>  <p>(See Page 34)</p>       | <ul style="list-style-type: none"> <li>• One video input to 4 video outputs</li> <li>• Long distance transmission – up to 65 meters</li> <li>• Superior video quality – up to 1920 x 1200</li> <li>• Supports up to 350 MHz bandwidth for high performance video</li> </ul> |
| <p><b>VE170</b><br/>A/V Over Cat 5 Extender</p>  <p>(See Page 36)</p>    | <ul style="list-style-type: none"> <li>• Transmitter and receiver units connect at distances up to 300 m using Cat 5e cable</li> <li>• Superior video quality - up to 1920 x 1200</li> <li>• Audio Enabled</li> </ul>   |
| <p><b>2L-2801</b><br/>Low Deskew Cat 5e Cable</p>  <p>(See Page 37)</p> | <ul style="list-style-type: none"> <li>• Supports high quality RGB video transmission</li> <li>• Compatible with ATEN analog Cat 5 video extenders</li> <li>• Delay Skew – 1~350 MHz 20nS/100m Max</li> </ul>   |

## Benefits

- **Low skew cable** – Supports high quality RGB video transmission. Eliminates blur and bleeding images and ensures clarity of the video transmission by using 2L-2801 Low Skew Cat 5e Cable
- **Long distance transmission** – VE170 extends the distance between staff room and control room up to 300 m
- **Supports multiple displays** – A single video source can be simultaneously transmitted and displayed on up to 4 monitors
- **Flexible deployment** – Video Splitter and Extender combination solution provides flexibility for the hotel to fulfill their application

## Solution Setup



## Car Factory

A leading automobile company has set up a world-class manufacturing floor which is fully automated, ensuring that there is minimal chance for error in the manufacturing processes. To increase work efficiency, they wish to monitor a single PC which is having various test results from multiple wall mounted monitors at long distance.



### ATEN Solution

Media Distribution Solution delivers high quality A/V content over Cat 5e cable to multiple displays in real time

#### VS1508

8-Port Cat 5 Audio/Video Splitter



(See Page 28)

- One video input to 8 video outputs
- Audio enabled
- Uses Cat 5e cable to extend displays up to 150 m
- Superior video quality – up to 1920x1200 @ 60Hz

#### VB552

VGA Over Cat 5 Repeater + Audio



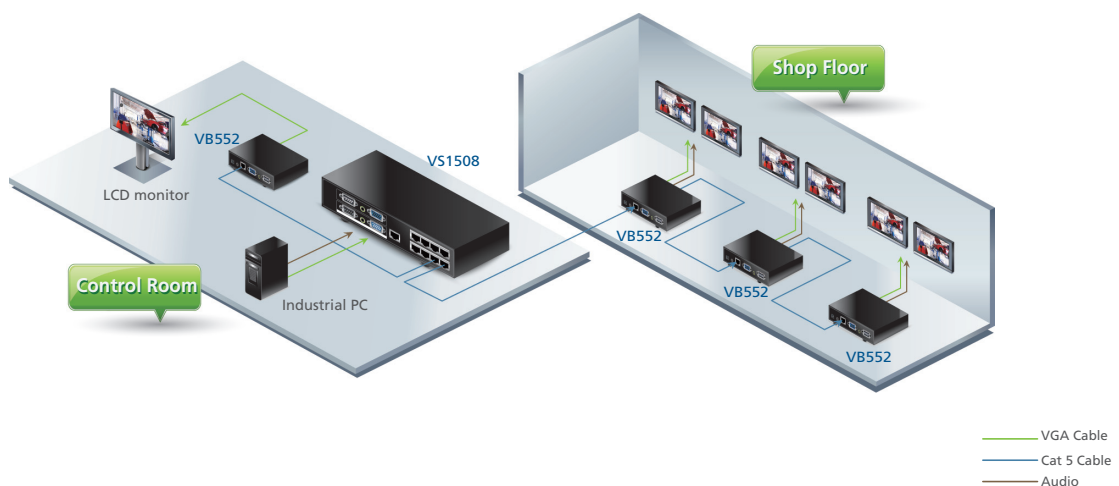
(See Page 28)

- Extends the transmission range an extra 150 m
- Dual Audio/Video output
- Audio enabled

### Benefits

- **Superior A/V quality** – ATEN Media Distribution Solution had higher resolution and superior audio quality support over long distance
- **Increases efficiency** – Improve monitoring and accessibility of testing process software from remote locations
- **Saves time** – Reduce travel time between shop floor and control room
- **Long distance transmission over Cat 5e cable** – The high quality A/V outputs can be transmitted from the source computer in the control room to displays at distances up to 150m

### Solution Setup



## Production Line

With HDMI currently being the most popular audio/video interface, new Tablets are designed with HDMI ports that allow users to connect to external HDMI devices. Therefore, a manufacturer must test the HDMI output signal of each Tablet that comes down the production line for quality and reliability.



### ATEN Solution

**VS481A**  
4-Port HDMI Switch



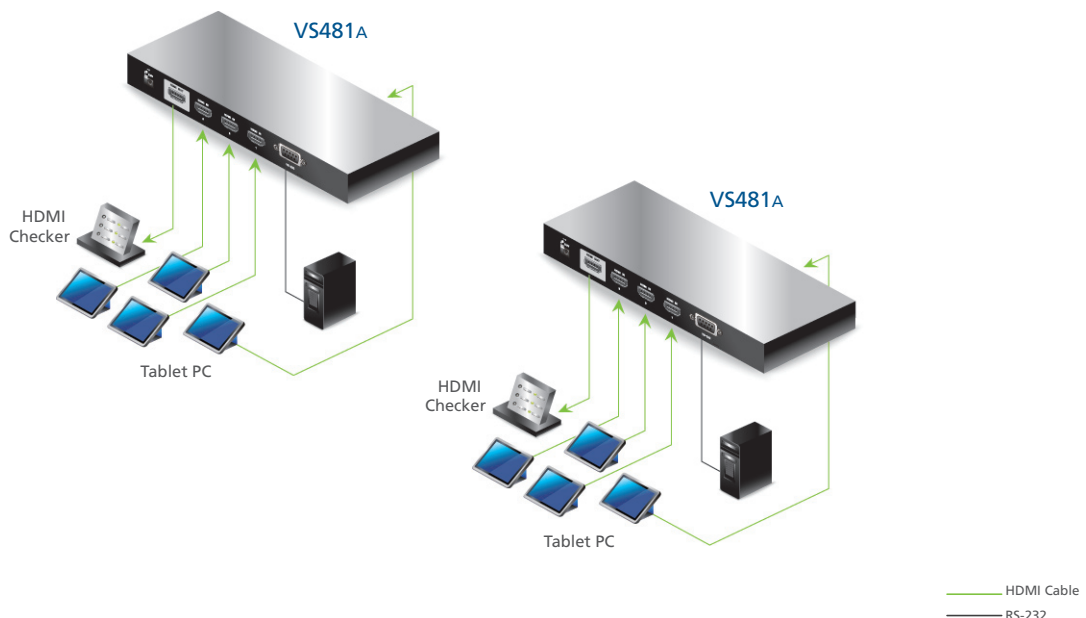
(See Page 32)

- Allows four HDMI A/V sources to be connected to one HDMI display
- Quick and easy switching via panel pushbuttons, RS-232 or IR remote control
- Built-in bi-directional RS-232 serial port for high-end system control

### Benefits

- **HDMI certified reliability** – VS481A is HDMI certified. It is compatible with HDMI and HDCP, so the signal is always stable to ensure perfect testing results
- **Customized switching procedures via RS-232** – Provides flexible and customizable testing procedures to reduce labor costs on the production line. In addition, personnel can connect to a server that controls the switching to monitor testing
- **Rapid response** – Reduces production line delay costs and increases efficiency
- **Improves compatibility testing** – Fast and effective compatibility testing of HDMI devices on a production line, with quality and reliability you can trust
- **Simplifies testing process** – Quickly and conveniently accomplish each test using RS-232 port switching, boosting production efficiency

### Solution Setup



## Place of Worship

Different religious programs take place in different locations, and are continuously aired 24 hours a day, 7 days a week. They need to simultaneously broadcast the program to all members through televisions/projectors set up on each floor. The audio and video quality must also be clear.



### ATEN Solution

Media Distribution Solution delivers high quality A/V content over Cat 5e cable to multiple displays in real time

#### VS1504

4-Port Cat 5 Audio/Video Splitter



(See Page 28)

- One video input to 4 video outputs via Cat 5e cable
- Audio enabled
- Uses Cat 5e cable to extend displays up to 150 m
- Superior video quality – up to 1920x1200 @ 60Hz

#### VE200R

Audio/Video Receiver



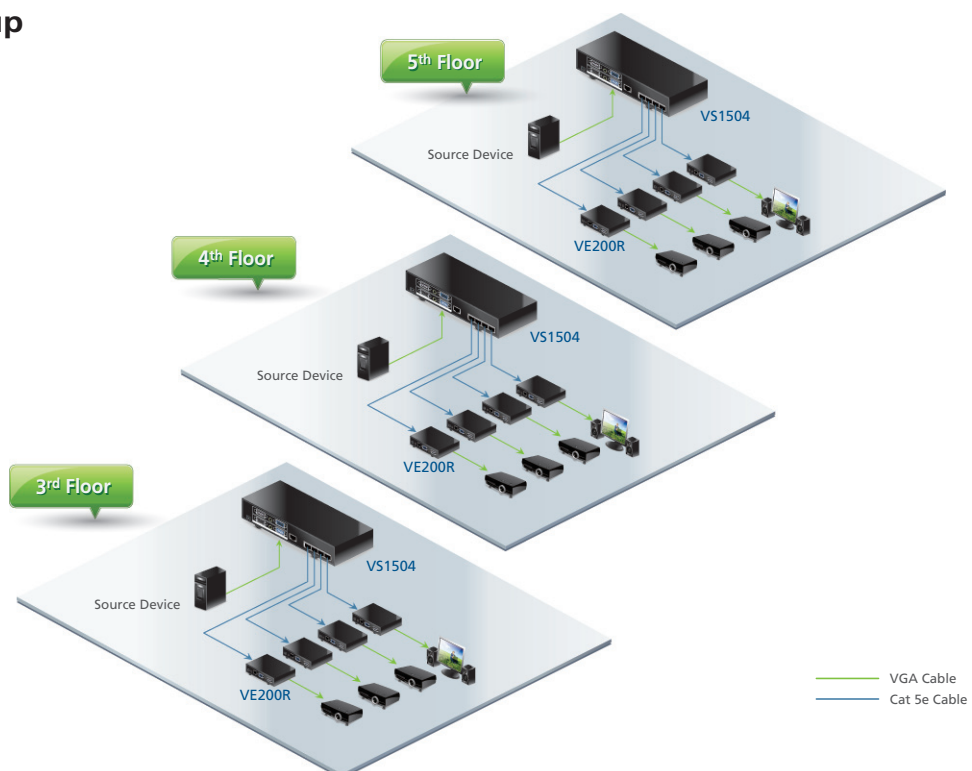
(See Page 29)

- Superior video quality – 1920x1200 @ 60Hz at 30 m, 1600x1200 @ 60Hz at 150 m
- Dual Audio/Video output
- Audio and serial enabled
- Two gain control modes for sharpest picture quality

### Benefits

- Superior A/V quality – Superior A/V signal distribution delivers crisp sound and clear video to multiple displays
- Cost effective and easy to install – Dual A/V output offers flexible, cost-efficient deployment
- Cat 5e cabling – Reduces cabling costs and provides a neat and tidy installation
- Long distance transmission – Several meters away and across separate building floors

### Solution Setup





## St. Francis of Assisi Church

St. Francis of Assisi Church in Poland is seeking to outfit the church with advanced equipment to meet the following requirements:

- The A/V content such as songs, prayers or photos needs to be transmitted from a computer in the control room to four monitors distributed around the church in real time
- Broadcast high quality video across longer distances for maximum viewing capability
- Reliable and efficient transmission of high quality A/V



### ATEN Solution

Media Distribution Solution delivers high quality A/V content over Cat 5e cable to multiple displays in real time

#### VS1504

4-Port Cat 5 Audio/Video Splitter



(See Page 28)

#### VB552

VGA Over Cat 5 Repeater +Audio



(See Page 28)

#### VE200R

Audio/Video Receiver

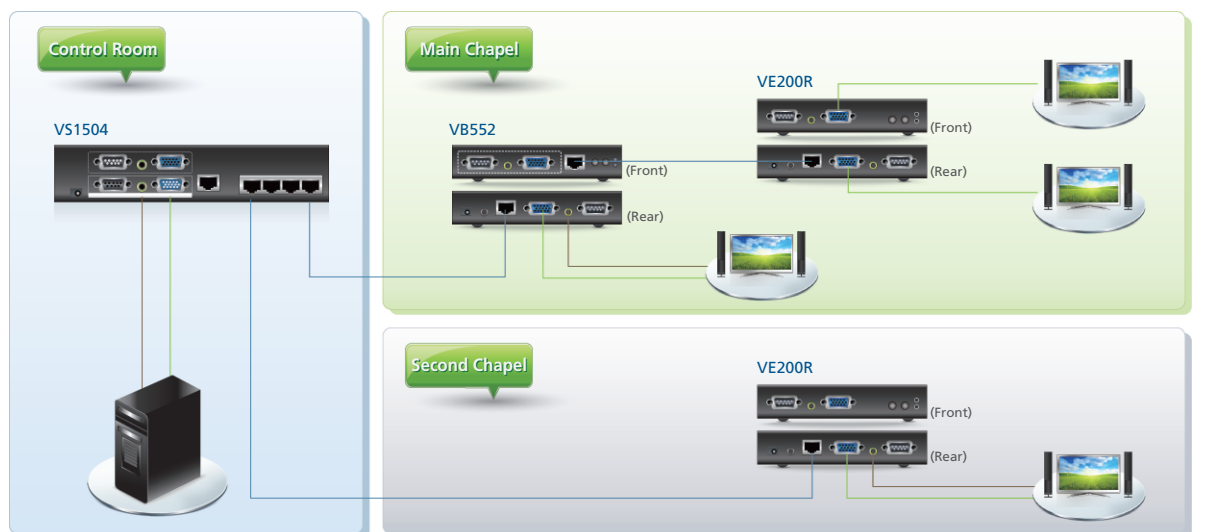


(See Page 29)

### Benefits

- **Improves the service** – Priests can perform their duties more efficiently and better serve their parishioners
- **Flexible installation** – The MDS allows monitors to be mounted in optimal locations, while the computer providing the multimedia content can be kept secure in a control room for easy service and maintenance
- **Superior A/V quality and reliable transmission** – A/V signals are delivered to four monitors over long distance without any interference or distortion. The sound coming from the setup can be heard well from every corner of the church and the four monitors are in clear view for all parishioners to see

### Solution Setup



— VGA Cable  
 — Cat 5 Cable  
 — Audio

## Jewelry Store

A jewelry store covering four floors wants to display their new product information and special offers on large screen monitors. They are looking for a broadcasting system to satisfy the following requirements:

- Delivers high quality audio and video from 6 A/V sources to 6 monitors
- Allows 6 A/V output to be distributed throughout the 4-floor store, with source devices located away from the monitors
- Supports frequent and convenient updating of multimedia content



### ATEN Solution

#### VM0808T

8x8 Cat 5 A/V Matrix Switch



(See Page 26)

- Connects any of 8 Cat 5 A/V inputs to any of 8 Cat 5 A/V outputs in combination with ATEN VE500 A/V Over Cat 5 Extender system
- Superior video quality – up to 1920 x 1200 @ 60Hz
- Easily switch between multiple sources and multiple displays
- Supports additional local input and local display

#### VE500T / VE500RQ

A/V Over Cat 5 Transmitter / Receiver with Deskew function



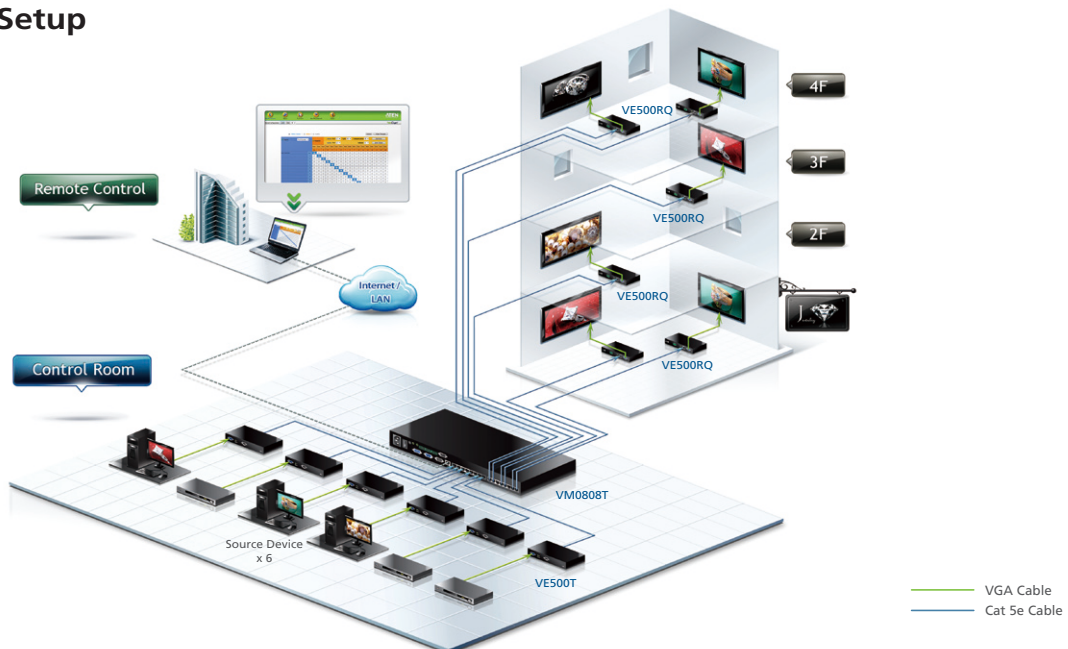
(See Page 26)

- Long distance transmission up to 300 m
- Uses Cat 5e cable to connect the Transmitter and Receiver
- Superior video quality – up to 1920x1200 @ 60Hz
- Superior RGB deskew function – automatically synchronizes the time delay of RGB signals to compensate for distance

### Benefits

- **Multiple video sources, multiple video outputs** – VM0808T can easily switch between multiple sources and multiple displays, so different promotional content can be efficiently delivered to different monitors located around the jewelry store
- **Exceptional video quality** – ATEN exclusive Deskew technology supports automatic and manual synchronization of RGB signals and corrects color phase and timing errors that occur over long distance
- **Easily configuration and control** – Uses a browser based web interface to efficiently control equipment from remote site

### Solution Setup



## Cell Phone Store

To provide efficient customer service, a cell phone store installed multiple large-screen monitors around the store to display the token number. The store is looking for a professional AV solution which extends the video signal to multiple monitors over long distance and is easy to install. The connecting cables need to be fitted in the ceiling or floor spaces to save space.



### ATEN Solution

Media Distribution Solution delivers high quality A/V content over Cat 5e cable to multiple displays in real time

#### VS1204T 4-Port AV Over Cat 5 Splitter



(See Page 29)

- One audio/video input to 4 audio/video outputs via Cat 5e cable
- Supports local display + 4 remote displays
- Uses Cat 5e cable to extend displays up to 300 m
- Superior video quality – up to 1920 x 1200 @ 60Hz

#### VE170RQ A/V Over Cat 5 Receiver with deskew function



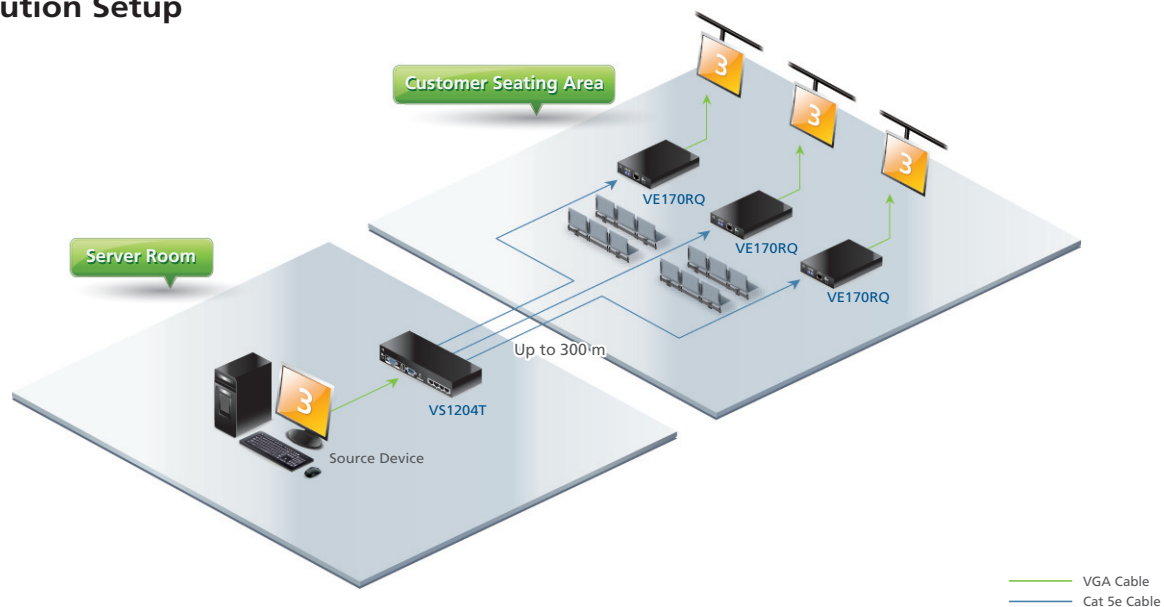
(See Page 30)

- Long distance transmission up to 300 m
- Deskew Function – synchronizes the time delay of RGB signals to compensate for distance
- Superior video quality – up to 1920x1200 @ 60Hz
- Audio enabled (mono)

### Benefits

- **Supports multiple displays** – The solution transmits A/V signals up to 300m which allows distribution of A/V content to multiple monitors anywhere in the store
- **Space saving** – Compact space-saving design solution
- **Cat 5e cabling** – Eliminates bulky conventional cables, and makes for a neat, efficient, uncluttered space
- **Easy to install** – The VS1204T has the function of distribution and extension, it allows you to setup easily
- **Superior video quality** – Adjustable gain/compensation control and deskew function reduces noise and image degradation

### Solution Setup



## Supermarket

A supermarket installed multiple monitors on different floors to display their sales promotion information. They need a system to broadcast and extend the promotion content to multiple monitors over long distances in real time.



### ATEN Solution

Media Distribution Solution delivers high quality A/V content over Cat 5e cable to multiple displays in real time

#### VS1508

8-Port Cat 5 Audio/Video Splitter



(See Page 28)

#### VB552

VGA Over Cat 5 Repeater + Audio



(See Page 28)

#### VE200R

Audio/Video Receiver

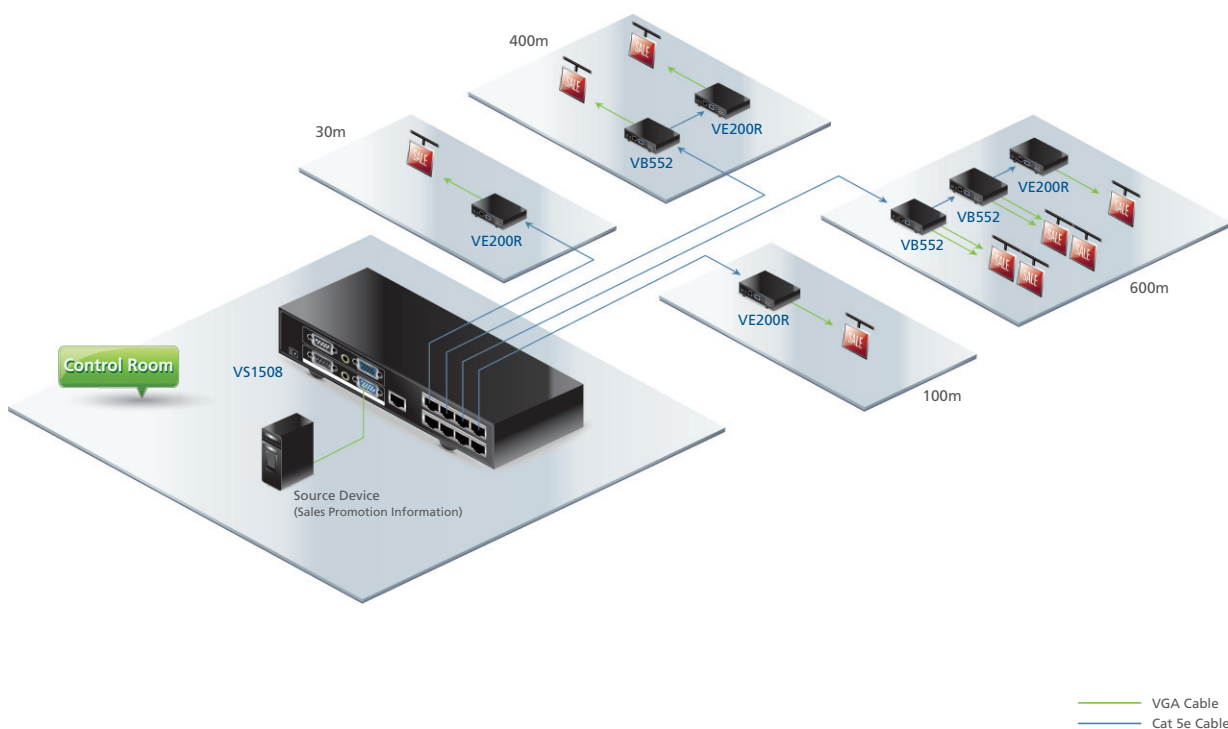


(See Page 29)

### Benefits

- **Supports multiple displays** – Using the VB552 repeater allows the video signal to be displayed on a remote monitor (up to 450m)
- **Cat 5e cabling** – Eliminates bulky conventional cables, and makes for a neat, efficient, uncluttered space
- **Space saving** – Compact space-saving solution design and installation
- **Dual A/V output** – Increases view with fewer connections and receiver units

### Solution Setup





# Superstore

The digital signage system of a superstore integrates kiosk billing functions with advertising capabilities. The kiosk computer supports dual video output, one to provide the billing process sequence on the touchscreen; while the other displays advertisements on each monitor throughout the store. The superstore is looking for a solution to broadcast the advertisements to multiple displays over long distance.



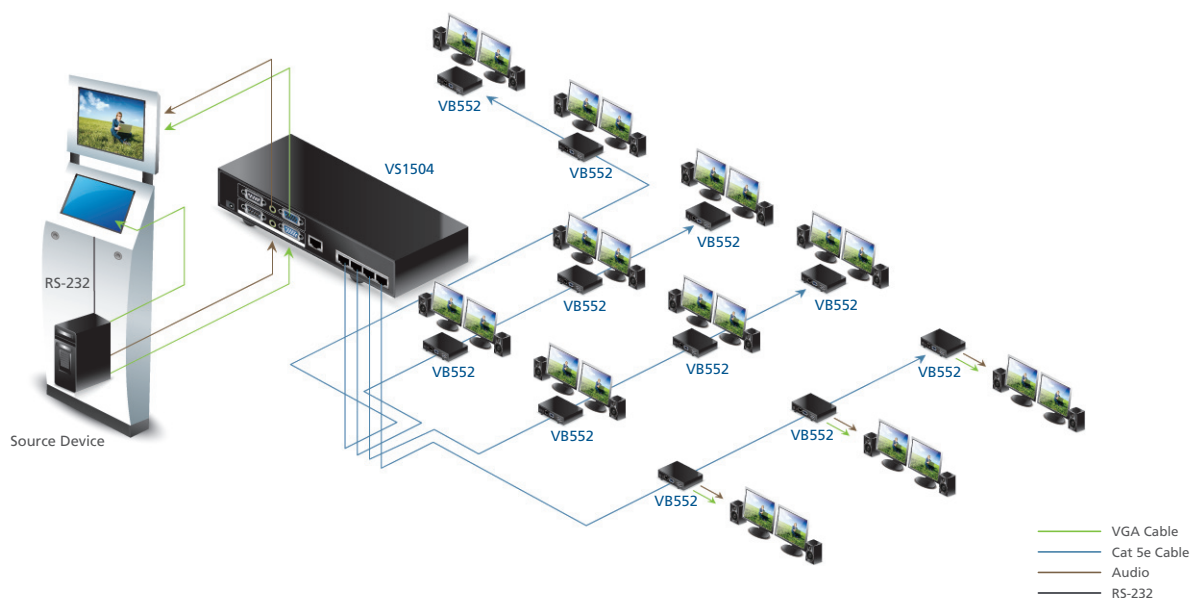
## ATEN Solution

|   |  |
|---|--|
| <p><b>VS1504</b><br/>4-Port Cat 5 Audio/Video Splitter</p>  <p>(See Page 28)</p> | <ul style="list-style-type: none"> <li>• One video input to 4 video outputs</li> <li>• Audio enabled</li> <li>• Uses Cat 5e cable to extend displays up to 150 m</li> <li>• Superior video quality – up to 1920x1200 @ 60Hz</li> </ul> |
| <p><b>VB552</b><br/>VGA Over Cat 5 Repeater + Audio</p>  <p>(See Page 28)</p>   | <ul style="list-style-type: none"> <li>• Extends the transmission range an extra 150 m</li> <li>• Dual Audio/Video output</li> <li>• Audio and serial enabled</li> </ul>   |

## Benefits

- **Flexible expansion** – Cascadable to three levels and extends signal transmission up to 450 m resulting in more kiosks
- **Superior video quality** – up to 1920 x 1200
- **Dual A/V output** – Extends signal to more digital signage systems/kiosks
- **Fast and reliable transmission** – Unlike streaming digital signage solutions that may have signal delay problems, VS1504 can easily support a kiosk’s continuous and real-time update requirements
- **Serial connectivity** – VS1504 provides two RS-232 channels that can extend the touchscreen signals of kiosks for convenience and flexibility

## Solution Setup



## KWANG IN Co., Ltd.

KWANG IN is a famous Korean advertising company that focuses on providing professional outdoor banner planning. KWANG IN helped the Sin Bundang Metro Line in Korea's capital set up digital signage installations which broadcast diverse commercial advertisements, public information and transportation data to riders. KWANG IN is looking for a professional A/V solution to meet the following requirements:

- Requires video splitters that support HDMI signal transmission
- Transmit hundreds of source signals to over 400+ monitors in metro stations
- All splitters must be installed in small spaces near the monitors requiring compact units
- Ensure splitters are reliable and easy-to-use for operation, and deliver signals with lowest failure rates when the content is updated frequently



### ATEN Solution

#### VS184

4-Port HDMI Splitter



(See Page 33)

#### VS0108H

8-Port HDMI Splitter



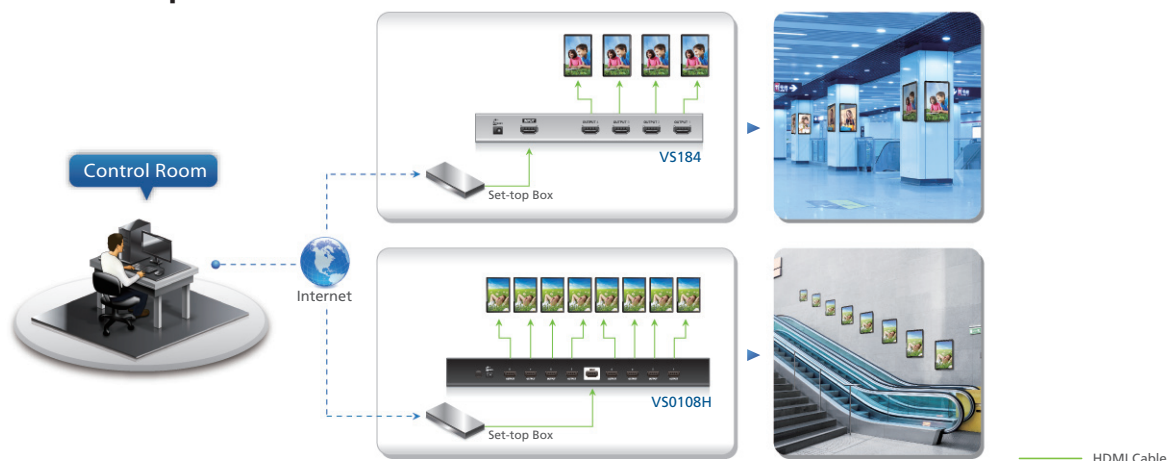
(See Page 33)

- One HDMI video input to 4 (VS184) / 8 (VS0108H) video outputs
- HDMI (3D, Deep Color)
- Support Dolby True HD and DTS HD Master Audio
- Long distance transmission – up to 20 m (24 AWG)
- Superior video quality – HDTV resolution of 480p, 720p, 1080i and 1080p (1920x1080)

### Benefits

- **Highly compatible** – Compatible with all standard HDMI devices and displays available on the market
- **High quality HDMI** – Supports 3D and HDTV for the highest video resolutions; and HDCP compatible
- **Supports multiple displays** – A single HDMI A/V source can be simultaneously transmitted and displayed on up to 8 monitors
- **Space saving** – Compact splitters are small in size, robust and flexible for any installation
- **Increase efficiency** – The device installation, operation and testing process are simple; problems are quickly resolved and digital signage content is easily updated

### Solution Setup





## Railroad Passenger Corp.

In order to provide passengers with the latest information and movies for their entertainment, a railroad passenger corp. set up 4 LCD monitors and speakers in each carriage. The company is looking for a professional A/V solution which can avoid A/V signal attenuation over long distance and remain a high video resolution of up to 1080p.



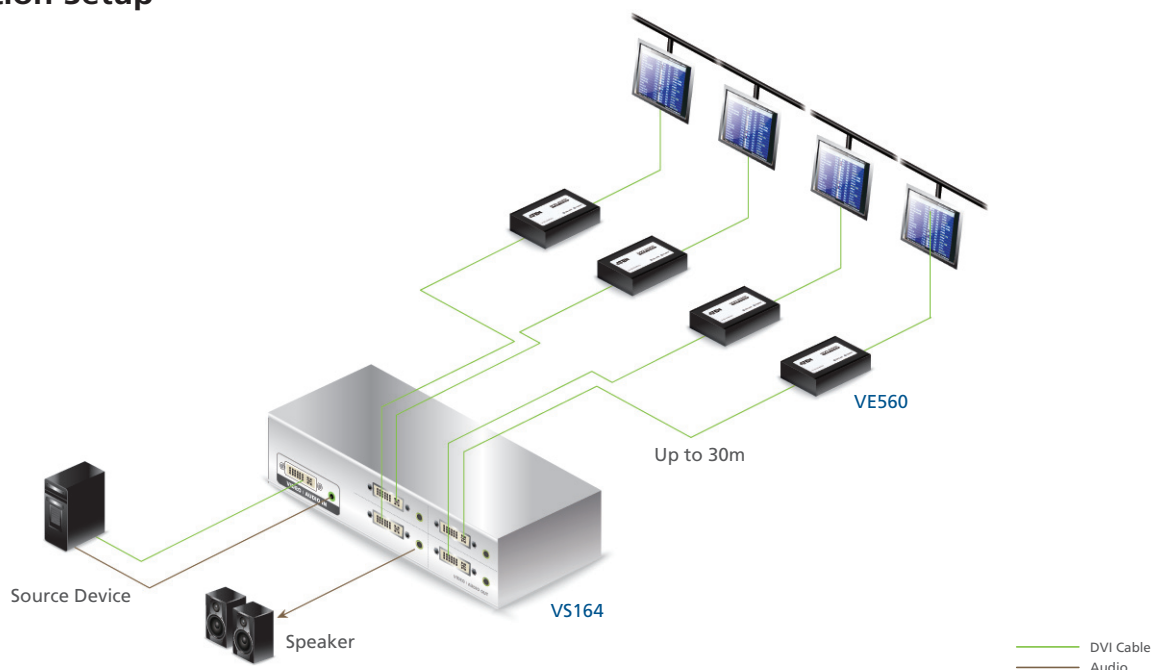
### ATEN Solution

|  |   |
|--|---|
| <p><b>VS164</b><br/>4-Port DVI Video Splitter</p>  <p>(See Page 34)</p> | <ul style="list-style-type: none"> <li>• One DVI video input to 4 video outputs</li> <li>• Fully compliant with DVI-Digital and DVI-Analog</li> <li>• Audio enabled</li> <li>• Superior video quality – up to 1920x1200 @ 60Hz</li> </ul> |
| <p><b>VE560</b><br/>DVI Booster</p>  <p>(See Page 36)</p>              | <ul style="list-style-type: none"> <li>• Supports long length cable for digital signal transmission</li> <li>• Transmission distance of up to 50 m</li> <li>• Superior video quality-HDTV resolution of up to 1920x1200</li> </ul>        |

### Benefits

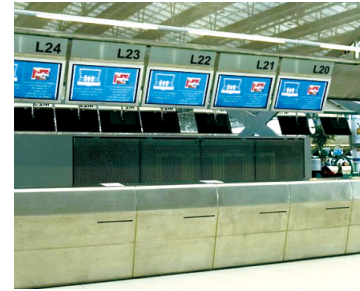
- Flexible expansion – Cascadable to three levels, the A/V signal can be delivered to up to 64 displays
- Long length cable – Up to 50 m for digital signal transmission
- Space saving – Compact splitter and booster are small in size, robust and flexible for any installation in carriage
- Superior video quality – up to 1920x1200
- Highly compatible – Easily connect to different digital video devices (e.g. LCD Monitor)

### Solution Setup



## Airport Terminal

An airport terminal plans to deliver real-time information to passengers in the customs area which is 100 meters away from the server room. They need a solution that can work over this distance and simultaneously deliver information on multiple displays.



### ATEN Solution

Media Distribution Solution delivers high quality A/V content over Cat 5e cable to multiple displays in real time

#### VS1508

8-Port Cat 5 Audio/Video Splitter



(See Page 28)

- One video input to 8 video outputs
- Audio enabled
- Uses Cat 5e cable to extend displays up to 150 m
- Superior video quality – up to 1920x1200 @ 60Hz

#### VE200R

Audio/Video Receiver



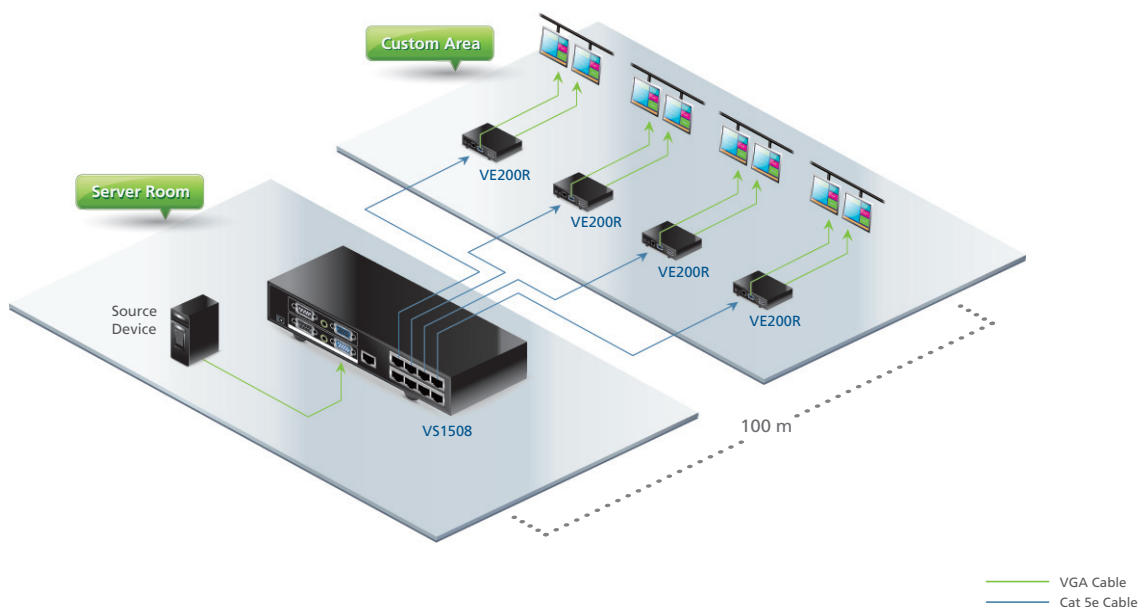
(See Page 29)

- Long distance transmission – up to 200 m
- Dual Audio/Video output
- Audio and serial enabled
- Two gain control modes for sharpest picture quality

### Benefits

- **Stable transmission** – Delivers real time information with the lowest failure rates
- **Supports multiple displays** – A single A/V source can be simultaneously transmitted and displayed on all the monitors through the installation
- **Long distance transmission** – Up to 150 meters by using Cat 5e cable

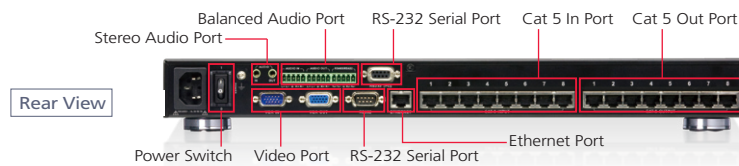
### Solution Setup



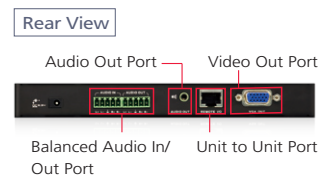
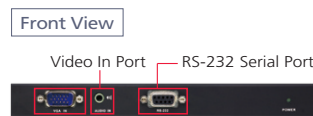
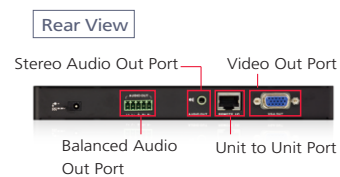
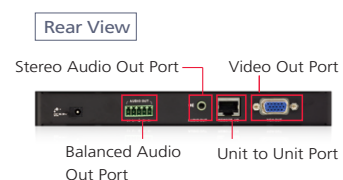
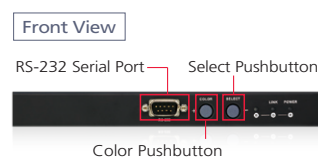


**VM0808T****8x8 Cat 5 AV Matrix Switch**

- Connects any of 8 Cat 5 AV inputs to any of 8 Cat 5 AV outputs in combination with ATEN VE500 AV Over Cat 5 Extender system
- Easily switch between multiple sources and multiple displays
- Supports additional local input and local display - provides an extra input / output source
- Flexible configuration and control
  - Local Operation: Front panel LCD display and pushbuttons + Serial controller
  - Remote Operation: Browser-based Graphical User Interface (GUI) + Telnet
- Serial RS-232 support
- Independent switching of audio and video sources - any audio source can be connected to any video source for output flexibility
- Automatic and adjustable video and audio quality

**Compatible Transmitters / Receivers****VE500T / VE500R / VE500RQ****AV Over Cat 5 Transmitter / Receiver**

- Uses Cat 5e cable to connect the Transmitter and Receiver
- Superior RGB deskew function (VE500RQ) - automatically synchronizes the time delay of RGB signals to compensate for distance
- Long Distance Transmission up to 300 m
- Superior video quality
  - VE500R: 1920x1200 @ 60Hz (30 m); 1600x1200 @ 60Hz (150 m)
  - VE500RQ: 1920x1200 @ 60Hz (150 m); 1280x1024 @ 60Hz (300 m)
- Superior audio quality - balanced audio provides flawless long-distance transmission
- Adjustable gain control - manually adjust signal strength to compensate for distance
- Supports one local and one remote displays
- Provides RS-232 channel
- Supports wide screen
- Rack Mountable

**▼ VE500T Transmitter Unit****▼ VE500R Receiver Unit****▼ VE500RQ Receiver Unit**

### VE300T / VE300R / VE300RQ

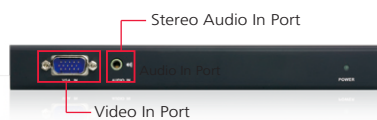
#### A/V Over Cat 5 Transmitter / Receiver



- Uses Cat 5e cable to connect the Transmitter and Receiver
- Extends A/V source in VM0808T installations
- Supports one local and one remote displays
- Superior RGB deskew function (VE300RQ) – automatically synchronizes the time delay of RGB signals to compensate for distance
- Long Distance Transmission up to 300 m
- Superior video quality
  - VE300R: 1920x1200 @ 60Hz(30 m), 1600x1200 @ 60Hz(150 m), 1280x1024 @ 60Hz(200 m)
  - VE300RQ: 1920x1200 @ 60Hz(150 m), 1280x1024 @ 60Hz(300 m)
- Automatic and adjustable gain control – adjust signal strength to compensate for distance
- Supports wide screen
- Built-in 8KV/15KV ESD protection
- Rack-mountable

#### ▼ VE300T Transmitter Unit

Front View



Rear View



#### ▼ VE300R Receiver Unit

Front View



Rear View



#### ▼ VE300RQ Receiver Unit

Front View



Rear View



| Industry Applications |  | Page Number |
|-----------------------|--|-------------|
| Corporate             | Lion Travel, Taiwan – Digital Signage System | P02         |
| Education             | Digital Class Room                           | P06         |
| Hospitality           | Night Club                                   | P12         |
| Retail                | Jewelry Store                                | P19         |

## Advanced MDS

### VS1504 / VS1508

#### 4/8-Port Cat 5 Audio/Video Splitter

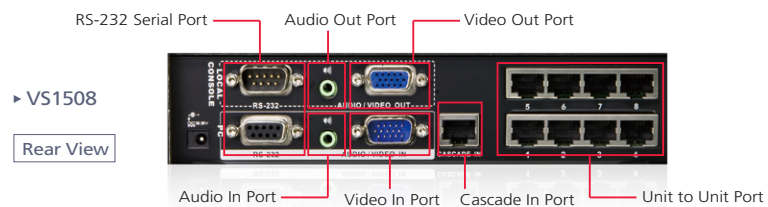


- One video input to 4/8 video outputs
- Cascadable to three levels - provides up to thousands of video signals when combined in an installation with ATEN receiving devices\*
- Audio and serial enabled
- Uses Cat 5e (or higher) cable to extend displays up to 150 m, 450 m when combined with ATEN receiving devices
- High quality video - supports 1920 x 1200 @ 60Hz
- Group screens off/on function
- Provide a RS-232 channel for selection\*\*

\* Receiving Devices

- ATEN VB552 (VGA Over Cat 5 Repeater)
- ATEN VE200R (Audio/Video Extender)

\*\* Only one RS-232 channel can be selected at a time

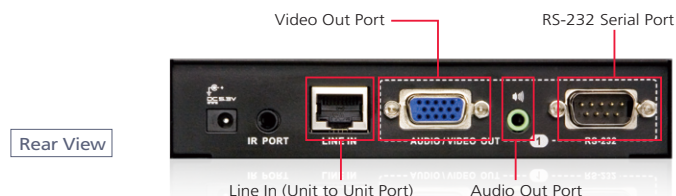


### VB552

#### VGA Over Cat 5 Repeater + Audio

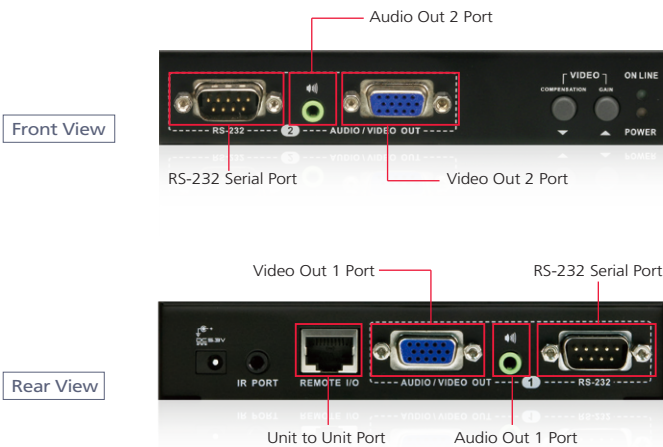


- Uses Cat 5e cable to extend audio/video signal
- Extends the transmission range an extra 150m
- High-quality video - up to 1920x1200 @ 60Hz at 30m, 1600x1200 @ 60Hz at 150m, 1280x1024 @ 60Hz at 200m
- Audio and serial enabled
- Two gain control modes for sharpest picture quality
- Video gain and compensation adjustable via OSD
- IR receiver for quick and easy video quality adjustment
- IR remote control for screen on/off and video adjustment at remote site
- Provide a RS-232 channel for selection
- Follows VESA FDMI mount standard
- Supports DDC for the local monitor
- Supports VGA, SVGA, XGA, SXGA, UXGA and multisync monitors
- For use in combination with VS1504/VS1508 Audio/ Video splitter



**VE200R****Audio / Video Receiver**

- Uses Cat 5e cable to connect the local and the remote units
- Dual Audio/video
- Supports one local and two remote displays
- High-quality video – up to 1920x1200@60Hz at 30 m, 1600x1200 @ 60Hz at 150 m, 1280x1024 @ 60Hz at 200 m
- Audio and serial enabled
- Two gain control modes for sharpest picture quality
- Video gain and compensation adjustable via OSD
- IR remote control for screen on/off and video adjustment at remote site
- Provide a RS-232 channel for selection
- Follows VESA FDMI mount standard
- Supports DDC for the local monitor
- Supports VGA, SVGA, XGA, SXGA, UXGA, WUXGA and multisync monitors

**Standard Plus MDS****VS1204T / VS1208T****4/8-Port AV Over Cat 5 Splitter**

- One audio/video input to 4/8 audio/video outputs via Cat 5e cable
- Uses Cat 5e cable to extend displays up to 300 m
- Superior video quality – up to 1920 x 1200 @ 60Hz
- Supports local display + 4/8 remote displays
- Supports up to 225 MHz bandwidth
- Audio enabled (mono)
- Built-in 8KV/15KV ESD protection
- Rack-mountable

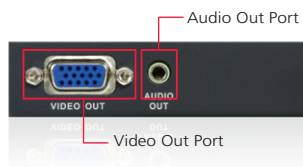




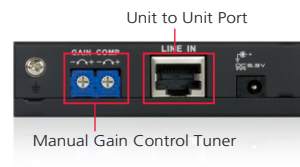
- Supports one local and one remote display
- Long distance transmission up to 300 m using Cat 5e cable
- Deskey Function (VE170RQ) – allows you to synchronize the time delay of RGB signals to compensate for distance
- Superior video quality:
  - VE170R: 1920x1200 @ 60Hz (30 m); 1600x1200 @ 60Hz (150m); 1024x768 @ 60Hz (300 m)
  - VE170RQ: 1920x1200 @ 60Hz (150 m); 1280x1024 @ 60Hz (300 m)
- Audio enabled (mono)
- Adjustable gain/compensation control
- Built-in 8KV/15KV ESD protection
- Rack-mountable

▼ VE170R Receiver Unit

Front View

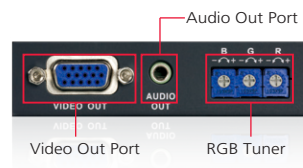


Rear View

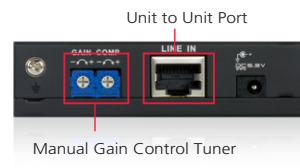


▼ VE170RQ Receiver Unit

Front View



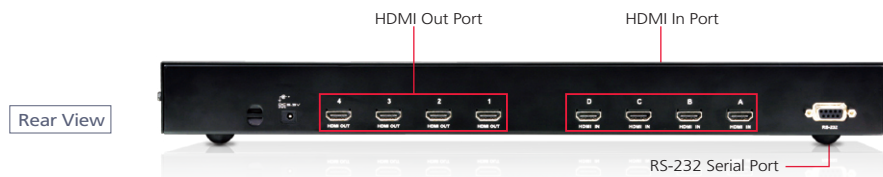
Rear View



| Industry Applications    |   | Page Number |
|--------------------------|---|-------------|
| Banking                  | Insurance Company                       | P01         |
| Corporate                | Oil & Gas Equipment and Service Company | P05         |
| Education                | Campus Broadcasting                     | P07         |
|                          | Training Facility                       | P08         |
|                          | Computer Classroom                      | P09         |
| Government               | Passport Office                         | P10         |
| Healthcare               | Media Staff Promotion (MSP), Japan      | P11         |
| Manufacturing            | Car Factory                             | P15         |
| Non-Profit Organizations | Place of Worship                        | P17         |
|                          | St Francis Church, Poland               | P18         |
| Retail                   | Cell Phone Store                        | P20         |
|                          | Supermarket                             | P21         |
|                          | Superstore                              | P22         |
| Transportation           | Airport Terminal                        | P25         |

**VM0404H****4x4 HDMI Matrix Switch**

- Connects any of four HDMI sources to any of four HDMI displays
- Toggle between HDMI sources and displays using remote control or front panel pushbuttons
- Long-distance transmission – up to 20 m (24 AWG)
- Cascade via other VM0404Hs to provide up to 64 HDMI sources/displays for digital signage systems
- Superior video quality – HDTV resolutions of 480p, 720p, 1080i, 1080p (1920x1080); VGA, SVGA, SXGA, UXGA (1600x1200), and WUXGA (1920 x 1200)
- HDMI (3D, Deep Color)
- HDCP 1.2 compatible
- Consumer Electronics Control (CEC) allows interconnected HDMI devices to communicate and respond to one remote control
- Supports Dolby True HD and DTS HD Master Audio
- Up to 60 Hz refresh rate
- Built-in bi-directional RS-232 serial remote port for high-end system control
- Power On Detection – if one HDMI source is powered off, the VM0404H will automatically switch to the next powered-on source
- DDC compatible
- Signaling rates up to 2.25 Gbits in support of 1080p display
- Easy and affordable way to add four HDMI inputs to your multiscreen home theater system
- Rack Mountable

**VS0202****2x2 Video Matrix Switch + Audio**

- Each of the 2 video outs can toggle between Source 1 and Source 2 using front panel pushbuttons.
- Duplicate and enhance video signals to up to 65 m (max.).
- Expandable: Cascade to ATEN's video splitters to support hundreds of video displays.
- Audio enabled.
- With up to 300 MHz Video Bandwidth.
- OS Support: Windows 2000, Windows XP, Linux, Mac and Sun



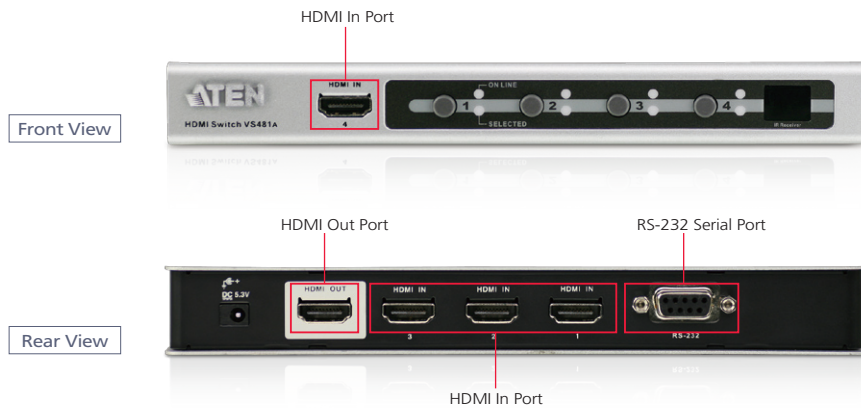
| Industry Applications |                                      | Page Number |
|-----------------------|--------------------------------------|-------------|
| Corporate             | Lion Travel, Taiwan – Show Room      | P03         |
|                       | HyperNet, Taiwan – Conference System | P04         |
| Education             | Computer Classroom                   | P09         |

**VS481A**

**4-Port HDMI Switch**



- Allows up to four HDMI AV source to be connected to one HDMI display
- Toggle between AV sources using remote control or front panel pushbuttons
- Long distance transmission - up to 20m (24 AWG)
- Superior video quality - HDTV resolutions of 480p, 720p, 1080i, 1080p (1920x1080); VGA, SVGA, SXGA, UXGA (1600x1200) and WUXGA(1920x1200)
- HDMI (3D, Deep Color)
- Supports Dolby True HD and DTS HD Master Audio
- Up to 60 Hz refresh rate
- Built-in bi-directional RS-232 serial remote port for high-end system control
- Plug-and-play - no software installation required
- DDC Compatible
- HDCP 1.2 compliant
- Signaling rates up to 2.25 Gbits in support of 1080p display
- LED indication of video source devices
- Easy and affordable way to add four HDMI inputs to your home theater system



**VS201**

**2-Port Video Switch**



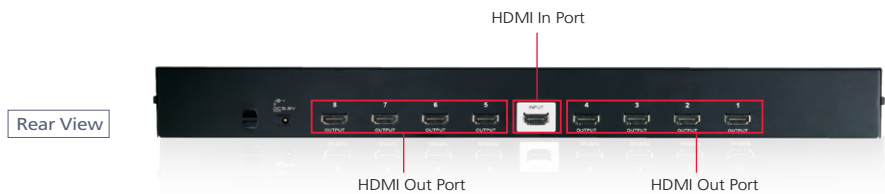
- Displays the video output of two computers on a single monitor or projector
- Automatic incoming signal selection (Auto)
- Quick and easy switching via slide switch
- Long-distance transmission – up to 65 m
- Superior video quality – up to 1920 x 1440
- Supports VGA, XGA, SVGA, UXGA and multisync monitors



| Industry Applications |                    | Page Number |
|-----------------------|--------------------|-------------|
| Education             | Computer Classroom | P09         |
| Manufacturing         | Production Line    | P16         |

**VS0108H****8-Port HDMI Splitter**

- Connects 1 HDMI video source to 8 HDMI displays at the same time
- Long distance transmission - 20 m (24 AWG)
- Cascadable to three levels
- Superior video quality - HDTV resolution of 480p, 720p, 1080i and 1080p (1920x1080); VGA, SVGA, SXGA, UXGA and WUXGA (1920x1200)
- HDMI (3D, Deep Color)
- DDC Compatible
- HDCP 1.2 compatible
- Supports Dolby True HD and DTS HD Master Audio
- Consumer Electronics Control (CEC) allows interconnected HDMI devices to communicate and respond to one remote control
- Up to 60 Hz refresh rate
- Signaling rates up to 2.25 Gbits in support of 1080p display
- Rack Mountable

**VS182 / VS184****2/4-Port HDMI Splitter**

- Connects 1 HDMI AV source to 2/4 HDMI displays at the same time
- Long distance transmission - 20 m (24 AWG)
- Cascadable to 3 levels - provides up to 64 HDMI signals
- Cascade distance: Source to Device -1.8m, Device to Device-15m, Device to Display-20m
- Superior video quality – HDTV resolution of 480p, 720p, 1080i and 1080p (1920x1080); VGA, SVGA, SXGA, UXGA (1600x1200), WUXGA (1920x1200)
- HDMI (3D, Deep Color)
- DDC compatible
- HDCP 1.2 compatible
- Signaling rates up to 2.25Gbits in support of 1080p display
- All-metal casing
- LED indication of display devices
- Plug-and-play - no software installation required
- Easy and affordable way to take your home theater system to the next level, or upgrade presentations, training, and video broadcasts in a corporate, educational, or commercial setting





**VS162 / VS164**

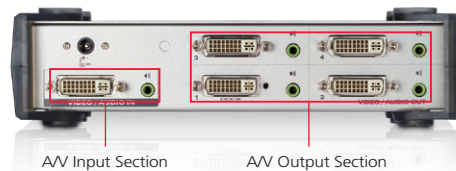
**2/4-Port DVI Video Splitter**



- Connects computers with DVI graphics to multiple DVI compatible monitors or projectors
- Fully compliant with DVI-Digital and DVI-Analog
- Cascadable to 3 levels - provides up to 8/64 video signals
- Cascade distance: Source to Device -1.8m, Device to Device-5m, Device to Display-5m
- Maintains highest single link video resolution (up to 1920 x 1200)
- DDC, DDC2, DDC2B Compatible (Port 1 only).
- HDCP 1.2 Compliant
- Supports DDWG (Digital Display Working Group) standard for DVI compliant monitors
- Speaker enabled for audio enjoyment
- Installs in minutes

► VS164

Rear View



**VS92A / VS94A / VS98A**

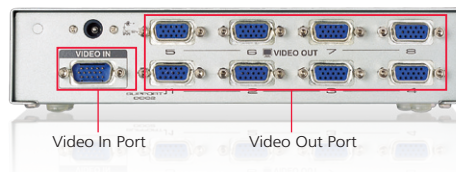
**2/4/8-Port Video Splitter**



- One video input to 2/4/8 video outputs
- Long-distance transmission - up to 65 m
- Cascadable to 3 levels - provides up to 8/64/512 video signals
- Superior video quality - 1920 x 1440 @ 60Hz
- DDC, DDC2, DDC2B Compatible (Port 1 only)
- Supports VGA, XGA, SVGA, UXGA, WUXGA and multisync monitors
- Supports 350 MHz bandwidth
- All metal casing

► VS98A

Rear View



| Industry Applications |                                | Page Number |
|-----------------------|--------------------------------|-------------|
| Education             | Training Facility              | P08         |
|                       | Computer Classroom             | P09         |
| Hospitality           | Hilton Conrad, Dubai, UAE      | P13         |
|                       | Hotel                          | P14         |
| Transportation        | KWANG IN Co., Ltd., Korea      | P23         |
|                       | Railroad Passenger Corporation | P24         |

## VE800

## HDMI Extender



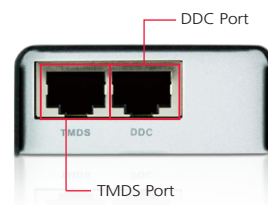
- Extends the distance between HDMI source and HDMI display
- 8 segment equalization adjustment switch
- Uses Cat 5e cable to achieve long distance transmission
- Extend 1080p by 40m; extend 1080i (HDTV) by 60m (1080p or 1080i)
- Superior video quality – 1920 x 1200, up to 1080p
- HDMI (3D, Deep Color)
- DDC compatible
- HDCP 1.2 Compatible

## ▼ VE800L Local Unit

Front View

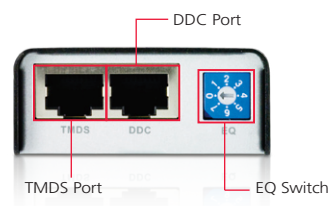
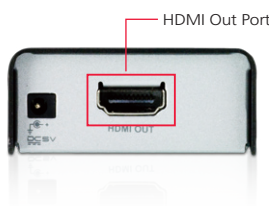


Rear View



## ▼ VE800R Remote Unit

Front View



## VE022

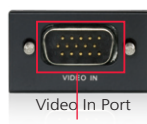
## Mini Cat 5 A/V Extender



- Uses Cat 5e cable to extend audio and video transmission up to 150 m
- Superior video quality – screen resolutions include 1920 x 1200 @ 60Hz (30 m), 1600 x 1200 @ 60Hz (100 m) and 1280 x 1024 @ 60Hz (150 m)
- Adjustable Gain Control lets you manually adjust signal strength to compensate for distance
- Audio enabled (mono)
- No external power supply needed for transmitter
- Convenient docking interface for mounting the VE022 on the display device
- Eliminates the need for bulky VGA cables
- Easy installation

## ▼ VE022T Transmitter

Front View

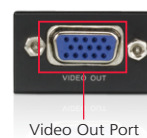


Rear View

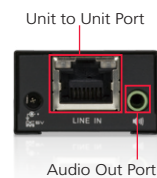


## ▼ VE022R Receiver

Front View



Rear View



**VE170T / VE170RQ**

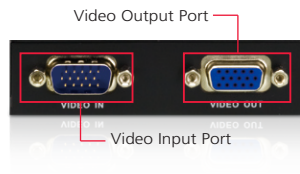
**AV Over Cat 5 Transmitter / Receiver**



- Supports one local and one remote display
- Long distance transmission up to 300 m using Cat 5e cable
- Deskew Function (VE170RQ) – allows you to synchronize the time delay of RGB signals to compensate for distance
- Superior video quality:
  - VE170R: 1920x1200 @ 60Hz (30 m); 1600x1200 @ 60Hz (150 m); 1024x76 @ 60Hz (300 m)
  - VE170RQ: 1920x1200 @ 60Hz (150 m); 1280x1024 @ 60Hz (300 m)
- Audio enabled (mono)
- Adjustable gain/compensation control
- Built-in 8KV/15KV ESD protection
- Rack-mountable

▼ **VE170T Transmitter Unit**

Front View

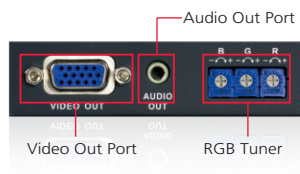


Rear View

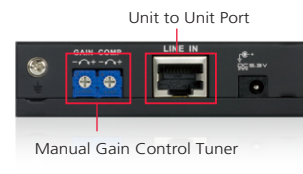


▼ **VE170RQ Receiver Unit**

Front View



Rear View



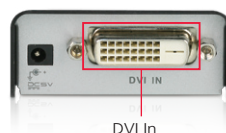
**VE560**

**DVI Booster**



- Connects computers with DVI graphics to multiple DVI compatible monitors or projectors
- One unit handles digital video extension and supports long length cable (24 AWG cable) for digital signal transmission
- Transmission distance of up to 50m
- Fully compliant with DVI specifications
- Supports DDWG standard for DVI compliant monitors
- Supports high resolution: Supports HDTV resolution of 480p, 720p, 1080i and 1080p & Supports VGA, SVGA, SXGA(1280x1024), UXGA(1600x1200) and WUXGA(1920x1200)
- HDCP 1.2 compliant
- Plug and play, easy to install
- Compact Design
- Easily connects to different digital video devices(e.g. Set-top Box, LCD Monitor, Projector, LCD TVs)
- Multiplatform support: Windows 2000/XP/Vista, Linux, Mac and SUN

Side View 1



Side View 2



**VE510****Video Synchronizer**

- Uses Cat 5e cable to extend audio and video transmission up to 150 m
- Connects VGA based video devices to VGA displays and enhances the video quality in long distance installations
- Compensates for a delay and synchronizes signal delays
- RGB delay tuner-manually synchronizes the RGB signals via pushbuttons
- Skew equalization
- Memory set button-allows the storing and recalling of user settings
- LED display for status monitoring
- Easy to install
- Hot pluggable
- Compact Size-Din Rail and Wall mountable
- Compatible with ATEN KVM Extenders, Video Extenders and KVM Switches

Front View



VGA Out Port

Rear View



VGA In Port

|                | Industry Applications                        | Page Number |
|----------------|--|-------------|
| Corporate      | Lion Travel, Taiwan – Digital Signage System | P02         |
|                | Lion Travel, Taiwan – Show Room              | P03         |
| Education      | Campus Broadcasting                          | P07         |
|                | Training Facility                            | P08         |
|                | Computer Classroom                           | P09         |
| Hospitality    | Hotel  | P14         |
| Transportation | Railroad Passenger Corporation               | P24         |

**2L-2801****Low Skew Cat 5e Cable**

Analog video presents a high quality image when the computer is directly connected to the monitor by short cables. "Skew" is the color phase and time errors that occur when R/G/B video signals are sent long distance over Cat 5e cables, and this can result in smeared, unsharp, color-fringed images. To remedy this distortion, ATEN developed a Low skew Cat 5e cable. This high performance cable is suitable for the audio and video transmission of a wide range of video and KVM Extenders. To eliminate blur and bleeding images and to ensure clarity of your video transmissions, use 2L-2801 Low Skew Cat 5e Cable.

- Supports high quality RGB video transmission
- Contains 305 m/1000 ft of low skew cable
- Delay Skew: 1 ~ 350 MHz 20nS/100m Max.
- Outer Jacket Material: FR PVC
- Outer Shield Material: Unshielded
- Conductor Material: 24 AWG solid bare copper
- Compatible with ATEN analog Cat 5 video extenders, KVM extenders, and Cat 5 KVM switches
- UL, ETL approved



|             | Industry Applications | Page Number |
|-------------|-----------------------|-------------|
| Banking     | Insurance Company     | P01         |
| Hospitality | Hotel                 | P14         |

**KH1516i****16-Port Cat 5 High-Density KVM Over the NET™**

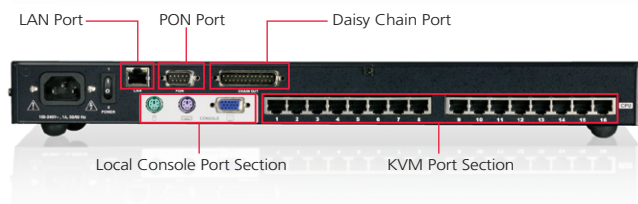
- High port density – RJ-45 connectors for up to 16 ports in a 1U housing
- Remotely access computers via LAN, WAN, or the Internet
- Daisy-chain up to 15 additional units - control up to 256 computers from a single console
- Superior video quality - 1600 x 1200 @ 60Hz at up to 30m and 1280 x 1024 @ 75Hz at up to 40m
- Internet browser access; Windows client and Java client provided; Java client works with most operating systems
- Supports PS/2, USB, Sun, and Serial connectivity
- Up to 64 user accounts - up to 32 concurrent logins
- Panel Array Mode - view all 16-ports at the same time
- Message Board for communication among remote users
- Windows-based Log Server
- 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
- Multiplatform support: Windows, Linux, Mac, Unix, SUN and FreeBSD

Front View



Firmware Upgrade Port

Rear View



LAN Port

PON Port

Daisy Chain Port

Local Console Port Section

KVM Port Section

**CS9138****8-Port PS/2 KVM Switch**

- One PS/2 console controls 8 computers
- Cascadable up to 3 levels - provides up to 512 computers
- Computer selection via front panel pushbuttons, hotkeys or On Screen Display (OSD)
- Superior video quality: up to 1920 x 1440; DDC2B
- Keyboard and mouse emulation for error free booting
- Supports Microsoft IntelliMouse, Logitech MouseMan, FirstMouse, IBM Scrollpoint Mouse
- OSD automatically adjusts to resolution changes
- Auto Scan function to monitor computer operation
- Available in silver and black
- Special design for easy stacking
- Rack mountable in 19" (1U) system rack
- Multiplatform support: Windows, Linux and FreeBSD

Rear View



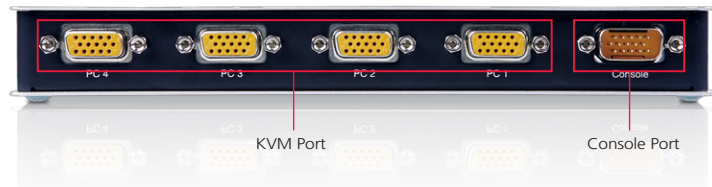
Console Port Section

Computer Port Section

**CS74E****4-Port PS/2 KVM Switch**

- One PS/2 console controls 4 computers
- Compact, modern case for convenient attractive placement
- Superior video quality - up to 2048 x 1536; DDC2B
- Custom connector layout
- Power on detection - automatically switches to the first powered on port
- Computer selection via front panel pushbuttons and hotkeys
- Supports Microsoft IntelliMouse and the scrolling wheel on most mice
- Auto Scan function to monitor computer operation
- Non-powered
- ATEN ASIC inside
- OS Support: Windows 2000, Windows XP, Windows Vista, LINUX and FreeBSD

Rear View



|           | Industry Applications                        | Page Number |
|-----------|--|-------------|
| Corporate | Lion Travel, Taiwan – Digital Signage System | P02         |
| Education | Training Facility                            | P08         |
|           | Computer Classroom                           | P09         |

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