



Simply Better Connections

# Solution guide

IT management

Control rooms

Conference and meeting rooms

AV signal distribution

Smart desktop tools





## Solution provider since 1979

ATEN develops hardware for pro AV and IT, providing solid signal distribution and central management solutions since 1979. You can find ATEN almost everywhere in your daily life. Keeping pace with market innovations, ATEN launches new models on a monthly base, targeting mainly SMB and enterprises, but also home appliances.

Did you know ATEN was established in 1979 and has since invested thoroughly in its own demo & training centers, offices, R&D, manufacturing and warehouses around the globe?

Moreover, ATEN products are distributed through a broad network of partners to ensure fast availability and solid installation support across Europe.

The logo for 'AVIT meets' is located in a green circular graphic. 'AVIT' is written in a large, bold, blue font, and 'meets' is written in a smaller, blue font below it, with a green underline. The entire logo is set against a white background within the green circle.

**AVIT**  
meets

Your Premier Partner  
Since 1979



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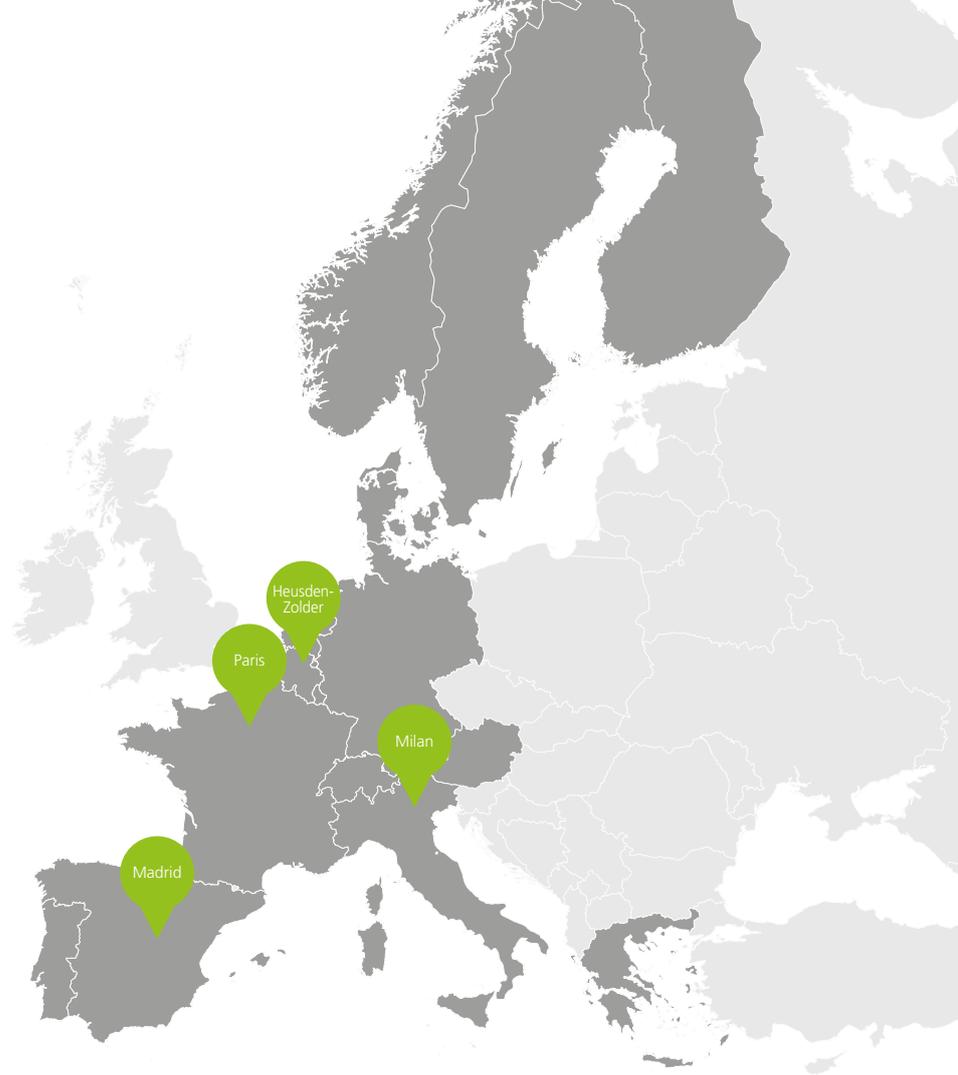
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### **40 years, the story continues...**

70-71



Get hands-on with  
ATEN: Visit us on the  
road or at a Demo &  
Training Center.



# Get trained

To support its local partners, ATEN opened several Demo & Training Centers to provide testing and training facilities for resellers, integrators and consultants, as well as their customers. These centers are open for visit each day of the week.

Visitors can register for a monthly or customized training. During these sessions, the ATEN sales and technical engineers will assist in working with the products and share insights, best practices and installation tips. Bringing third party products is encouraged to test and experience the ATEN interoperability.

In 2018-2019, Demo & Training Centers opened in Italy, Spain and France. In addition, ATEN hosts trainings and demonstrations in a variety of events throughout Europe on a monthly base. Visit [www.aten.com](http://www.aten.com) to discover where to meet ATEN closest to you.

- ✔ Integrated Systems Europe (Amsterdam)
- ✔ World ATM Congress (Madrid)
- ✔ Internationale Funkausstellung (Berlin)



We value our close cooperation with local installers and resellers throughout Europe.

[www.aten.com/  
your-training-center](http://www.aten.com/your-training-center)

# IT Management



From small to large server rooms and datacenters, ATEN can provide local and worldwide over IP management for IT managers on the road, at home or at the office.

# Key highlights

## Remote management

- Out-of-band access
- Saving travel cost and time
- Limiting physical access to the server room
- Bios-level access for trouble shooting

## Flexibility

- Remote rebooting
- System scalability
- Advanced user settings
- One or multiple simultaneous users
- Full HD in every datacenter

## Convenient design for large installations

- Intuitive user interfaces
- High density KVM switches
- Local and remote workstations
- Commonly used Cat. and KVM cables
- Computer access in extreme environments

## Ensured security

- Operate on hardware level
- Network, power and control redundancy
- Military-graded security levels
- Encrypted communication
- Adjustable authority level and one-time password

# Featured KVM and smart energy products

## Serial console server

### SN0132CO

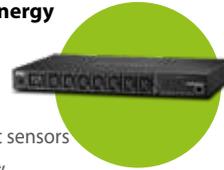
- 32 ports
- data buffering
- advanced user settings
- dual network, dual power
- 16 simultaneous logins per port
- CC2000 all-inclusive management software
- direct connection to Cisco switches
- online detection of connected serial devices



## PDU for intelligent energy management

### PE8208G / eco DC

- control by outlet
- overload protection
- optional environment sensors
- 8 outlets (7x C13: 10A, 1x C19: 16A)
- free eco DC management software included



## HDBaseT KVM extender

### CE820 / CE920

- HDCP 2.2 support
- 4096 x 2160 (100m)
- 1920 x 1080 (150m)
- wake PC via push button
- HDMI (CE820), DisplayPort (CE920), Audio, USB2.0, RS-232 and Ethernet over a single Cat. 5e/6A cable



## KVM over IP switch

### KN8164V

- 1920 x 1200
- virtual media
- 64 KVM ports, 9 bus
- dual network, dual power
- advanced security and user settings
- multilingual and on-screen keyboard
- panel array mode and broadcast mode
- CC2000 all-inclusive management software



## 4K HDMI KVM over IP extender

### KE8950 / KE8952 / CCKM

- PoE (KE8952)
- push and pull video
- Boundless Switching
- local and remote console
- optional fiber SFP module
- enhanced panel array mode
- remote control via OSD, hotkeys
- advanced security and user settings
- videowall function (up to 64 displays)
- CCKM matrix manager lite software included



## Centralized datacenter management software

### CC2000

- powerful security standards
- task management and scheduling
- single sign-on to manage all devices
- blade server and virtual media support
- multiple flexible logging and reporting options
- seamless integration with: KVM over IP switches, PDU's, serial console servers and 3<sup>rd</sup> party devices



## Short depth LCD console

### CL3800NW

- 1920 x 1080
- USB peripherals
- DVI-D, VGA, HDMI
- second console port
- 18.5in, Short depth (51.42cm)
- multilingual keyboard support
- dual rail, rack mountable, 1U



## LCD KVM over IP switch

### KL1108V / KL1116V

- 1920 x 1200
- 8 / 16 ports, 2 bus
- dual-rail KVM console
- dual network, virtual media
- advanced security and user settings
- panel array mode and broadcast mode
- CC2000 all-inclusive management software



## Professional online UPS

### OL3000HV

- 8x C13
- smart battery charger
- hot swappable battery
- output power factor is 1 (3000VA, 3000W)
- SNMP, USB and RS-232 communication
- programmable power management outlets
- ensures save shutdown of connected servers



# Scenarios

## Datacenter maintenance

Being it contracted or self-hosted, servers never stand alone in processing large amounts of data. To speed up maintenance and trouble-shooting, a KVM switch guarantees access and control to over 60 servers at once.

A KVM switch visualises all connected computers in a single view and it can broadcast operations simultaneously to all or selected devices. ATEN KVM over IP switches allow up to 9 simultaneous users to work on the servers, more users are offered viewing status.

Depending on purpose as well as security levels, closed-circuit, out-of-band or over IP connections are installed to centralize the management of multiple servers. ATEN's KVM over IP switches are tested against military security standard, reaching FIPS-140-2 lvl 1. ATEN's intelligent power units can push critical alerts for individual servers in case of incidents.

- ✔ Out-of-band access
- ✔ Simultaneous users
- ✔ Large infrastructure management

## Supermarket cash system

The IT installation of a supermarket chainstore is remotely managed by a central IT department. For each store, this department handles daily maintenance, alert monitoring, diagnosis and problemsolving.

ATEN's CC2000 software centralizes the management of several of the in-store IP devices. With a single login, an IT manager can access all connected IP addresses. One of the addresses links to a KVM over IP switch, which visualizes several servers in a single view for efficient alert monitoring.

The servers support the point-of-sales operations. In each supermarket, they are neatly connected to cashdesk-consoles by KVM extenders. Depending on each cashdesk's needs, the KVM extenders support serial, USB and Infrared connections. The entire setup avoids local employees to work on IT, while the IT managers save time and travelling-costs.

- ✔ Remote problem-solving
- ✔ Centralized IT management
- ✔ Distributed IT infrastructure

# Scenarios

## Offshore IT management

The middle of the sea can be a harsh environment for servers and other computer hardware. Windmill platforms however still rely on reliable solutions to manage heavy machinery and complex software packages.

A central operator monitors data from multiple locations on the platform to ensure safety. In addition, remote access to servers on land needs to be provided in order to ensure a smooth daily operation. This connection enables clear communication and remote management.

- ✔ **Instant monitoring**
- ✔ **Remote access to multiple servers**
- ✔ **IT management over IP**

## Public transport calculation system

A powerful transport management system calculates public travelling schemes based on several variables, such as passenger location, safety measures, railroad and carriage occupancy.

The system is hosted by a powerful mainframe. To be operation-effective, the datacenter and its back-up are installed in two central and secured locations. Each mainframe is accessible by an ATEN KVM over IP unit, connected to two network and power suppliers. This guarantees 24/7 system up-time.

Operators, stationed in local trainstations and regional control rooms, access the system over IP to update real-time data. National transport schedules and operations stay tuned at all times.

- ✔ **Remote access**
- ✔ **Central management**
- ✔ **Ensured system up-time**

# Experience KVM over IP online 24/7

KVM over IP solutions allow you to monitor, access and manage one or multiple computers/servers from any location in the world. Users can log in from a local console or remote workstation by using a web browser, regardless of the platform/operating system used. A KVM solution can be installed as an extra layer of security, preventing first level access to your system.

Experience KVM online: you will find one model for each ATEN KVM over IP category. Download a guide with tips and tricks to experience working remotely on a computer through a KVM switch or control unit with basic user capabilities. Willing to test a KVM switch with all user rights? Pass by one of our Demo & Training Centers or request a sample.

[www.aten.com/KVM-experience](http://www.aten.com/KVM-experience)



**KN2116VA**  
Multi-user KVM  
over IP switch



**CL5708i**  
LCD KVM over  
IP switch



**CS1716i**  
KVM over IP switch



**CN8600**  
KVM over IP  
control unit



**CV211**  
Laptop USB KVM  
Console Crash Cart  
Adapter

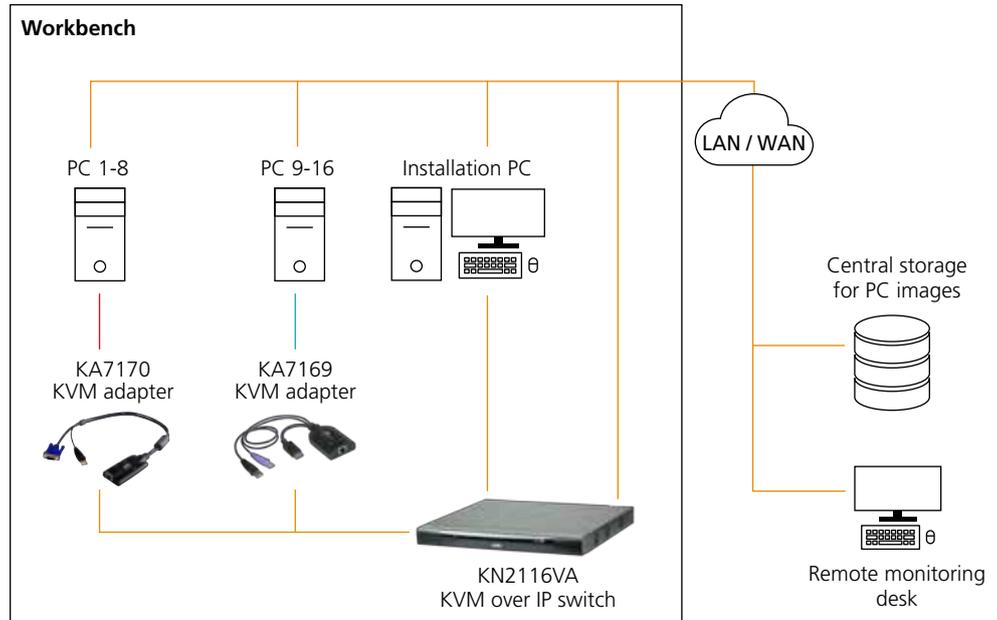
# ATEN in action – Computer installation lines, Germany

## IT consultancy and maintenance

A branch office of one of Europe's largest IT installers and consultants needed a way to quickly and easily install and update servers, desktops and laptops. The installation process happens in a hall at around 160 workbenches with up to 8 or 16 simultaneous computer installations per bench.

A KVM switch per bench broadcasts the installation steps to each of the computers taking files from a central storage system.

— DisplayPort Cable — Cat5 Cable — VGA Cable



### Requirements

- **Process enhancement:** shorten the time to install and update a large amount of PC's or servers.
- **OS flexibility:** require accessibility to a variety of operating systems.
- **BIOS access**

### Products

- 99x KN2116VA - **KVM over IP switch, 3 bus, 16 ports**
- 82x KN1108VA - **KVM over IP switch, 2 bus, 8 ports**
- 2240x KA7170 - **KVM adapter**
- 450 x KA7169 - **KVM adapter with virtual media support**

### Benefits

- **PadClient** – an app which allows swift surveillance and access to the servers through the KVM switches.
- **Resolution detection** – the EDID mode of the dongles enables each server to efficiently detect resolutions.
- **Broadcasting mode** – allows the installer to simultaneously handle and copy actions to all computers at once.



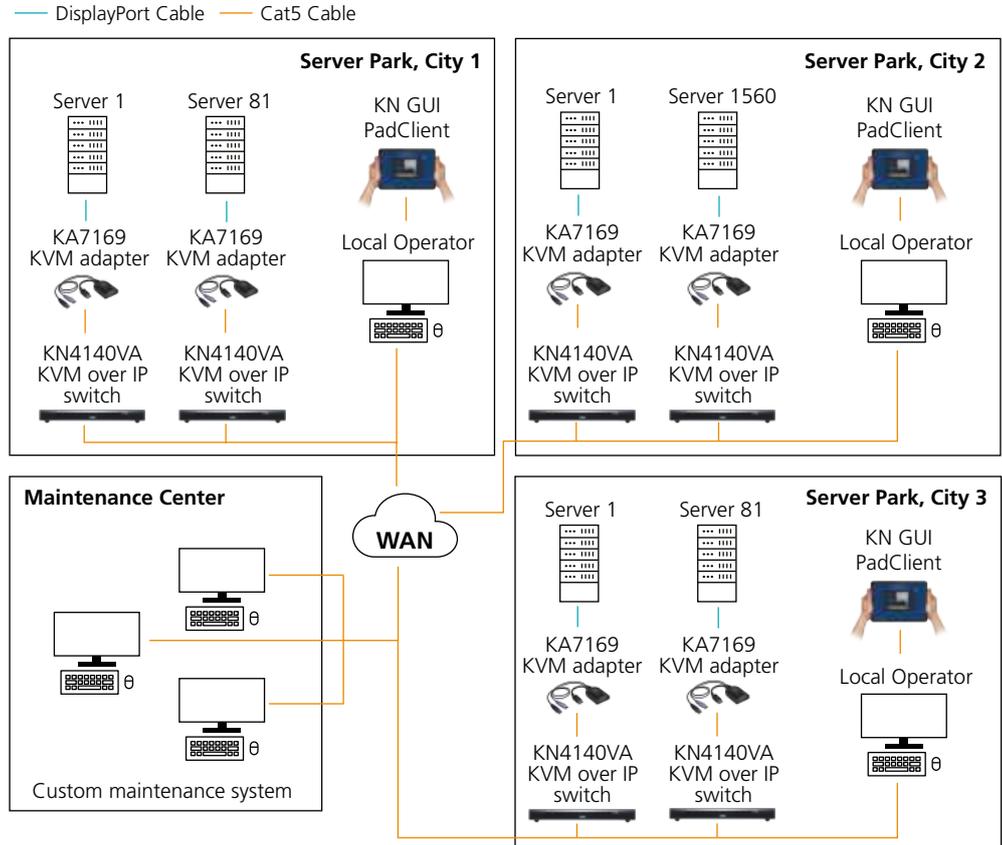
# ATEN in action – Telecom operator, datacenter, Germany



## Mass server management in a customer service datacenter

Merging a technical and customer service department lead to the re-arrangement of several server parks, located in 3 different cities.

The central maintenance center, in charge of all datacenters, manages a mass amount of servers simultaneously, thanks to multiple KVM over IP switches. A custom management system helps the IT managers to automate many daily operational processes. Only in case of irregularities, the IT managers are notified to check what is going wrong. They can take immediate action over IP or on-the-spot.



## Requirements

- **Central management:** remote access to all server parks from a central maintenance office.
- **Local management:** local access to individual servers in case of critical events.
- **Secure access:** the KVM switch provides for an extra layer of hardware protection for the datacenter, but is also equipped with extra security measures ensuring its compliance with the FIPS-140-2 norm.

## Products

- 79x KN4140VA - **KVM over IP switch, 5 bus, 40 ports**
- 3160x KA7169 - **KVM adapter with virtual media support**

## Benefits

- **PadClient** – an app which allows swift surveillance and access to the servers through the KVM switches.
- **Resolution detection** – the EDID mode of the dongles enables each server to efficiently detect resolutions.
- **Broadcasting mode** – allows the installer to simultaneously handle and copy actions to all computers at once.

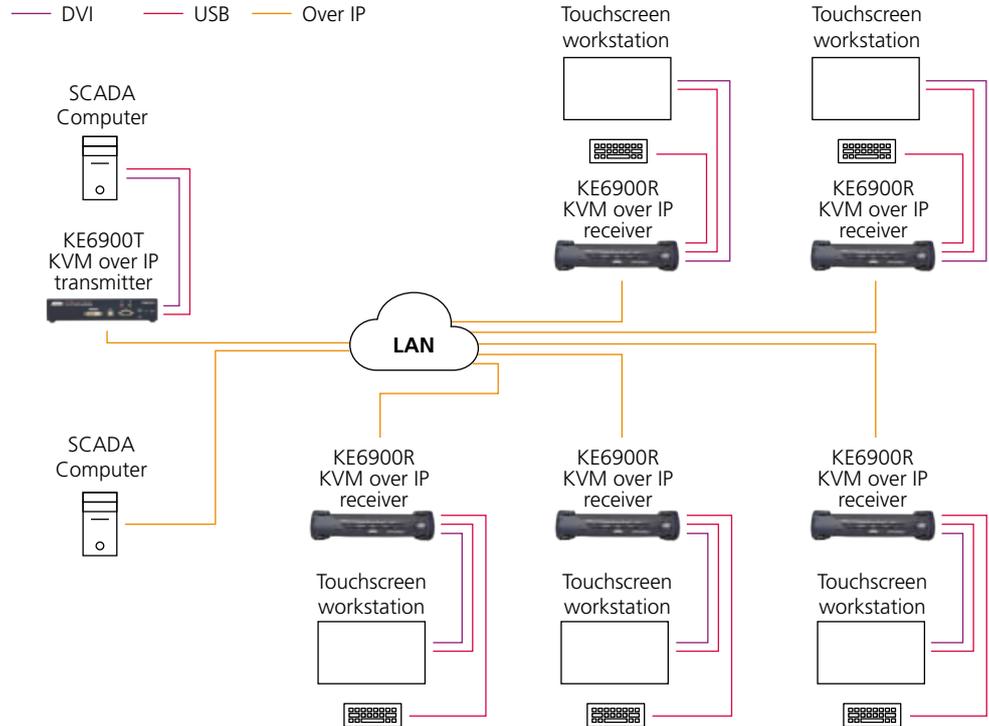


# ATEN in action – Computer access system, Italy

## Multi-workstation computer access

An Italian SI, who develops and builds CNC-workcenters with multiple operator consoles, built a Scada PC with access from 5 different workstations. The workstations needed to be equipped with a touchscreen/keyboard and were allowed exclusive access one at-a-time.

The Scada PC, where the CCKM matrix software has been installed, enables or restricts access from each workstation during a period of at least 10min. An automation PLC manages the ports. This all happens through machine-to-machine communication.



### Requirements

- **Virtual matrix management:** the automation PLC can enable / disable someone at one of the 5 workstations to « occupy » the computer for a period of at least 10mins.
- **Scalability:** more workstations can be added whenever necessary.
- **Secure access:** the main controller (PLC) need to enable / disable each remote console depending on the workcenter status.

### Products

- 1x KE6900T - **KVM over IP transmitter**
- 5x KE6900R - **KVM over IP receiver**
- 1x CCKM - **Matrix management software**

### Benefits

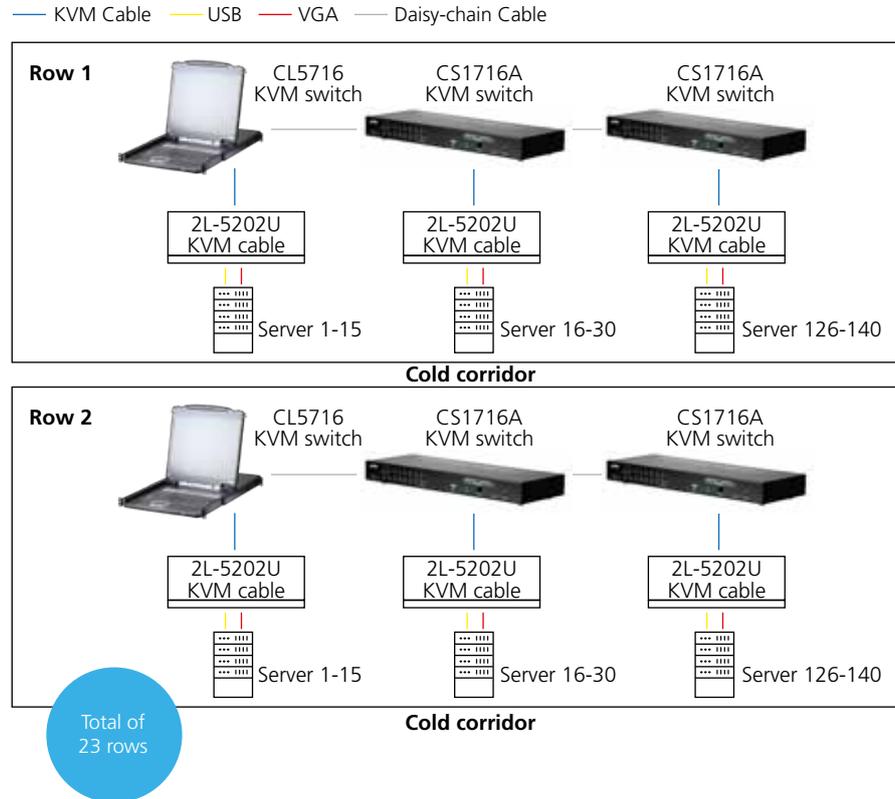
- **Multiple access modes** – exclusive access, occupying while others can still view, shared access or view-only mode.
- **Secure access** – the extra hardware level enhances the security-level.
- **Touchscreen support**



# ATEN in action – Public transport, datacenter management, France

## Multi-server management, on-site access

The operations of a French public transport company are supported by a 23-row large datacenter, which hosts almost 6.000 servers. An LCD console, placed at the beginning of each row, provides visual access to each of the servers. Thanks to a KVM switch at the top of each rack, the servers can be managed and accessed in group, speeding up the surveillance process.



### Requirements

- **Local access:** visualising and managing multiple servers on-the-spot, inside the datacenter.
- **Mass management:** providing efficient access to a large quantity of servers.

### Products

- 24x CL5716 - **KVM switch with LCD console, 16 ports**
- 352x CS1716A - **KVM switch, 16 ports**
- 5992x 2L-5202U - **KVM cable**

### Benefits

- **Broadcast mode** – ability to broadcast a set of actions to all servers connected to a single KVM switch.
- **Expandable** – control more than 16 servers at once by daisy-chaining multiple KVM switches.
- **Saving space** – by choosing for a combined solution with a LCD console with built-in KVM switch that fit 1U rack-space.



# Control room management



The finest details can make the difference in your control room. ATEN provides complete control room hardware solutions, combining KVM and AV matrix switches, central hardware control and intelligent energy management.

# Key highlights

## Ensured security

- Adjustable authority levels
- Encrypted communication

## Remote management

- Secure storage
- Stable, reliable connectivity
- Limiting noise
- Mobile access & control

## Flexible workspaces

- Unlimited scalability
- Efficient space management
- Flexible deployment and management
- Seamless AV and IT integration
- Videowall capacity

## Real-time monitoring

- Push & Pull video
- Multi-view options
- Seamless switching
- High resolution



# Featured KVM and pro AV products

## 4K HDMI KVM over IP extender

KE8950 / KE8952

- PoE (KE8952)
- push and pull video
- Boundless Switching
- local and remote console
- optional fiber SFP module
- enhanced panel array mode
- remote control via OSD, hotkeys
- advanced security and user settings
- videowall function (up to 64 displays)
- CCKM matrix manager lite software included



## Modular matrix switches

VM1600A / VM3200

- 4096 x 2160
- power redundancy
- seamless switching
- 32/64 connection profiles
- calendar-based scheduling
- videowall and scaler function
- live stream function (VM3200)
- 16/32 inputs and 16/32 outputs
  - HDMI, DVI-D, HDBaseT, 3G-SDI, VGA boards available
- control via WebGUI, IR, RS-232, Telnet



## Hardware controllers

VK1100 / VK2100

- various interfaces
  - 2 / 6 Serial ports
  - 2 / 4 IR / Serial ports
  - 4 Relay channels
  - 4 I/O Channels (VK2100)
  - 1 Ethernet port
- KNX support
- 2 app licences included
- 4 DC 12V outputs (24W)
- optional: expansion boxes, keypad



## HDBaseT KVM extender

CE820 / CE920

- HDCP 2.2 support
- 4096 x 2160 (100m)
- 1920 x 1080 (150m)
- wake PC via pushbutton
- HDMI (CE820), DisplayPort (CE920), Audio, USB2.0, RS-232 and Ethernet over a single Cat. 5e/6A cable



HDBT

## HDMI multi-view KVM switch

CM1284

- 4096 x 2160
- 4 ports
- dual output
- Boundless Switching
- daisy chainable and cascadable
- control: front panel, OSD, hotkeys, IR and RS-232
- multi-view modes: Quad View, PiP, PbP, PoP



## PDU for intelligent energy management

PE8208G / eco DC

- control by outlet
- overload protection
- optional environment sensors
- 8 outlets (7x C13: 10A, 1x C19: 16A)
- free eco DC management software included



## DVI KVM switch

CS1768

- 8 ports
- 1920 x 1200
- HDCP support
- broadcast mode
- USB2.0 hub and audio
- independent keyboard, video, mouse and USB switching



## HDMI multi-view dual rail LCD KVM switch

CL3884NW

- 4 ports
- 18,5in, 1920 x 1080
- Boundless Switching
- dual rail, rack mountable, 1U
- multi-view (Quad view, PiP, PbP, PoP)
- expandable to control up to 16 sources
- serial port allows for third-party control
- independent switching: KVM, USB, audio
- control: pushbuttons, OSD, hotkeys, IR, serial and mouse



## USB over IP extender

UEH4102

- 4 port
- plug-and-play
- USB 2.0 over LAN
- automatic link connection



# Scenarios

## City surveillance

A city holds several small to large public meeting spaces, used for cheer events, markets as well as demonstrations. Cameras and monitoring technology assist the police department in identifying negative atmospheres and send on-site surveillers.

The control room is supported by a videowall and multiple workstations. Surveillance managers and operators can push and pull the various AV streams on the videowall to their workstation, for a more detailed observance.

- ✔ Videowalls
- ✔ Multiple workstations
- ✔ Multi-user access

## Healthcare & research surveillance

Many hospitals have their own lab to analyse samples. Each sample is monitored by a specific machine, which carries out setting-adjustments to test variables on command of a medical operator.

With a centralized operation system, enabled by a virtual KVM matrix switch, multiple machines are accessible from different workplaces. The medical team can reach all machines instantly. With one touch of a button, operators switch computers to modify each test's variables.

Thanks to a splitscreen KVM switch, 4 computers are monitored simultaneously from a single multi-view workstation.

- ✔ Interference free
- ✔ Flexible workspaces
- ✔ Instant control and response

# Scenarios

## Broadcasting feed surveillance

OB-van workstations are known for their efficient use of space. Noisy servers are neatly separated from the production area, while operators easily switch and share workplaces. Via the user modes 'share', 'occupy' and 'exclusive', they can co-work on a project or exclude each other. While a server processes content for the evening news, the journalist virtually switches to a second PC and continues his work on another project. A virtual KVM over IP matrix switch can be configured to serve dual view workstations or a videowall covering multiple screens.

The system comes with an easy-to-use OSD to manage the matrix. Equipped with a hardware control system, also power, aircondition and lights can be managed from a central location.

- ✔ **Noise-cancellation**
- ✔ **Workstation efficiency**
- ✔ **Advanced user settings**

## Stock market

Sharing new ideas, innovations and financial results with the press requires efficient media distribution. ATEN's video matrix switches support connectivity between multiple sources and screens, allowing videos, presentations and live streams to be distributed to any desired screen in a press area.

A camera films the presenter. Two computers run the presentations. The matrix switch and video extenders ensure journalists at the back optimal visibility by duplicating the video signals to screens throughout the room. Professional audiovisual infrastructure, massively used in press rooms, demands central and mobile hardware control.

A moderator controls the entire setting. To avoid noisy rooms when multiple people talk simultaneously, the journalists' microphones are turned on only during a Q&A session. Commonly used hardware, such as lights, beamers and curtains, are controlled by the same system.

- ✔ **Serial automation and control**
- ✔ **Instant multi-computer access**
- ✔ **Fast and secure datatransmission**

# KVM over IP matrix manager

The ATEN KE-series is a range of KVM over IP extenders. Combined with the CCKM matrix manager software, the transmitters and receivers form a virtual KVM over IP matrix system, ideally fit for flexible workstations of all kinds.



## BOUNDLESS SWITCHING

Many KVM switches require a button to switch between computers. Boundless Switching enhances the work-experience. The feature allows operators to move their mouse cursor across displays and switch automatically between multiple computers.



## MULTI-USER SETTINGS

A KVM over IP extender allows users to collaborate, which means to push and pull AV streams from a videowall to one of several workstations. Computers that manage the AV streams can be accessed with different user modes, including an occupying modus, sharing access, exclusive access or viewing only.



## VIDEO WALL PROCESSOR

Connected to a gigabit network, the CCKM matrix manager can manage multiple videowalls. Each videowall lay-out can range up to 64 screens (8x8). Meanwhile, the KE6940 KVM over IP extender can process dual view workstations.



## COMPACT AND FLEXIBLE DESIGN

The system is easily expandable, more transmitters and receivers can easily be added over time. HDMI, DVI and DisplayPort models operate smoothly together. The full option transmitters offer a variety of features, while the compact size transmitters save space and support more basic features.



CCKM matrix manager software

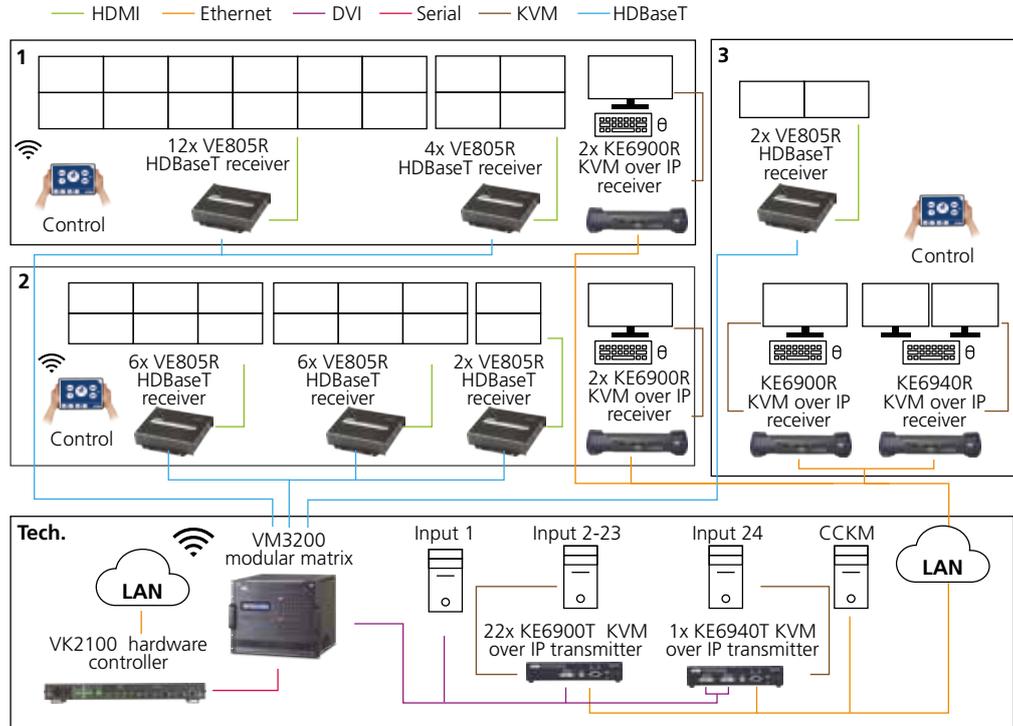
# ATEN in action – City surveillance, Italy



## Multiple videowalls and workstations

The State Police in Turin required a new control room to monitor crowd behaviour during large public events. With the help of ErreElleNet, an industry specialist, several videowalls and flexible workstations are setup.

ErreElleNet combined the forces of a hardware-based videowall processor with flexible workstations powered by a virtual KVM over IP matrix system, and a hardware automation system. The State Police in Turin has since improved its operational flexibility. Operators have eye-balls on different urban areas and inform agents in the field in no time.



**“ATEN goes beyond the videowall processors. The KVM matrix system offered the extra mile of flexibility that our operators need in their daily operations.”**

- Ing. Corrado Biava, Director of 1st Area TLC Piemonte and Valle d’Aosta, State Police

## Requirements

- **Mass media distribution:** Multiple videowalls installed in three different control rooms.
- **Remote access:** operators can access any of the computers, which are stored safely in a separate server area.
- **Easy to manage:** operators without any technical knowledge need to be able to control the videowall in each control room.

## Products

- 22x KE6900T - **KVM over IP transmitter**
- 1x KE6940T - **Dual display KVM over IP transmitter**
- 4x KE6900R - **KVM over IP receiver**
- 1x KE6940R - **Dual display KVM over IP receiver**
- 1x VK2100 - **Hardware controller**
- 1x VM3200 - **Modular matrix switch**
- 8x VM7604 - **DVI input board**
- 8x VM8514 - **HDBaseT output board**
- 32x VE805R - **HDMI HDBaseT extender**

## Benefits

- **Central control** – VK2100 hardware controller is compatible with any commonly used hardware device, allowing central control via a dedicated, custom-designed interface.
- **Modular** – VM3200 modular matrix is compatible with many commonly used interfaces and seamlessly connects a large amount of screens and sources.
- **User rights** – KE matrix system takes into account several authority levels.



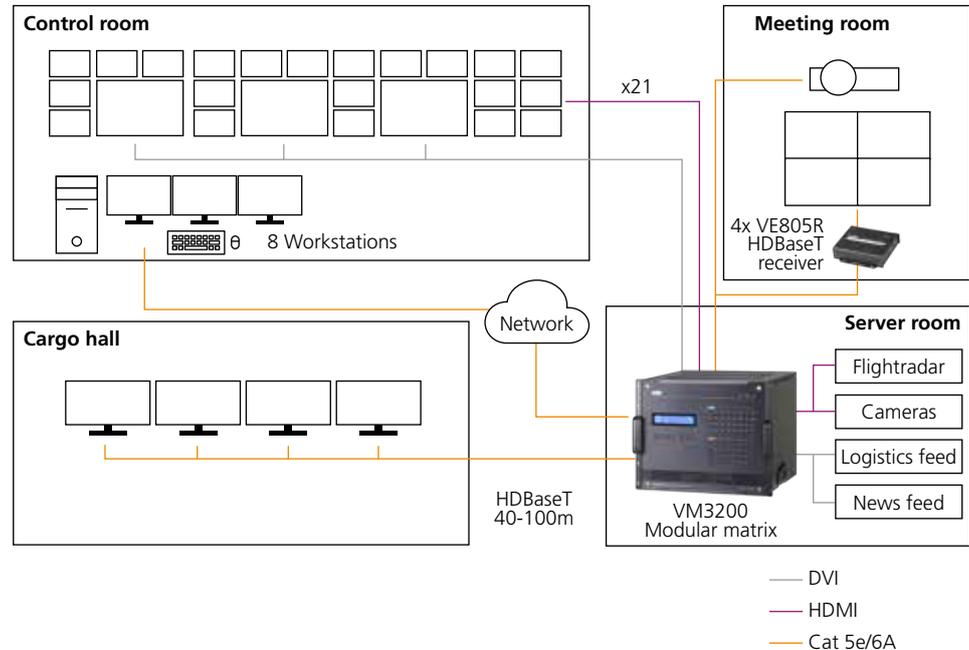
# ATEN in action – Airport, cargo surveillance, Scandinavia

## A large videowall and AV signal distribution

A scandinavian cargo service supplier processes goods from travellers' luggage to bulk logistics. Sorting all goods to the correct transport hubs requires a surveillance center with fast response times.

ATEN's modular matrix switch visualises all transportation processes on several videowalls. From a web user interface, operators can rearrange the videowall connection profiles.

FITE, a scandinavian SI, coordinated the design and setup of the installation, in cooperation with the ATEN product manager. All products were purchased through Tele-tukku.



**“We choose ATEN for its reliable, flexible and cost effective solutions.”**

- Jussi Pasanen, FITE

### Requirements

- **Mass signal distribution:** to connect a multitude of sources and screens, each with its own interface and resolutions.
- **Interface flexibility:** multiple types of in-/output interfaces, all combined in a rackmountable installation.
- **Central control:** compatibility with commonly used hardware devices, allowing central control via a dedicated interface.

### Products

- 1x VM3200 - **Modular matrix switch**
- 4x VE805R - **HDBaseT receiver**
- 2x VM7514 / 2x VM8514 - **HDBaseT in-/output board**
- 2x VM7604 / 2x VM8604 - **DVI in-/output board**
- 2x VM7804 / 2x VM8804 - **HDMI in-/output board**

### Benefits

- **Central control** – VM3200 modular matrix helps to create custom connection profiles in a drag-and-drop interface. From the live preview selection menu, the active inputs are always visible, while inactive inputs are easily selected for on-screen visualisation.
- **Modular** – VM3200 modular matrix is compatible with many commonly used interfaces and seamlessly connects up to 32 of screens and 32 sources. Hot-swappable boards can be added or changed on-the-spot.

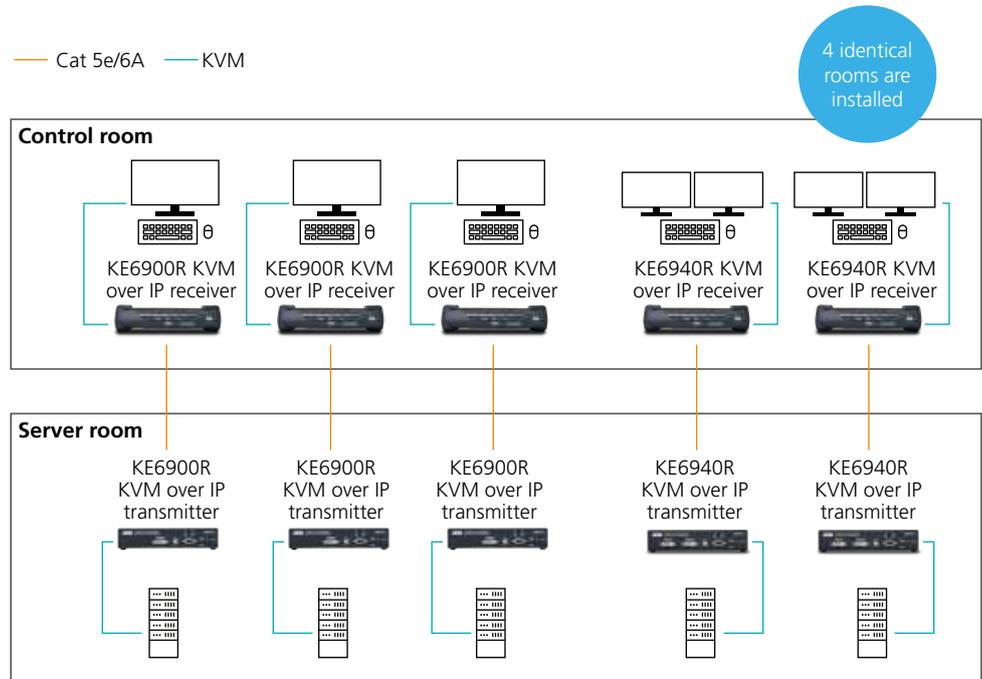


# ATEN in action – Control room, oil platform, Italy

## Distributed process control

An Italian SI specialized in process-automation of industrial plants, with a focus on DCS, SCADA/HDMI, PLC, needed several computers to be safely stored in a server room, while still be accessible from 5 different control rooms.

In cooperation with a consultant and reseller, both active in the IT market and control room business, the ATEN team installed several KVM over IP extenders.



## Requirements

- **KVM extension:** to control a computer, without any delay, from a remote workstation installed at the campus.
- **Scalability:** future expansion plans need the infrastructure to be easily copied to setup extra servers and surveillance workstations.

## Products

- 15x KE6900 - **KVM over IP extender**
- 10x KE6940 - **Dual display KVM over IP extender**

## Benefits

- **Secure access** – the extra hardware level enhances the security-level.
- **Excellent technical support** – an ATEN technician was on-site during the installation and for training.
- **Matrix manager** – in case of future operational expansion, the system can be transformed from a point-to-point to a multipoint-to-multipoint installation using ATEN's CCKM matrix software.



# Conference and meeting rooms



ATEN presentation switches, central hardware controller, splitters, matrix switches, extenders and converters already are the backbone of everyday huddle spaces, conference and presentation rooms. ATEN's new AV mixers for live streaming are an intuitive addition to the team.

# Key highlights

## Worldwide communication

- Live-streaming
- Online social sharing
- No OS requirements
- Protected content transmission

## Personalisation

- Customizable GUI
- Bring your own device
- Automation and scheduling

## All-round control

- General compatibility
- Central hardware control
- Multiple control interfaces
- Simple UI and configuration
- Interactivity with touchscreen support

## High performance

- Multiple inputs, multiple outputs
- Single or multiroom control
- Seamless switching
- Scale to any resolution
- Videowall capacity
- Reliable, stable transmissions

# Featured pro AV products

## HDR presentation matrix switch

### VP1421

- 2 HDMI, 1 HDBaseT and 1 VGA input
- 1 HDMI and 1 HDBaseT output
- auto switching
- built-in audio DSP
- scale up to 4096 x 2160 @60Hz 4:4:4
- control: front panel, IR remote, RS-232, webGUI
- compatible with the 4-key contact closure remote pad, VPK104



## Presentation matrix switch

### VP2730

- 7 HDMI and combo inputs
- 2 HDMI, 1 HDBaseT outputs
- streaming in/out
- Seamless Switching
- multiple audio in/out
- multiple display mode
- scale up to 1920 x 1080
- USB port for image capture
- OSD for setup and interaction
- control: buttons, Telnet, RS-232, OSD and IR



## Hardware controllers

### VK1100 / VK2100

- various interfaces
  - 2 / 6 Serial ports
  - 2 / 4 IR / Serial ports
  - 4 Relay channels
  - 4 I/O Channels (VK2100)
  - 1 Ethernet port
- KNX support
- 2 app licences included
- 4 DC 12V outputs (24W)
- optional: expansion boxes, keypad



## Hardware control pad

### VK0200

- various interfaces
  - 2 RS-232 ports
  - 2 Relay channels
  - 1 Digital input channel
  - 1 Ethernet port
- KNX support
- EU, 2 Gang mounting
- custom button engraving service
- intuitive configuration through VK6000
- 6-12 buttons customizable in 125 layouts
- optional: app licences, expansion boxes



## HDBaseT HDMI matrix switches

### VM3404H / VM3909H

- rackmountable, 1/2U
- 8/18 connection profiles
- 4/9 in- and 4/9 output ports
- HDMI over a single Cat. 5e/6A cable
- 4096 x 2160 (40m), 1920 x 1080 (70m)
- control: WebGUI, RS-232, IR and Telnet
- videowall function through VE805R and VE816R HDBaseT receivers



## HDBaseT VGA/HDMI transmitter

### VE2812EUT

- auto switching
- HDCP support
- 4096 x 2160 (100m)
- 1920 x 1080 (150m)
- EU wall plate, 2 Gang mounting
- HDMI, VGA (with audio), RS-232 and IR over a single Cat. 5e/6A cable



## StreamLIVE HD - Multi-channel AV mixer

### UC9020

- PC and software free
- stream to any CDN platform
  - 1920 x 1080
- multiple inputs:
  - 1x 4K HDMI / 2x 1080P HDMI
  - 1x LINE-In / 1x MIC-In
- supports 4K HDMI loop-out
- intuitive iOS app for editing and monitoring your scenes / layouts



## HDBaseT HDMI extender

### VE1812

- HDCP support
- power over HDBaseT (PoH)
- HDMI over a single Cat 5e/6A cable
- IR pass-through, RS-232, CEC
- 4096 x 2160 (100m), 1920 x 1080 (150m)



## Wireless HDMI extender

### VE819

- up to 10m
- 1920 x 1080
- plug-and-play
- low latency < 1 ms
- connect up to 4 transmitters to 1 receiver



# Scenarios

## Conference room / aula

Conference speakers present multiple reports and slideshows. They like to distribute content easily to multiple screens, handling it from a single device. Combining ATEN's video matrix switches and hardware control system ensures seamless switching, high quality resolution and mobile control from a single tablet or PC.

The installation allows speakers to control the entire presentation from start to end, without interrupting a presentation to switch buttons at several devices. Thanks to a high density of input ports, personal devices can connect easily to the matrix. ATEN's hardware control system can control any device from ethernet, serial, Infrared, relay or I/O connection. It can thus handle lights, soundmixers, curtains, airconditioning and many more commonly used items.

- ✔ **Instant content switching**
- ✔ **Source flexibility**
- ✔ **Multiple screens and outputs**
- ✔ **Central hardware control**

## Meeting room

Meeting rooms often bring together people from different locations, either within a large campus or from a remote subsidiary. With an ATEN presentation switcher, they are brought together over IP and can share their presentations with each other easily.

Presentation switchers can connect multiple interfaces, from screens, projectors, laptops, audioboxes and other devices. Thanks to the internal processor, simply connect a keyboard and mouse to manage the presentation interface and connected devices.

- ✔ **Interoperability**
- ✔ **Remote participants**

# Scenarios

## Huddle space

Small, swift meetings, between colleagues, suppliers or partners, hold a diversity of visitors and visiting devices. A huddle space enables visitors to easily connect to a display or small beamer and take hold of the presentation.

Depending on the type of installation, both cabled or wireless solutions can hold the key to success. Connecting a laptop can be as simple as plugging a cable into a wallplate built-in the meeting room furniture, hiding cables from sight and extending the signal to the correct output device. Alternatively, a simple HDMI-stick can setup a WHDI (Wireless Home Digital Interface) connection from one or several laptops, extending the signal to a receiver near the beamer or display.

- ✔ **Instant content switching**
- ✔ **Source flexibility**
- ✔ **Multiple screens and outputs**

## Event / press room

Sharing new ideas, innovations and financial results with the press requires efficient media distribution. ATEN's video matrix switches support connectivity between multiple sources and screens, allowing videos, presentations and live streams to be distributed to any desired screen in a press area.

A camera films the presenter. Two computers run the presentations. The matrix switch and video extenders ensure journalists at the back optimal visibility by duplicating the video signals to screens throughout the room. Professional audiovisual infrastructure, massively used in press rooms, demands central and mobile hardware control.

A moderator controls the entire setting. To avoid noisy rooms when multiple people talk simultaneously, the journalist's microphones are turned on only during a Q&A session. Commonly used hardware, such as lights, beamers and curtains, are controlled by the same system.

- ✔ **Seamless media distribution**
- ✔ **Instant and noiseless equipment control**

# Central hardware control series

The ATEN Hardware Control System perfectly fits any new and existing hardware installation. It integrates multiple devices to centralize, simplify and automate control. The customizable user interface, being it a digital GUI or physical controls, can be entirely themed, personalized and branded.



## STANDARD CONNECTIONS

Ethernet, serial, I/O, relay and infrared ports ensure that any commonly used hardware device can be connected and controlled.



## SIMPLIFIED CONTROL

Control multiple devices with a single button to ready an entire room. Custom design a GUI or control panel to manage individual units and advanced settings.



## FIRMWARE COMPATIBILITY

The drivers library of the VK6000 software is equipped with 10,000+ device drivers and is easily expandable.



## EASILY EXPANDABLE

Multiple expansion boxes allow users to control even more serial, relay or infrared devices when required. With the advantage of an Ethernet-based connection, the expansion boxes can be connected to the VK2100 from a variety of locations, benefitting from PoE.



## PERSONAL USER INTERFACE

Physical buttons, sensors or a completely personalized application? Design your user interface for cross-platform use, using a drag-and-drop application system.



Lighting Control



Screen



Lift



TV



Blu-ray / DVD



Amplifier



Smoke Sensor



Curtains



Door Sensor



Video Matrix



Projector



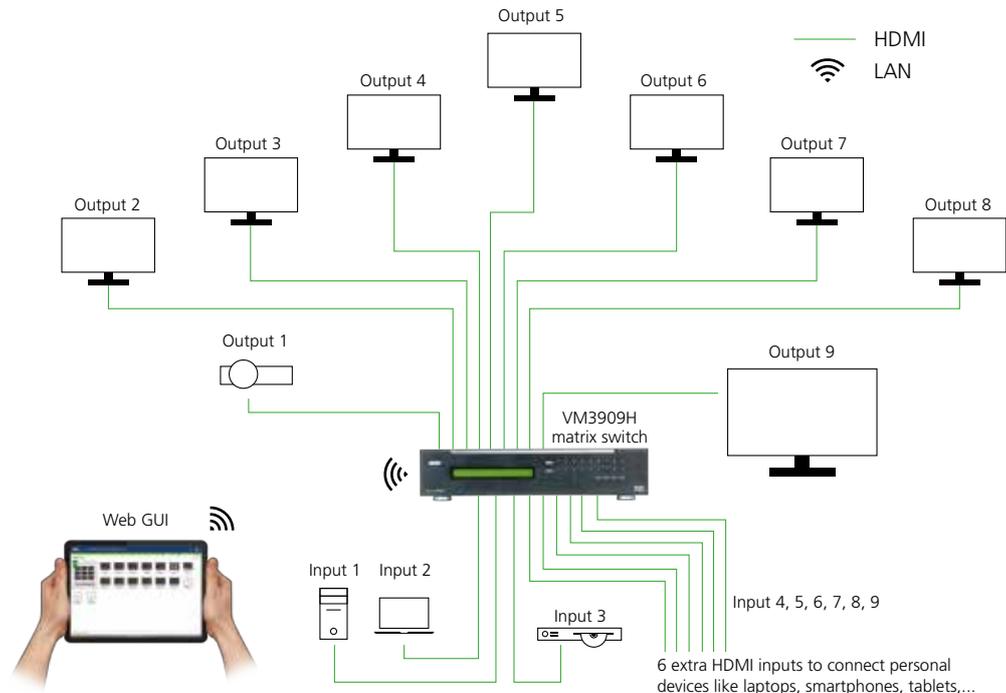
Conferencing System

# ATEN in action – EA European Academy, meeting room, Germany

## A flexible and future-proof presentation environment with ATEN's HDBaseT matrix switch.

The EA, European Academy of Technology and Innovation Assessment, is a non-profit, interdisciplinary research institute founded in 1996 to study the relation between society and technological development.

The EA often brings together multiple stakeholders to present and assess research outcomes, which requires a flexible and easy-to-use presentation system. Visitors and researchers use laptops, tablets and smartphones to show their findings on a large videowall. ATEN's HDBaseT matrix switch turns out to be an excellent, high quality media distribution solution for EA's meeting room setup.



**“Thanks to the ATEN HDBaseT matrix switch, participants can easily hook up their devices to our presentation system.”**

- Head of EA Lab, Researcher

## Requirements

- **Multiple displays:** ability to connect 9 output devices across the whole meeting room.
- **Flexibility:** fast and easy connection establishment via HDMI from any source to any output device.
- **Ease-of-use:** change output and input channels via web interface.

## Products

- 1x VM3909H – **HDBaseT matrix switch**

## Benefits

- **DCI 4K @60Hz** – crystal clear 4K video up to 40 meters and 1080p up to 70 meters.
- **User interface** – swift profile control and setup with the Red Dot Award winning user interface.
- **HDMI input** – supports stakeholder integration by giving them the possibility to use their own devices in meetings.

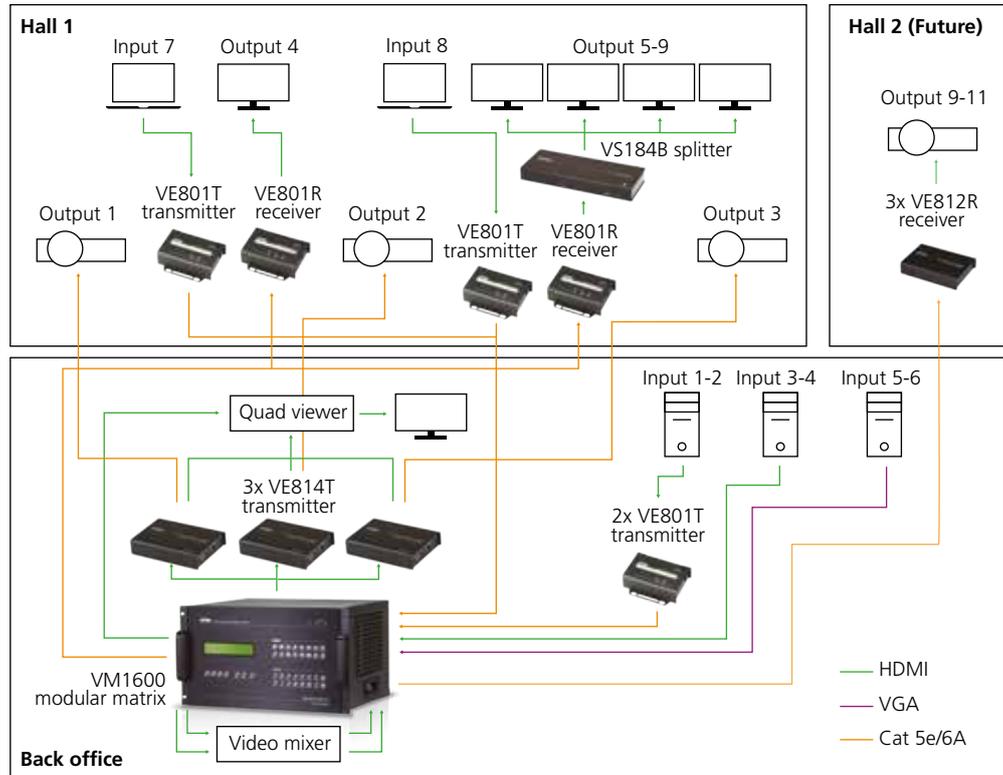


# ATEN in action – Unione Confcommercio theater, Italy

## A versatile conference room with ATEN's modular matrix switch

Unione Confcommercio Milano, one of the largest business associations in Italy, wants to upgrade its conference room "Orlando's hall" (a 562sqm hall with 490 seats) from analog to digital. Unione appointed Mr. Edoardo Nogara, CEO of Save Technology, to find a solution that meets the needs of a current-day conference room.

With the support of Agenzia Curreri, they discovered ATEN's modular matrix switch as the perfect match. The VM1600's large amount of in- and output ports, ability to use multiple interfaces and Seamless switching technology makes it not only flexible, but also a future-proof solution.



**“The interoperability of ATEN’s products made the installation of the total solution really convenient for us.”**

- Mr. Edoardo Nogara, CEO of Save Technology

### Requirements

- **Flexibility:** various inputs combined with the possibility to de-embed the audio.
- **Smoothness:** Seamless Switching technology, for more engaging presentations.
- **Interoperability:** combining various manufacturers.
- **Reliability:** quality transmission over long distances.

### Products

- 1x VM1600 – **Modular matrix switch**
- 1x VS184B – **HDMI splitter**
- 3x VE814T – **HDMI HDBaseT transmitter**
- 4x VE801T – **HDMI HDBaseT-Lite transmitters**
- 2x VE801R – **HDMI HDBaseT-Lite receivers**
- 3x VE814R – **HDMI HDBaseT receiver**

### Benefits

- **HDBaseT** – ATEN's HDBaseT-certified products assure reliable transmission of AV, Ethernet, power, USB and control signals over a single Cat 5e/6A cable up to 100m.
- **Modular** – VM1600 is compatible with many commonly used interfaces, ensuring the integration of the existing setup (VGA) into the new distribution system while taking into account future upgrades.
- **Seamless Switching** – smooth transitions when switching sources, keeping hold of the audience's attention.

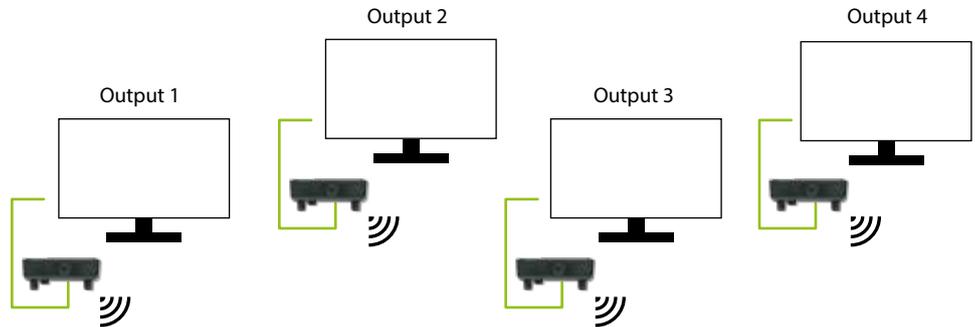


# ATEN in action – Plopsaland De Panne, Belgium

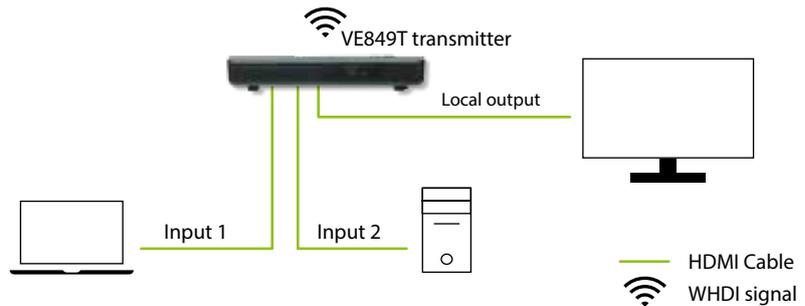
## Wireless video/audio extension

Plopsaland De Panne is one of six theme parks owned by the Studio 100 group, one of the largest independent global family entertainment companies worldwide. Plopsaland De Panne combines the magic of the Studio 100 characters with the pleasure of top attractions.

Plopsaland De Panne recently opened the Prinsessia's Castle, which houses a romantic restaurant/foyer often used to host business conferences. This room needed wireless AV signal distribution, to transmit content to various mobile TV stands.



4x VE849R receiver



**“Setup time? It took us longer to unbox than to setup the system.”**

- ICT Manager Plopsa Group

### Requirements

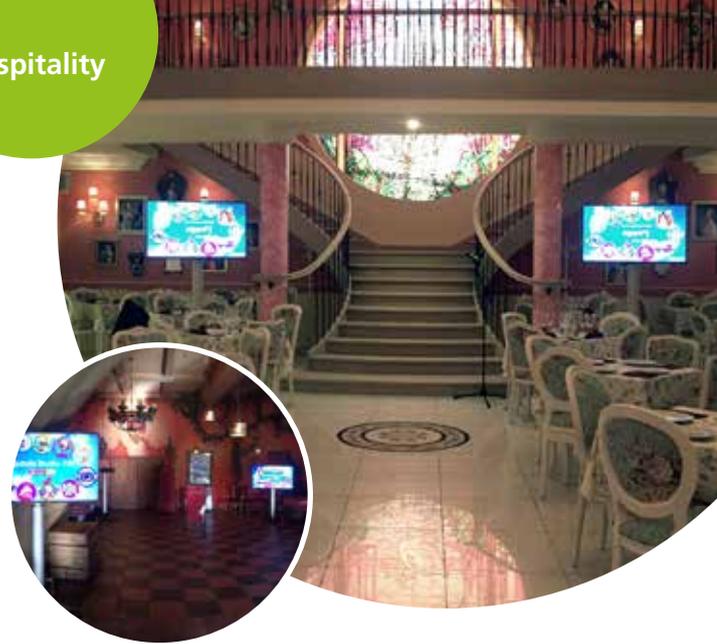
- **Wireless:** a stable (5 GHz) wireless transmission in a public area, since cabling is not possible.
- **Various content types:** stream Full HD content (presentations, slide-shows, video, ...) without any quality loss.
- **Monitoring:** a local output to verify the transmitted content or to serve as a 5<sup>th</sup> display.

### Products

- 1x VE849T - **Multicast HDMI wireless transmitter**
- 4x VE849R - **Multicast HDMI wireless receiver**

### Benefits

- **Wireless content** – thanks to the wireless capability of the product no extra labor was required for implementing a cable infrastructure.
- **Only 1 transmitter** – one VE849T can transmit Full HD content to up to 5 displays simultaneously (1 local + 4 remote (30m)).
- **Easy to swap content** – with 2 HDMI inputs on the transmitter it requires no effort to change the content on all display devices. Simply swap between the 2 sources.

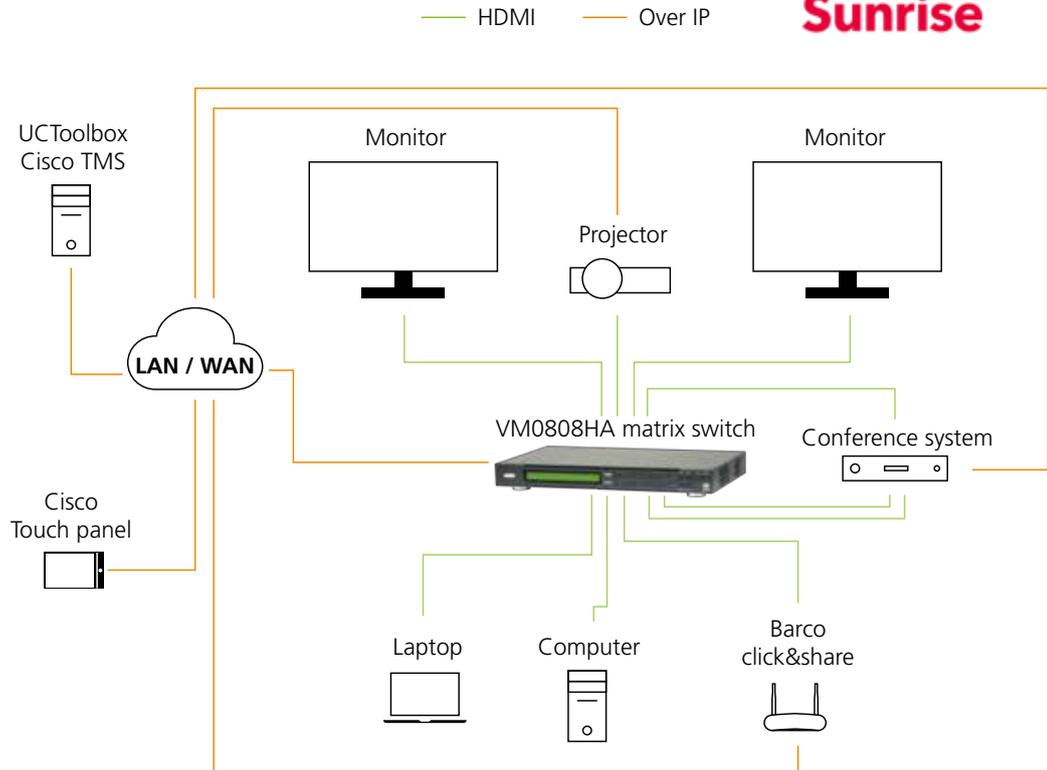


# ATEN in action – Luxury watch designer, meeting rooms, Switzerland

## Flexibility and collaboration in corporate meeting rooms

Sunrise, a Swiss conference room designer, installed 4K matrix switches in over 80 meeting rooms at the headquarters of a luxury watch designer. Each room also required central control to manage the entire setup at once.

The main objective is to create a flexible meeting room where participants can easily share multiple video sources directly to 2 or 3 TVs/projector. Either locally or remotely in combination with a 3rd party video conference system. The perfect AV distribution solution was found in ATEN's 8x8 4K HDMI matrix switch with its easy to control webGUI.



**Sunrise**

**“ATEN provided an excellent pre-sales service, which made the integration of the matrix an easy job”**

- Mr. Demont, Senior Engineer, Sunrise Communications AG

## Requirements

- **Multiple interfaces:** ability to distribute multiple inputs to multiple outputs.
- **Multiple displays:** support a wide range of displays from different manufacturers.
- **Multiple resolutions:** support 4K resolutions in case of future installation upgrades.
- **Central control:** configuration and control of the matrix switch via Telnet commands to integrate into the conference room.

## Products

- 80x VM0808HA – **HDMI matrix switch**

## Benefits

- **User interface** – swift profile control, scheduling and setup with the Red Dot Award winning web user interface.
- **Multiple control interfaces** – system management via front-panel pushbuttons, Infrared remote, RS-232 control, and Ethernet connections.
- **Matrix switch** – connect any of 8 HDMI sources to any of 8 HDMI outputs.

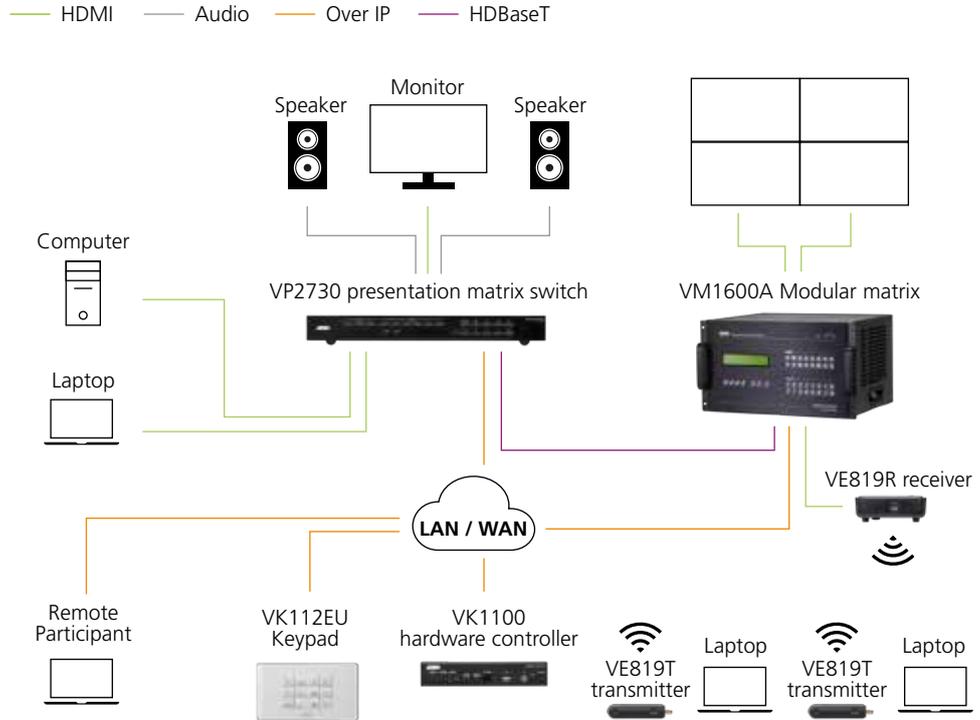


# ATEN in action – Demo & Training Center, Paris

## Presentation system

The ATEN Demo & Training Center in Paris can host international meetings through its presentation switcher. Participants can share slides over IP, which can be displayed on the videowall. Participants can hook up their own laptop or use a fixed PC.

The entire setup can be managed from a simple keypad, which is backed by a hardware controller. Each keypad button can activate one of the preferred settings.



**“Thanks to the intuitive user interface, my business partners can easily take the lead in managing a presentation or event. They switch between several computers and laptops without any problem”**

- Fabien Noyant, Demo & Training Center manager

### Requirements

- **Remote connection:** other offices need to be able to join the meeting.
- **Central management:** a central moderator to manage the meeting.
- **Various outputs:** diverse third party devices need to be connected, including visitors with diverse types of laptops.

### Products

- 1x VM1600A – **Modular matrix switch**
- 1x VP2730 – **Presentation matrix switch with streaming**
- 1x VK1100 – **Hardware controller**
- 1x VK112EU – **Hardware control keypad**
- 1x VE819 – **HDMI Wireless extender**
- 1x VE819T – **HDMI Wireless transmitter**

### Benefits

- **Multi-user access** – up to 6 remote computers can join the meeting over IP.
- **Audio mixing** – transmission of audio to separate audio boxes (up to 5.1 channel audio).
- **Chatroom** – for question management and silent conversations.



# AV signal distribution



Large campuses such as airports, government institutions, universities, shopping malls,... require excellent information delivery. ATEN hardware AV signal distribution can provide for high quality and long distance distribution. ATEN can combine sources and displays of any kind and operating systems of any type in a single, centrally managed device.

# Key highlights



## Hardware-based

- No OS requirements
- High bandwidth capacity
- Protected content transmission

## Future-proof

- High Resolutions
- Easily expandable
- Multiple interfaces

## Instant control

- Plug-and-play
- Effortless Scheduling
- Award winning WebGUI's
- Central hardware control
- Mobile and network control
- Interactivity with touchscreen support

## High performance

- Seamless switching
- Scale to any resolution
- Long distance transmission
- Multiple video and control interfaces

# Featured pro AV products

## HDMI over IP extenders

### VE8900 / VE8950

- 1920 x 1200 (VE8900)
- 4096 x 2160 (VE8950)
- daisy-chainable
- extra audio channel
- supports vertical displays
- USB touchscreen support
- videowall and matrix function
- RS-232, IR pass-through
- control: push buttons, Ethernet, RS-232, WebGUI



## Seamless HDMI matrix switches

### VM6404H / VM6809H

- 4096 x 2160
- seamless switching
- rackmountable, 1U
- 8 / 17 connection profiles
- 4 / 8 in- and 4 / 9 output ports
- audio extraction (VM6809H)
- videowall and scaler function
- control: WebGUI, IR, RS-232 and Telnet



## Modular matrix switches

### VM1600A / VM3200

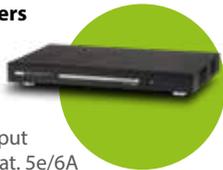
- 4096 x 2160
- power redundancy
- Seamless switching
- 32 / 64 connection profiles
- calendar-based scheduling
- videowall and scaler function
- live stream function (VM3200)
- 16 / 32 inputs and 16 / 32 outputs
  - HDMI, DVI-D, HDBaseT, 3G-SDI, VGA boards available
- control via WebGUI, RS-232, Telnet



## HDBaseT HDMI splitters

### VS1814T / VS1818T

- 4096 x 2160 (100m)
- 4 / 8 output ports
- control via RS-232
- extra local HDMI output
- HDMI over a single Cat. 5e/6A cable



## HDBaseT HDMI extender

### VE811

- 4096 x 2160 (100m)
- 1920 x 1080 (150m)
- compact design
- HDCP & CEC support
- HDMI over a single Cat. 5e/6A cable



## HDBaseT HDMI/USB extender

### VE813A

- 4096 x 2160 (100m)
- 3 USB2.0 ports
  - ideal for touch screen applications
- HDMI and USB2.0 over a single Cat. 5e/6A cable



## HDMI Optical Extender

### VE883

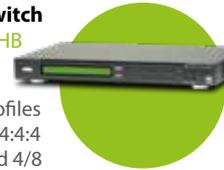
- 4096 x 2160:
  - 300 m (VE883K1)
  - 10 km (VE883K2)
- supports HDCP 2.2
- HDMI, audio, IR, RS-232, USB and Ethernet over a single duplex fiber optic cable



## HDR HDMI matrix switch

### VM0404HB / VM0808HB

- HDCP 2.2 compatible
- 8/16 connection profiles
- 4096 x 2160 @60hz 4:4:4
- 4/8 HDMI inputs and 4/8 HDMI outputs
- control: WebGUI, IR, RS-232, Telnet



## HDR HDMI switch

### VS481C / VS0801HB

- auto switching
- cascade up to 3 levels
- 4 / 8 inputs and 1 output
- 4096 x 2160 @60Hz 4:4:4
- rackmountable, 1U (VS0801HB)
- HDMI 2.0 and HDCP 2.2 support
- control: push buttons, RS-232 and IR



# Scenarios

## Digital signage for retail

Creative videowalls and large billboards inspire people. Therefore, seasonal trends are often visualized in mood videos throughout a gallery or showroom.

A video matrix switch can distribute and schedule content from multiple media sources to videowalls and digital signage screens. Regardless of software or operating system, a matrix switch connects HDMI, HDBaseT, VGA, DVI and SDI devices. ATEN matrix switches scale and distribute 4K-quality without any bandwidth concern via HDMI or HDBaseT connections.

Customized connection profiles guide content to the desired screens. Thanks to the award-winning webGUI, through which each ATEN matrix switch can be controlled, custom connection profiles are easy to setup via laptop or tablet. Alternative control options lie with serial, infrared or network signals.

- ✔ Content scheduling
- ✔ Videowall and matrix profiles
- ✔ Scaling to multiple resolutions

## Sports and entertainment bar

TV channels are distributed instantly across the venue from a central server location to several areas thanks to a modular video matrix switch. Within less than a second, any channel can be re-distributed to any other screen connected.

Customers enjoy football, basketball and other competitions depending on the relax-area of their choice. In total, the venue counts 25 screens. The main games are watched in 4K on a large, central projectionwall. Other games can be seen from smaller screens near the bar or at a lounge area.

At opening- and closing-time, the bartender controls the scheduling and distribution of 32 TV channels from a webGUI. Hardware automation combined with sensors tell if a room is without visitors, switching TVs off after a certain period of time.

- ✔ Central content distribution
- ✔ Sensor-enabled hardware automation
- ✔ Variety of in-/output devices

# Scenarios

## Public transport timetables

Instant updates of arrival and departure times are displayed across the campus on a variety of screens. Passengers can book tickets through an interactive display, while children play games on a touchscreen-enabled gameboard.

With over IP extenders, digital signage managers can direct a diversity of sources to any display, videowall or touchscreen, all from a central on-campus location. Central management has become easy with a drag-and-drop user interface to direct the correct source to the correct set of displays.

- ✔ Interactive displays
- ✔ Instant signal distribution
- ✔ Central over IP management

## Take-away bar

Interactive on-screen menus inform about the ingredients, flavors and history of the menu items. Being connected to a server responsible for stockmanagement, all menu-choices are displayed based on ingredient availability. Distributed to multiple displays via an HDBaseT splitter, the up-to-date menu is visible to guests in every corner of the venue.

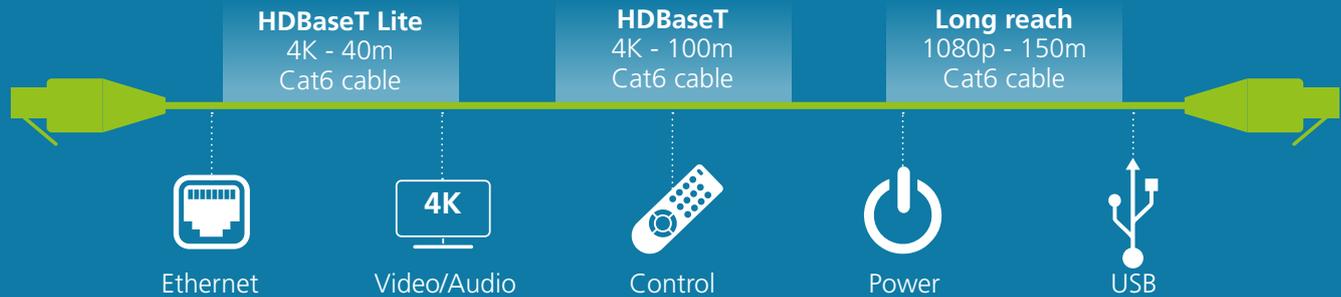
Thanks to an HDBaseT matrix switch, customers can watch TV series in the lounge area. The bartender can choose from a webGUI which content to play on which screen. With HDBaseT, screens from an upstairs floor can even be connected, since HDBaseT covers distances up to 100m.

With a hardware controller connected to all TVs and sources, all devices are switched on/off from a single tablet, simplifying control of the entire venue. Based on opening hours, it is even possible to switch power automatically.

- ✔ Hidden sources
- ✔ Content scheduling
- ✔ Simplified hardware control

# Technology for long distance distribution

HDBaseT is a simple and cost-effective one-cable standard for long distance signal distribution. ATEN and HDBaseT have been partners in the convergence of professional AV and IT since 2013.



- ✓ **+30 ATEN-HDBaseT expert trainers**
- ✓ **+40 ATEN-HDBaseT products**
  - ✓ videowall processors
  - ✓ video matrix switches
  - ✓ video splitters
  - ✓ video extenders
  - ✓ presentation switcher
  - ✓ KVM extenders

! ATEN recommends low-skew cat-cable 2L-2801, HDBaseT-certified Cat6 cable 2L-2910, or standard Cat6 cables.



**Become an expert**

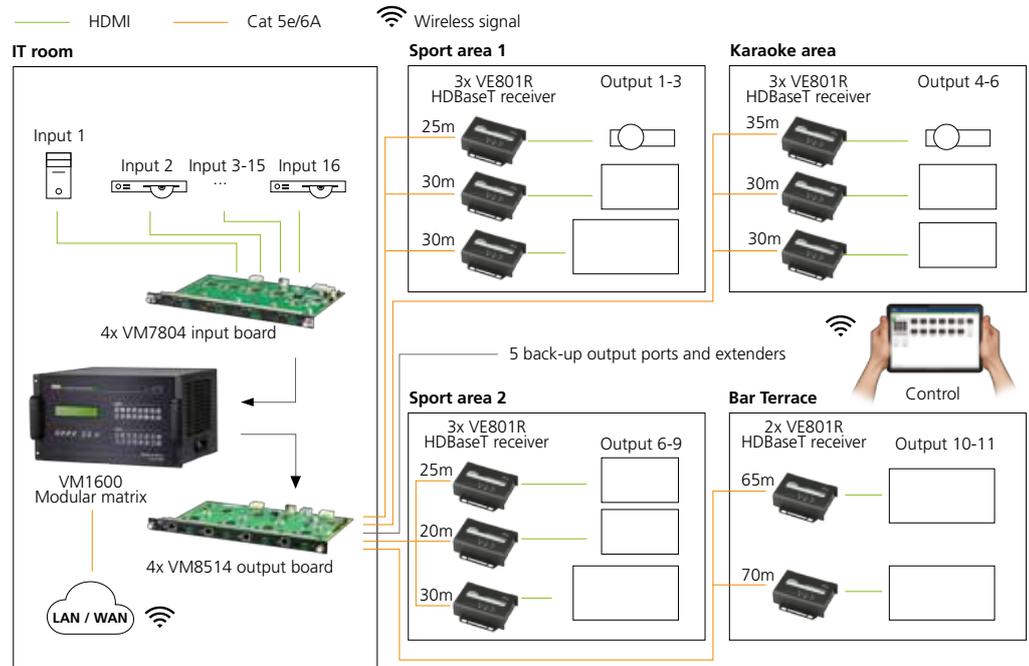
[www.aten.com/eu/en/hdbaset](http://www.aten.com/eu/en/hdbaset)

# ATEN in action – Jameson Distillery Pub, Germany

## A flexible media distribution upgrade with ATEN's modular matrix switch

The Jameson Distillery Pub is one of the biggest Irish Pubs in Cologne. Customers can enjoy traditional Irish food and drinks while they watch their favorite sports or participate in a fun karaoke session.

To enhance the experience, Jameson Distillery Pub has a digital signage setup of 13 screens inside the pub and 2 big screens outside, all managed from a centralized matrix switch. As they searched for a new and future proof switch they quickly found out that ATEN's modular matrix switch perfectly fits their needs.



**“The system is easy to operate, but if I have any questions, I can always rely on the excellent after sales service.”**

- Mr. Brown, Manager Jameson Distillery Pub

### Requirements

- **Long distance:** cover distances of up to 70m.
- **Multiple displays:** ability to distribute video signals to +10 displays.
- **Output variability:** support a wide range of displays from different manufacturers.
- **Future proof:** effective price-quality balance offering a future proof infrastructure.

### Products

- 1x VM1600 - **Modular matrix switch**
- 4x VM7804 - **HDMI input board**
- 4x VM8514 - **HDBaseT output board**
- 16x VE801R - **HDBaseT-Lite receiver**

### Benefits

- **User interface** – swift profile control, scheduling and setup with the Red Dot Award winning web user interface.
- **Modular** – VM1600 is compatible with many commonly used interfaces, which makes the setup future proof and easy to change or expand whenever needed.
- **HDBaseT** – ATEN's HDBaseT-certified products allow you to send audiovisual, Ethernet, power, USB and control signals through a single Cat 5e/6a cable up to 100m (70m with HDBaseT-Lite).



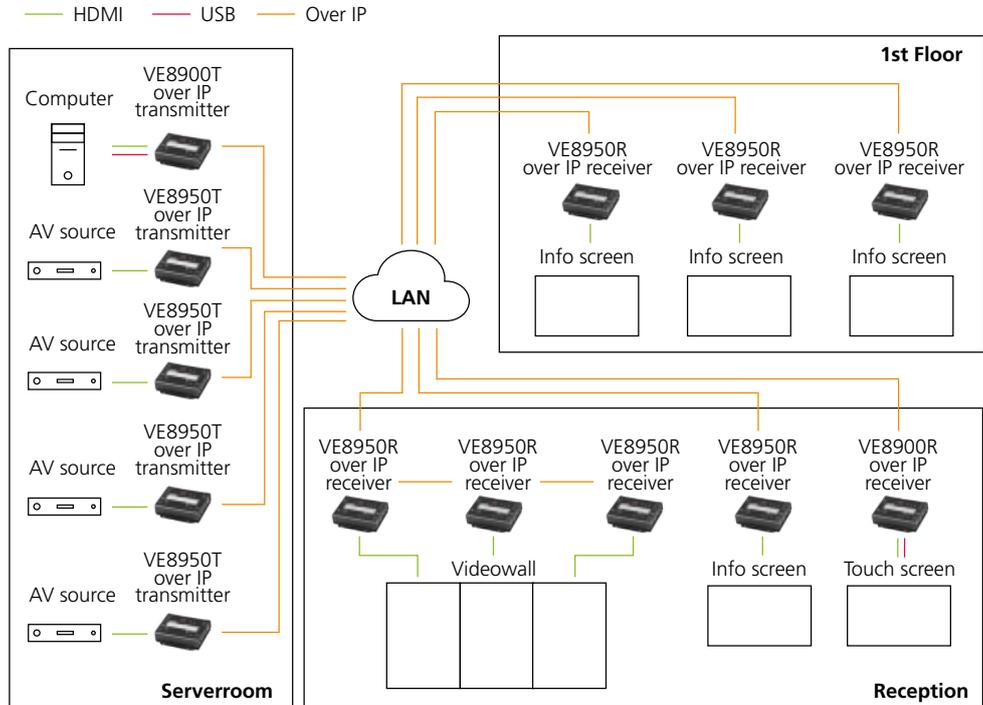
# ATEN in action – Signage and information boards, The Netherlands

## Vertical and horizontal info boards and kiosks

An adult evening education college hosts more than 1.000 students every week. Students can find the lecture aula and timing of all classes on a videowall in the reception hall. Other displays feed the university's daily news.

An interactive display guides lost students through the building structure as a way finder.

Near the lecture hall, students will find information about the professor's agenda and upcoming tests. All information is transmitted over IP to the correct location by campuses the digital signage manager.



### Requirements

- **Scalability:** more screens might be added in the future.
- **Flexibility:** 4K and vertical videowall support.
- **Simplicity:** no technical knowledge required to change the source of each display.
- **Interactive:** touchscreen support for easy access to agendas.

### Products

- 7x VE8950R – **4K HDMI over IP receiver**
- 4x VE8950T – **4K HDMI over IP transmitter**
- 1x VE8900R – **HDMI over IP receiver**
- 1x VE8900T – **HDMI over IP transmitter**

### Benefits

- **User interface** – swift profile setup and management, thanks to the drag-and-drop user interface.
- **Easy to set up and operate** – simple configuration that requires no extensive IT experience or extra learning.
- **Daisy Chaining** – connects multiple displays through a single port of the network switch to create a stunning videowall.



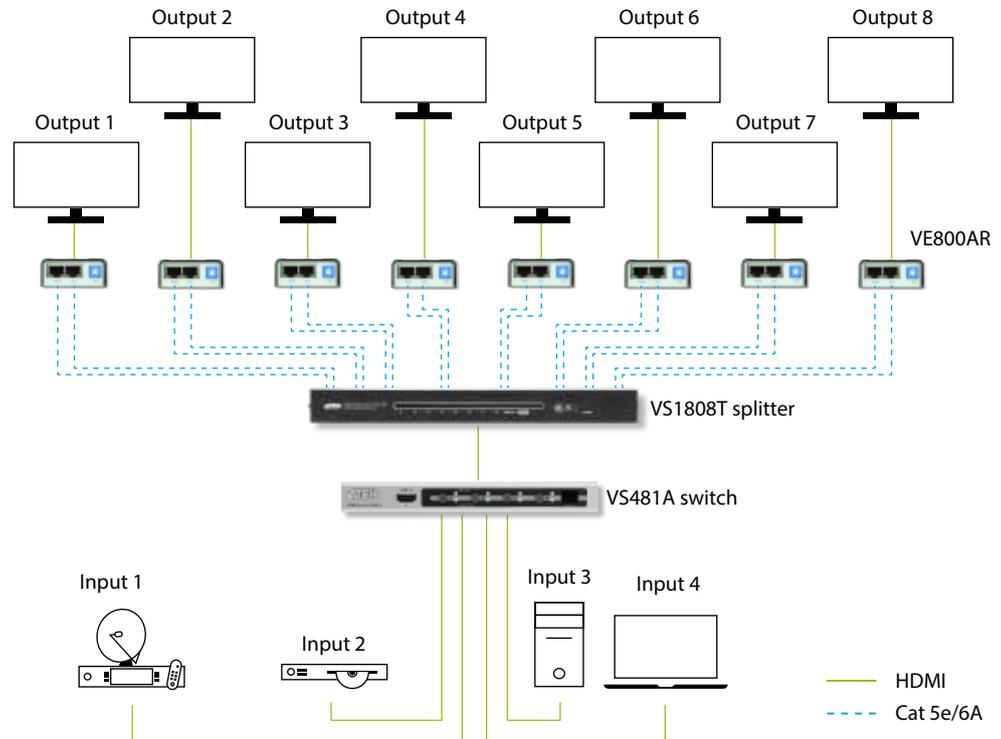


# ATEN in action – Old Wild West restaurant, Italy

## Large-scale video distribution contributes to an immersive experience

Old Wild West is a restaurant chain that immerses its guests in the lost world of the wild west. To enhance this experience, Agenzia Curreri set up a media distribution setting with 4 to 8 monitors in each subsidiary, so the private “Old Wild West Channel” could easily be distributed.

At this moment, Old Wild West counts on ATEN in multiple of its subsidiaries. In total, 442 screens have been installed.



**“ATEN was the only manufacturer able to deliver a large amount of products in a short time allowing us to fulfil our installation schedule”**

- Mr. Curreri, Agenzia Curreri

### Requirements

- **Output variability:** support a wide range of monitors from different manufacturers.
- **Long distance:** distance from the source to the monitors should reach up to 40m.

### Products

- 1x VS481A – **HDMI switch**
- 1x VS1808T – **HDMI Cat 5e/6 splitter**
- 8x VE800AR – **HDMI receiver**

### Benefits

- **EDID mode selection** – the ATEN splitter will give you the option to select the best EDID profile to guarantee compatibility with all the connected monitors.
- **Power-on detection** – automatically switches the source when the current source shuts down. No more black screens!
- **Compatibility** – all ATEN products work seamless with each other and many competitor brands. This offer the possibility to expand your setup and make it future proof.
- **Simplicity** – a simple button on the HDMI switch to jump to another media source.



# Smart Desktop Tools



ATEN offers many AV and IT hardware solutions for home and businesses. Enhance your desk experience and avoid unnecessary cable clutter by using smart desktop tools to centralize all your gear.

# Key highlights

## Compatibility

- Multiple interfaces
- Hot pluggable (KVM)
- Multiple in- & outputs

## Flexibility

- Easy to install
- Compact design
- Multi-view, multi-display

## Innovatively

- Boundless Switching
- Resolutions up to 4K, 5K
- Independent switching between audio, video, peripherals
- Control: push buttons, hotkeys, mouse and RS-232
- power delivery

## Hardware-based

- Protected content transmission
- No OS requirements
- Interlinkable



# Featured Smart Desktop tools and AV signal distribution

## USB-C dock

**UH3234**

- 1920 x 1080 (dual view)
- 3840 x 2160 (single view)
- power delivery: 60W
- up to 10 peripherals:
  - HDMI, VGA, DisplayPort, SD, MMC, MicroSD, USB 3.1, Ethernet, audio



## Thunderbolt 3 dock

**UH7230**

- 5120 x 2880 (single view)
- 4096 x 2160 (dual view)
- data transfer: 40 Gbps
- power delivery: 85W
- up to 13 peripherals:
  - Thunderbolt 3, DisplayPort, USB-C, USB 3.1, Ethernet, audio



## USB-C sharing switch

**US3342**

- 2 ports
- cross system support
- power delivery: 85W
- 4 USB 3.2 Gen 2 peripherals
- BEZEL X - Mouse switching between 2 PCs with files and clipboard sharing (10Gbps)



## DisplayPort KVM switch

**CS1942DP / CS1944DP**

- 2/4 ports
- 4096 x 2160
- dual display
- 2 USB 3.1 ports
- independent switching: KVM, USB and Audio
- daisy chainable
- control: front panel, quick keys, mouse and RS-232



## DisplayPort KVM switch

**CS7822DP**

- 2 ports
- 4096 x 2160
- USB powered
- independent switching: KVM and audio
- mouse port allows USB peripherals



## StreamLIVE HD - AV mixer

**UC9020**

- 1920 x 1080
- PC and software free
- stream to any CDN platform
- multiple sources:
  - 1 LINE-In / 1 MIC-In
  - 1 4K HDMI and 2 1080P HDMI
- supports 4K HDMI loop-out
- intuitive iOS app for editing and monitoring your scenes / layouts



## DisplayPort secure KVM switch

**CS1184DP**

- 4 port
- 3840 x 2160
- CAC support
- multi-layered security
- NIAP common criteria
- compliant with PSS PP v3.0 requirement
- displayport input and HDMI output
- data channel isolation and unidirectional data flow



## Boundless KM switch

**CS724KM**

- 4 ports
- Boundless Switching
- daisy-chain to control up to 8 PCs
- customize monitor layouts with hotkeys or configuration tool
- use a single keyboard / mouse
- independent switching: keyboard/mouse, USB and audio
- control: push buttons, hotkeys, mouse cursor/wheel and RS-232



## HDMI multi-view KVM switch

**CM1284**

- 4096 x 2160
- 4 ports
- dual output
- Boundless Switching
- daisy chainable and cascadable
- control: front panel, OSD, hotkeys, IR and RS-232
- multi-view modes: Quad View, PiP, PbP, PoP



# Scenarios

## Sales manager on-the-go

Your laptop has just one USB-C port, easy to travel with, but harder to connect. It needs charging, a stable ethernet connection over cable, an external mouse, a second screen and so on. Yet all of this is possible and still there is no cable jungle in sight.

Multiport docking stations, with power charging, provide all the convenience that comes with the many ports of an elaborate desktop computer. Yet it remains a small and portable solution that works effortlessly with your ultra-thin notebook.

- ✔ Plug-and-play
- ✔ Power pass-through
- ✔ Compact design

## Financial trader

When a lot of data need to be monitored, processed and interacted with simultaneously, an optimal workspace set-up is fundamental. Indispensable in these kinds of installations, are multiple screens that can access several different computers. A multiview KVM switch allows professionals to not only interact with data on multiple servers, but to also monitor additional information on a second screen. This allows an optimal flow of information and guarantees that no information is lost.

Financial traders have to supervise different markets and make split-second decisions based on the data at hand. Multi-view options enable them to monitor several servers simultaneously, which increases productivity and allows for grounded decision-making.

- ✔ Intuitive control
- ✔ Multiview
- ✔ Up to 4K resolution

# Scenarios

## Graphic and product designer

Combining all input into a final composition can be messy. Everyone has an opinion, own notes, design ideas and sketches. Different types of content come together at a graphic and product designer's desk. A sharing switch can help to ensure an optimal flow of information and effective collaboration.

Sharing switches help to share content between multiple computers and operating systems. Simply drag and drop content between systems using a single keyboard and mouse.

- ✔ Fast data transfer
- ✔ Intuitive control
- ✔ Integrates operating systems

## Turn any place into your personal set-up

Few things are as much fun as playing a game with friends or as convenient as the possibility to turn every screen into a part of your personal workspace.

Did you know it takes only a simple mini-dock to connect portable devices to a screen, anywhere, anytime?

ATEN offers small and stylish docking stations that can be used as hub for your gaming or presentation installation. Enable sharing without losing functionality on your personal device.

- ✔ Plug-and-play
- ✔ Pocket-size design
- ✔ Extensive compatibility

# USB, DID YOU KNOW?

USB, or Universal Serial Bus, is probably the single most successful communications interface in the history of the computer. Developed to streamline communications between computers and peripheral devices, revisions are constantly made to provide higher data transfer rates to keep up with technological advancements.



## **ABC** GENERATIONS

USB interfaces continue to change in order to keep up with modern-day needs. This resulted in USB-A, USB-B and USB-C. Different outlets each with their own merits.

## **SPEED**

The rates at which data are transferred through the USB interface evolved greatly. What started at just 1.7 Mbps, has turned into SuperSpeed+ USB at 10 Gbps.

## **DEVELOPMENT**

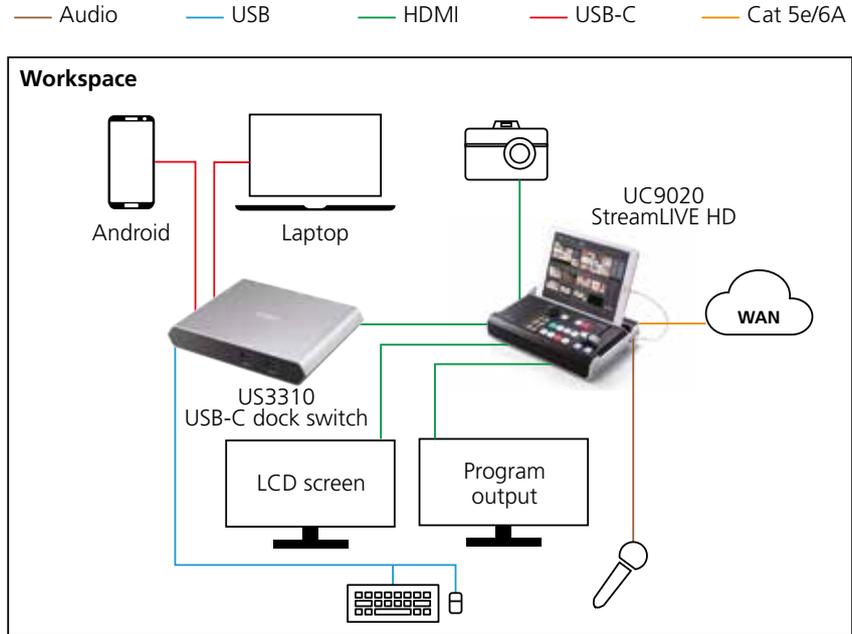
Where USB used to be solely used for data transfer, with the introduction of USB-C, it has become the go-to interface for versatile and all-round signal distribution.

# ATEN in action – Streamer and mobile gamer, Belgium

## Post-production made obsolete with ATEN's Multi-Channel AV mixer

A well-known Belgian gamer and podcaster posts videos to his YouTube channel on a weekly basis. He prefers to stream live and avoid post-production work. To ensure a dynamic show, an ATEN multi-channel AV mixer helps to switch between pre-defined layouts while streaming live.

The AV mixer combines input from a camera, laptop or phone. The game played on his phone is visualized on a display, while the second screen visualizes his life feed allowing him to stay tuned on his followers feed. A docking switch is used to switch easily between his laptop and phone, to share keyboard and mouse, while it powers the phone.



## Requirements

- **Creative flexibility:** design up to 8 custom and personalized lay-outs.
- **Intuitive design:** use a simple buttons and a gear stick to manage the live feed.
- **Portability:** plug & play the AV mixer, it is light-weighted to carry it along at events, secure it with a Kensington lock.

## Products

- 1x US3310 – **2 port USB-C dock switch**
- 1x UC9020 – **StreamLive HD - AV mixer**

## Benefits

- **Processing power** – an iPad takes full responsibility for instant and smooth transitioning.
- **Live-editing** – 8 pre-set, custom-made lay-outs can be prepared in advance, but last-minute adjustments while streaming.
- **Flexibility** – both the docking switch and the AV Mixer are easy to install and intuitive to use. Peripherals are interchangeable and can receive their power through the docking switch to avoid cable clutter.

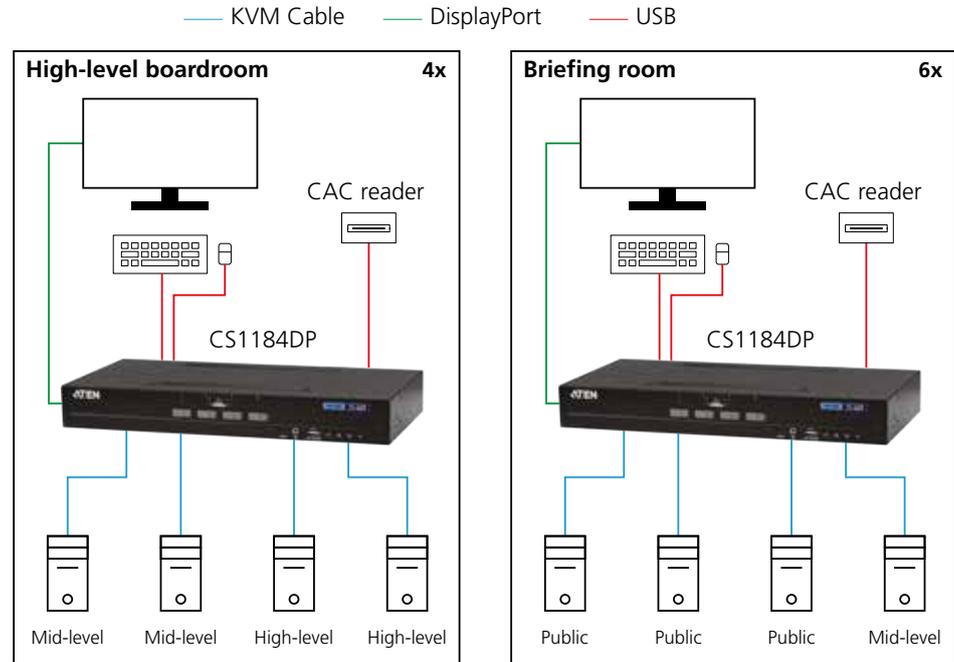


# ATEN in action – Managing sensitive information, Spain

## KVM switch multi-layered security

A Spanish governmental institution needs more than just a regular KVM Switch to ensure maximum security. The daily contact with sensitive data, requires a solution that provides maximum security and the possibility of customizable access for employees.

ATEN's secure KVM Switches provide a complete fix that ensures full control over access-restrictions. Employees must scan their CAC-card and enter a personal access code at their desk. This allows the KVM switch to check whether an employee has access to a certain server or not. This layer of security makes sure that sensitive information doesn't get into the wrong hands.



## Requirements

- **Channel isolation:** transferring data between computers must be impossible to ensure maximum security.
- **Layered security:** both the software and hardware of products have to be provided with extra layers of security.
- **Compliance:** compatible with PP3.0 (Protection Profile for Peripheral Sharing Switch) security requirements

## Products

- 10x CS1184DP – **DisplayPort secure KVM switch**

## Benefits

- **Dual USB connection** – each server can be connected through two USB ports. This guarantees an additional layer of security as it allows for a scanner to be plugged in simultaneously with other devices.
- **Military-class security** – multi-layered protection on both the physical and digital levels prevent data leakage across internal ports as well as to external networks.
- **Self-destructive** – tempering with the hardware is impossible. Opening the device entirely destroys it.



**40 years**, the story continues...

**2000**  
Setup of international subsidiary, in Belgium

**1979**  
Foundation ATEN brand under the name of HOZN Automation Co. Ltd

**1982**  
Launching the first product: central control series for home appliances

**1988**  
Company developed its international strategy and rebranded to ATEN International Co. Ltd.

**1991**  
Launched world's smallest printer buffer

**2000**  
First certified USB 2.0 hub worldwide

**1984**  
Launching the DATA switch box series

**1991**  
Development of the ATEN ASIC chip

**1996**  
Establishment of first international subsidiary in USA

**2001**  
**CS62**  
World's first Compact KVM (Cable KVM)



**2009**  
**CC2000**  
Central datacenter management





**AVIT**  
meets

Your Premier Partner  
Since 1979



**Today**  
Integrating AV  
and IT in multiple  
professional  
installations

**2007**

First Dual Rail  
LCD KVM switch  
worldwide (Cat5)

**2012**

Introducing smart  
energy analysis  
solutions

**2015**

Mobile control for  
pro AV + datacenter  
management

**2018**

Opening several  
Demo & Training  
Centers around the  
world

**2020**

+40 Demo & Training  
Centers worldwide

**2002**

Dedication to  
enterprise solutions

**2010**

Introducing pro AV  
solutions

**2013**

HDBaseT member

**2016**

Europe's first 4K  
DisplayPort KVM  
switch

**2019**

ATEN's first AV  
mixer for live-  
streaming

**2015**

**VK-series**

Central hardware  
control system



**2019**

**Unizon**

Global AV  
Management  
Platform





At the heart of AV and IT,  
**since 1979.**

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