Meeting Room
Solutions Guide

Contents

Meeting Rooms

The nature of how we work and meet is changing. In today's corporate climate, clear and efficient communication is an essential competitive advantage – and the vast majority of that communication is undertaken in various meeting room environments. No matter whether you are looking for fluid, mobile meeting spaces or to collaborate in real-time with people all over the world, when it comes to creating the right space for the perfect meeting, training program or video conference, your meeting space technology must promote greater communication among participants and assist you in reaching your targets.

Work to your full potential with ATEN meeting room technology that works with you. Our solutions deliver the flexibility, ease-of-use, and control you need for any size meeting room environment, and are designed to encourage and augment the kind of activities that are crucial to success in today's information-centric global business world.

ATEN collaborative meeting room solutions. Simple. Intelligent. Expandable.

Considerations for Meeting Room Productivity

For corporate A/V systems integrators and other implementers of meeting room infrastructure solutions, it is paramount to be aware of how corporate meeting spaces are being reimagined. The latest trends in business culture all lean towards a cool, calm and collected approach to doing business in a globalized economy. But successfully transforming offices and meeting rooms into sleek, modern inspirational spaces has implications for the technology that comprises the backbone of workplace design. And that technology must deliver results in terms of real business value.

Demand for conference room solutions is being driven by flexibility, simplicity and ease of use – the user experience – but it remains imperative that solutions must also result in increased productivity – both for individual workers and for the corporation overall. End-users simply do not have time to waste in setting up conference systems or to learn complicated technology; rather, they need to focus on the content of their meetings and achieving their goals.

Providing the best pro A/V tools to control the flow of a meeting is the key to that meeting being as productive as possible. ATEN's 37+ years of excellence and more than 500 patents in the technology of connectivity and control means that we understand the challenges of today's fast-paced, pan-global collaborative workspaces and have the know-how that translates into the best meeting room solution for you. Choose ATEN. Choose productivity.

Trends in
Meeting Rooms

BYOD and Advances in Meeting Space Tec

Just as newly emerging technologies have changed every aspect of our lives, the to
environments have moved on from the days of chalk board presentations and bor
function rooms. And as IT becomes more consumer-oriented, personal tools are al

BYOD (Bring Your Own Device) is a concept that embodies the kinds of advances
that implementers now have to take into consideration. While various studies inc
experience and productivity, there are also challenges to overcome with employees
devices, such as tablets, mobile phones and laptops, to use in the workplace. N
connectivity on the corporate network – which creates a need for extra security as the
unmanaged by network administrators – but there are also further implications in

Meeting participants are likely to need to share and sync content from their devices, so solutions must facilitate
interoperability by giving these participants a way to have all devices collaborate with each other. These interactive
technologies mean participants can seamlessly connect their own devices to large screen 4K displays and
projectors, and focus can switch effortlessly from one presenter to another with tracking cameras. In addition,
presenters can sync their presentations with the mobile devices of participants so they can contribute their own
ideas both locally and remotely.

Dynamic Participation and the Evolution of Global Collaboration

With ever-increasing advances in collaborative and interactive technologies and the need to work with people all around the world, the evolving demands of corporate meeting environments and the expectations of what needs to be achieved in these spaces have paved the way for innovations that are specifically tailored to meet productivity and goal-driven targets.

Meeting room behavior has changed, and solutions need to be able to actually augment and encourage that behavior, and encourage certain activities. Previously static meeting room spaces have become more dynamic and collaborative – people expect to be able to share information, such as potential market trends and company goals, via collaborative multimedia technology. Managers want tangible results from their meetings, and so now colleagues at remote locations can be involved in decision making, problem solving and risk control. Behavior and expectations have changed, and now all participants are able to take part in discussions to reach consensus and targets quickly and effectively. Cameras put everyone – both in the room and halfway across the world – face-to-face, and digital data streaming, content sharing and mobile connectivity solutions are turning meeting rooms into dynamic locations where people from across states, countries and continents can reach agreements by seeking mutual benefits in an environment of optimized communication efficiency.

With these higher expectations of productivity that stem from the global village outlook and the tools to achieve it also comes a further, more subtle change in behavior -- workers are much more likely to leave a state-of-the-art video conference with a unified sense of direction and purpose – and that can only ever be beneficial.

IoT and Managing the Meeting Room Environment

Nowadays, there is an expectation that meeting spaces have been specifically designed to facilitate progress, and that has changed the behavior of meeting attendees. But, ever-increasingly, we are also starting to manage the environment of the meeting room itself.

This is where IoT comes into play. So much more of the meeting room space needs to be controlled – the lights, the curtains, the cameras, the screens – and all of these can be networked and controlled by sensor technology and integrated control systems. Pre-programmed actions can provide fully automated operations and help to facilitate conversation among devices intelligently so that lights can be programmed to turn on when the first meeting participant arrives, or cameras that detect audio can instantly switch the video display to whomever is speaking – the possibilities are endless. Furthermore, integrated control systems can not only control how devices are used in each room but also allow administrators to quickly view how multiple meeting spaces are being operated at any time and monitor the status of particular hardware for maintenance and technical assistance.
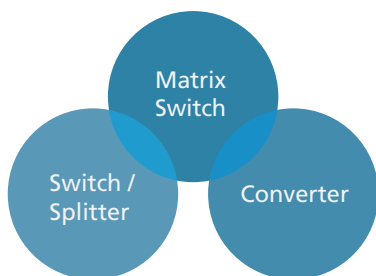
This efficient, intuitive approach simplifies meeting space management, creates control of a meeting's flow and empowers collaboration extremely effectively, regardless of the meeting space's scope or function.
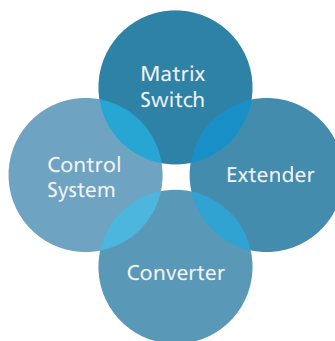
ATEN Meeting Room
Solutions

ATEN meeting room solutions allow you to collaborate in real-time with people all over the world, and connect with multiple devices with multiple interfaces. Effortlessly connect all your devices – wired and wireless. Share content during presentations. Have all your devices collaborate with each other to simplify video conferencing setup. Start a meeting with a single tap on your mobile device. Heighten the meeting room experience with limitless compatibility. Facilitate conversation among devices intelligently. Manage central control of large meeting rooms from a mobile device. Instantly switch between different meeting profiles, such as conference, lecture, or training. Whatever your meeting environment needs, ATEN has a tailored solution for you.

Three Kinds of Meeting Room Environment
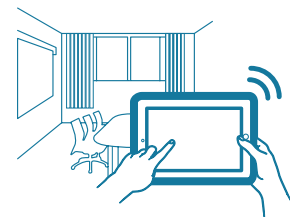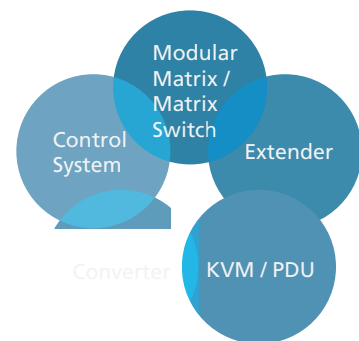
1 Presentation

Matrix Switch
Switch / Splitter
Converter

2 Video Conference

Matrix Switch
Control System
Extender
Converter

3 Multifunction Meeting

Modular Matrix / Matrix Switch
Control System
Extender
Converter
KVM / PDU

ATEN Meeting Room Solutions –
Key Advantages

Multiple Inputs, Multiple Outputs

Modular switch design with hot-pluggable fan and power modules and multiple I/O boards provides convenience and variety – DisplayPort, HDMI, SDI, DVI and VGA formats are all supported. The unique modular design also makes repair and replacement easier than ever without any interruption to services.

Simple Setup and Configuration

Remote integrated environment control with an intuitive UI that can be viewed on any mobile device makes setup and configuration quick and easy – simply connect and control all ATEN devices.

Intelligent Control for Smooth Interactions

Pre-programmed actions provide fully automated advanced operations and facilitates conversation among devices intelligently; ensures interaction between devices and participants is smooth and trouble-free; no incompatibility issues; control hardware devices via simple point-n-tap operations from the customized GUI.

Easy-to-use Control Interface

An intuitive, easy-to-use control interface means that users with minimal tech experience can still operate the system effectively and efficiently – ensures a short learning curve for users and a quicker focus on the meeting's agenda.

Compatible and Expandable

Effortless expandability is afforded by a range of expansion boxes that means your solution can expand as your meeting environment evolves; flexible, future-proof solution.

Seamlessly Share Multiple Content Sources in Real-time

ATEN's Seamless Switch™ technology with a unique Scaler provides close to zero second switching, while HDBaseT technology provides up to 100 meters extension with zero latency, ensuring meeting flow is not interrupted.

Reliable and Stable A/V Transmissions

EDID Expert™ provides the highest capabilities in terms of solving potential compatibility issues and means extra IT personnel are not required to be on hand for meetings.

Intuitive Video Wall Control via Red-dot Awarded GUI

Video wall functionality with an easy to use web GUI to create profiles customized into different video wall layouts for any video conference, presentation or training room environment.

Meeting Room
Scenarios

1 Presentation Environment

For presentation environments in the corporate world, there are multiple purposes that all revolve around the dissemination of information to participants as effectively and as interestingly as possible. The content can be anything from presentations about new market trends or potential new business opportunities to presentations used for training purposes and to deliver all kinds of professional knowledge. The key elements of success in this environment is holding people's attention in order to clearly communicate useful or original material. Presentation solutions must therefore facilitate effective communication and this is usually achieved by focusing the presentation around centralized visuals in a variety of formats. Presentations are likely to include an increasing amount of multimedia content, so graphics and video–based presentations should be ideally be teamed with display technology at the highest resolutions. Participants are also likely to need to share content from tablets, mobile phones or laptops.

Challenges:
- Central display to focus and unite participants, such as a projection screen, TV, with supporting multimedia, such as a Blu-ray player
- Requires high quality images
- Needs to supports of a variety of input sources

ATEN Suggested Solution:

✅ **HDMI Switch with VGA/DVI/DisplayPort to HDMI Converter**

- Auto Switching, automatically detects and switches when source device is connected
- EDID Expert™, selects optimum EDID settings for smooth power-up and highest quality display
- Easy source selection through pushbuttons
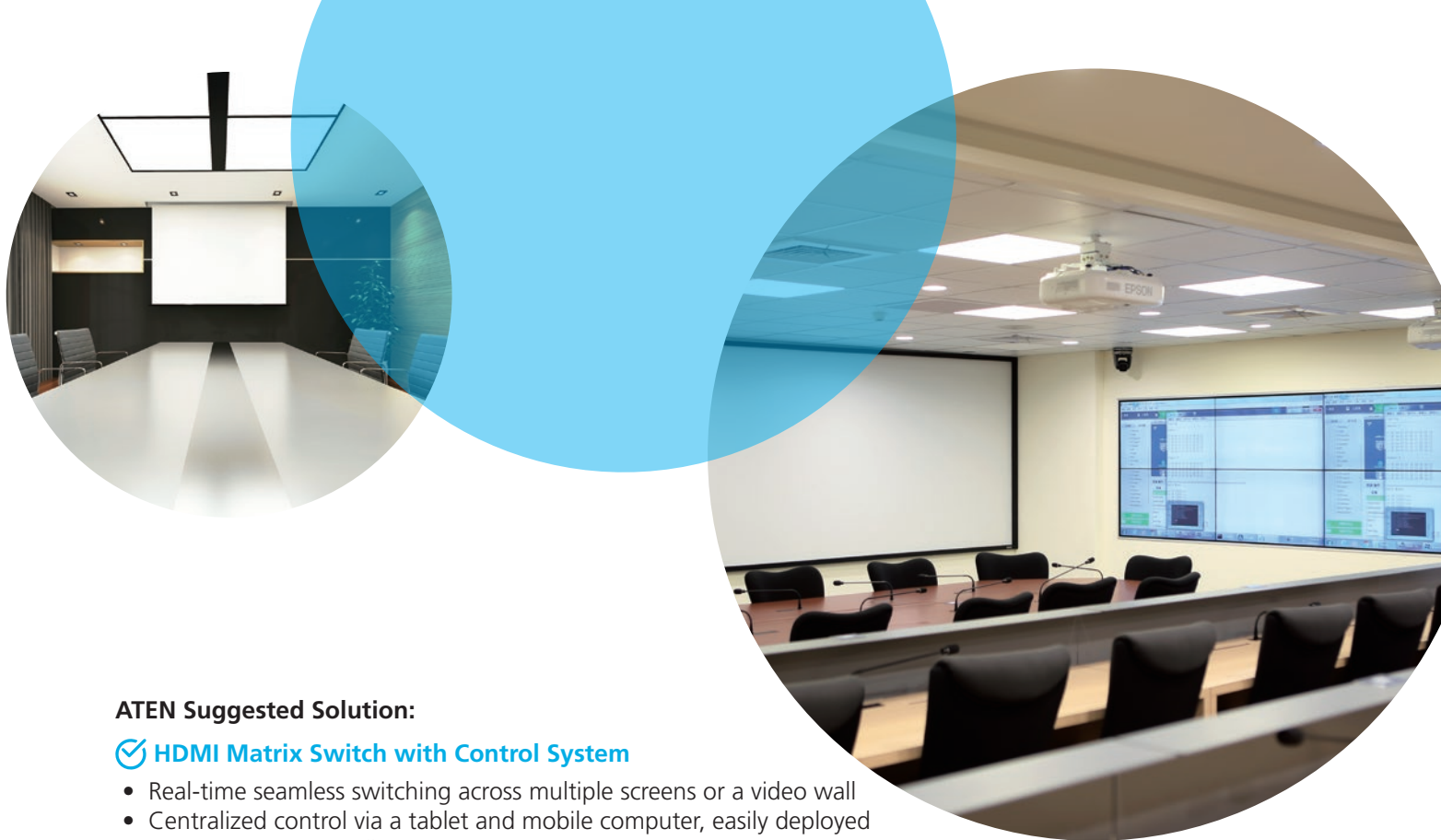- Multiple control methods: IR, RS232 and Ethernet

2 Video Conference Environment

In a video conferencing environment, whether it involves connecting different meeting rooms in the same building or multiple offices at various locations across the globe, solutions need to enable all participants to feel connected, involved and ready to unite and collaborate with partners and colleagues. Integrated A/V technologies are utilized in this environment for the purposes of information exchange, problem solving, and risk control, and so solutions must facilitate effective communication without delay, interference or lag. These kind of face-to-face group business reviews that allow multiple participants to collaborate and to share inspiration and progress are an important backbone of today's corporate business model, and so expectations for video conferencing solutions are high. Fluidity and communication are paramount, so support for setting up as video conference and maintaining multiple simultaneous high resolution video displays in tandem with digital audio is an essential requirement. Interoperability and seamless switching between multiple inputs is also paramount.

Challenges:
- Easy video conferencing set up
- Maintaining multiple simultaneous video feeds throughout the meeting
- Interoperability and seamless switching between multiple inputs
- Stable, clear audio/video signals
- High quality image requirement

ATEN Suggested Solution:

☑ HDMI Matrix Switch with Control System

- Real-time seamless switching across multiple screens or a video wall
- Centralized control via a tablet and mobile computer, easily deployed into an existing installation
- Camera tracking to facilitate remote discussion
- Audio Extraction – extracts and converts audio signals from HDMI input

3 Multifunction Meeting Environment

A typical multifunction meeting environment is usually a combination of a presentation, video conferencing, and corporate training environment, and therefore requires collaborative multimedia technology that is optimized for both convenience and instant, flexible sharing between multiple content sources. It will usually incorporate an A/V conferencing system to link participants for presentations and discussions, share digital data streams, and include multiple display screens and video walls to present a variety of multimedia, including high-resolution video and graphics. Considering the much larger scale of this kind of meeting environment, high-end setups will often require support for long distances and an intuitive control system that manages every aspect of the A/V solution, especially one that facilitates interoperability by giving users a way to have all devices collaborate with each other as part of the wider BYOD trend. These kinds of multifunction meeting environments are some of the most dynamic workspaces imaginable, and solutions needs to be both flexible and scalable.

Challenges:
- Requires instant, flexible sharing between multiple content sources with collaborative technology
- Requires quick switching between different usage scenarios
- Large screen, video wall deployments make installation complicated
- Needs central environmental control
- Multifunction rooms require support for long distances with different interface input

ATEN Suggested Solution:

☑ Modular Matrix Switch with Control System

- Centralized control through tablet and mobile computer; Ethernet based control easily deployed into existing installation
- Various expansion boxes are available, providing flexibility and scalability when you need it
- HDBaseT technology provides simple and cost effective solution for long distance signal transmission with 4K resolutions up to 100 meters
- Easy video wall setup and integration with Scaler
- Modular switch design with hot-pluggable modules enhances stability and minimizes maintenance costs

ATEN Meeting Room
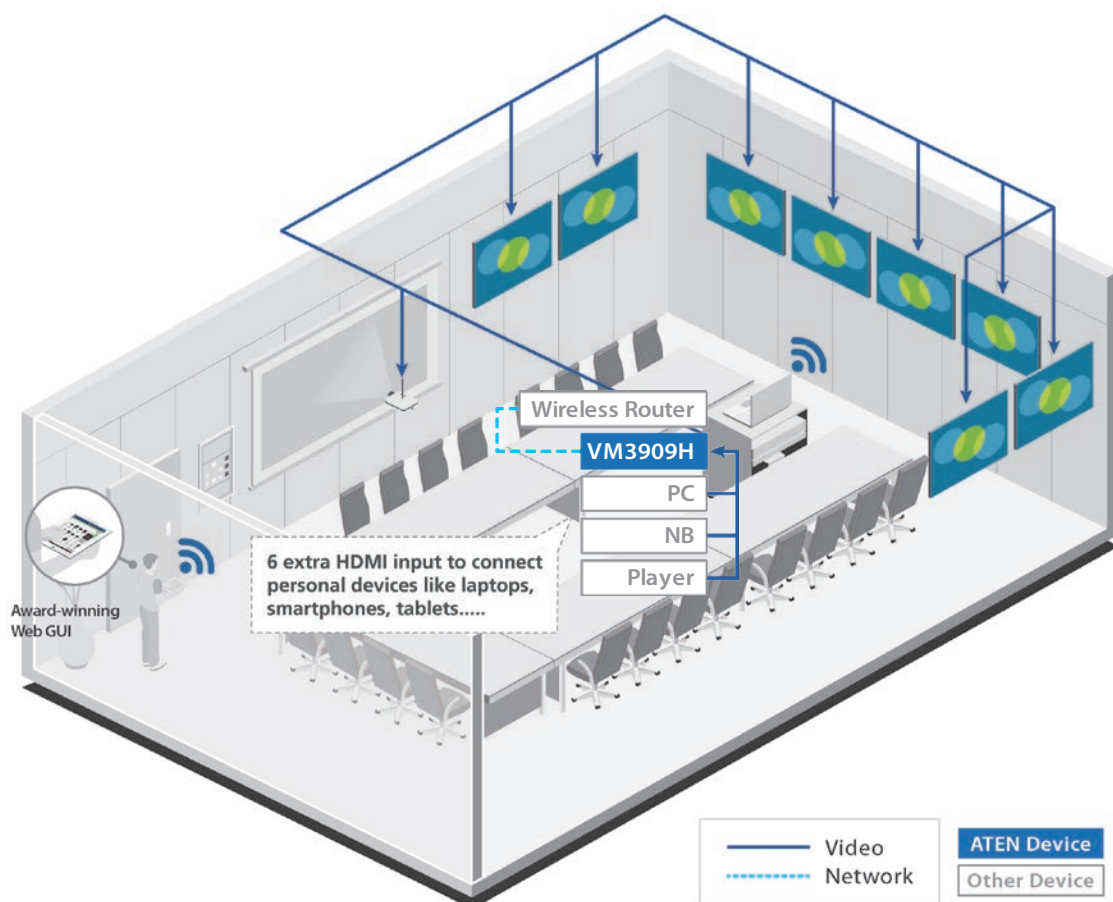# Solutions in Action

Presentation Solution

EA European Academy of Technology and Innovation Assessment, Germany

The EA is a non-profit, interdisciplinary research institute founded in 1996 to study the relation between society and technological development. The Academy maps future scenarios and shares potential impacts with policymakers and business leaders. 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 video wall.

ATEN Solution

The ATEN solution provided swift profile control, scheduling and setup with the Red Dot Award winning web user interface, while DCI 4K @60Hz support delivered crystal clear 4k video up to 40 meters and 1080p up to 70 meters. The HDMI input supported stakeholder integration by giving them the possibility to use their own devices in meetings.

VM3909H - HDMI HDBaseT-Lite Matrix Switch

Wireless Router
VM3909H
PC
NB
Player

6 extra HDMI input to connect personal devices like laptops, smartphones, tablets.....

Award-winning Web GUI

— Video
---- Network

ATEN Device
Other Device

Video Conference Solution

A/V Systems Integrator, Japan

One of high-end video conferencing systems providers based in Japan who is considered an expert in the video conferencing field. They wanted to source the best solution for the corporate conference room at their Tokyo headquarters in order to showcase the latest innovations in conferencing solutions. The upgrade needed to integrate seamlessly with the existing video conferencing hardware and provide dual-display HDMI functionality, interoperate with tracking cameras and a variety of video input sources and also accept input from tablet PCs and iPads.
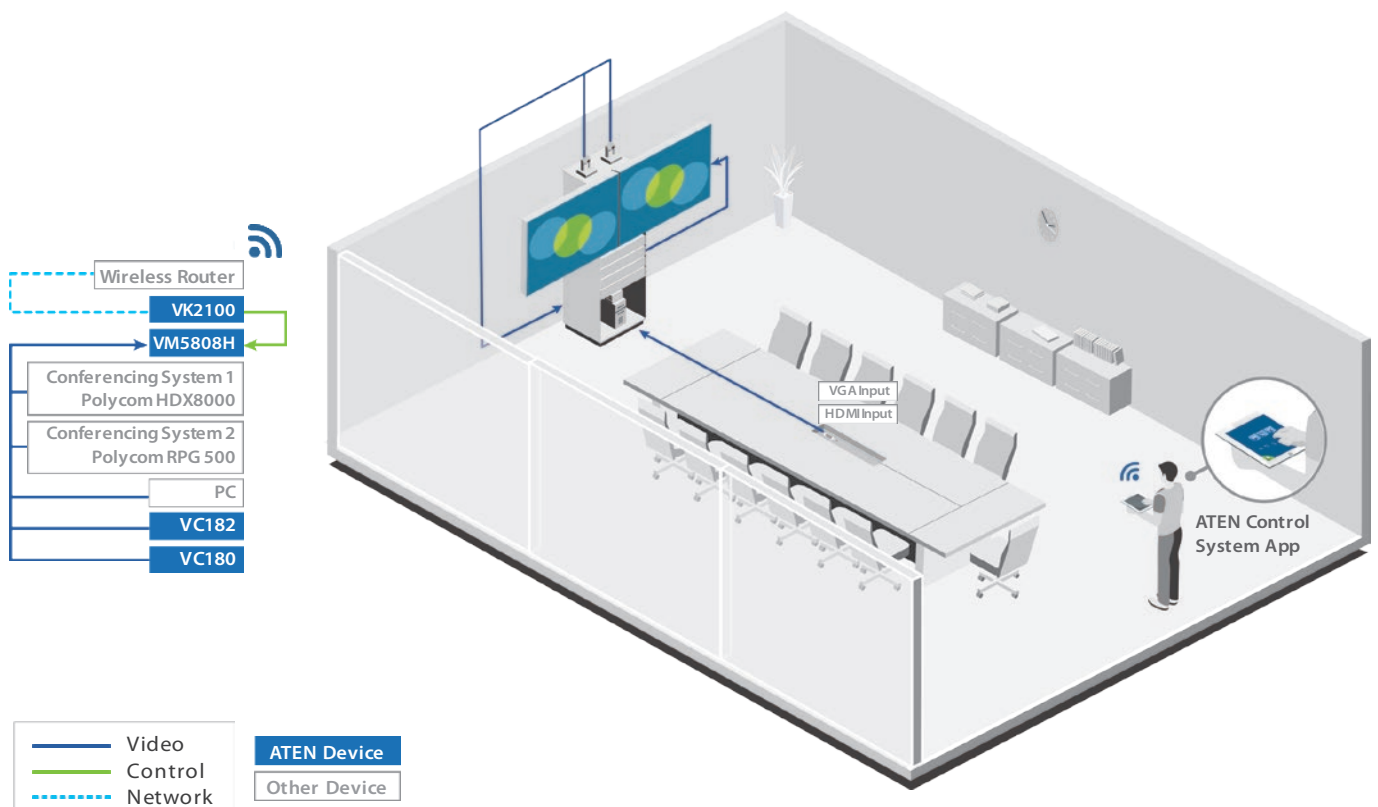
ATEN Solution

The ATEN matrix switch with scaler integrated seamlessly with the existing video conferencing system to provide centralized management of video from multiple sources and provided Seamless Switch technology, EDID Expert and ESD protection for HDMI.

VM5808H - 8 x 8 HDMI Matrix Switch with Scaler
VC182 - VGA/Audio to HDMI Converter with Scaler
VC180 - VGA/Audio to HDMI Converter

Wireless Router
VK2100
VM5808H
Conferencing System 1
Polycom HDX8000
Conferencing System 2
Polycom RPG 500
PC
VC182
VC180

VGA Input
HDMI Input

ATEN Control System App

Video
Control
Network

ATEN Device
Other Device

Multifunction Meeting Room Solution

Optoma, Taiwan

Optoma is a leading designer and manufacturer of projection and audio products for business, education, professional audio/video and home entertainment. Their corporate HQ decided to renovate their meeting room with a high-performance presentation and conferencing system. Due to the complexity of the system, their most important requirements were ease-of-use and minimal user distraction. These key value points demanded intuitive, automated controls that could quickly shift among various lighting environments, source feeds from computers, and a wide variety of mix-and-match A/V outputs.

ATEN Solution

ATEN's economical solution delivered elegant simplicity that easily met the full range of requirements in this advanced corporate conferencing system, providing a complete, solidly reliable, and highly automated solution. Effortless control turns devices ON/OFF and controls lighting in order to quickly adapt to each environment while facilitating the separation of audio signals from the video using the VC880. A fully customized UI delivered easy and centralized wireless control from any mobile device.
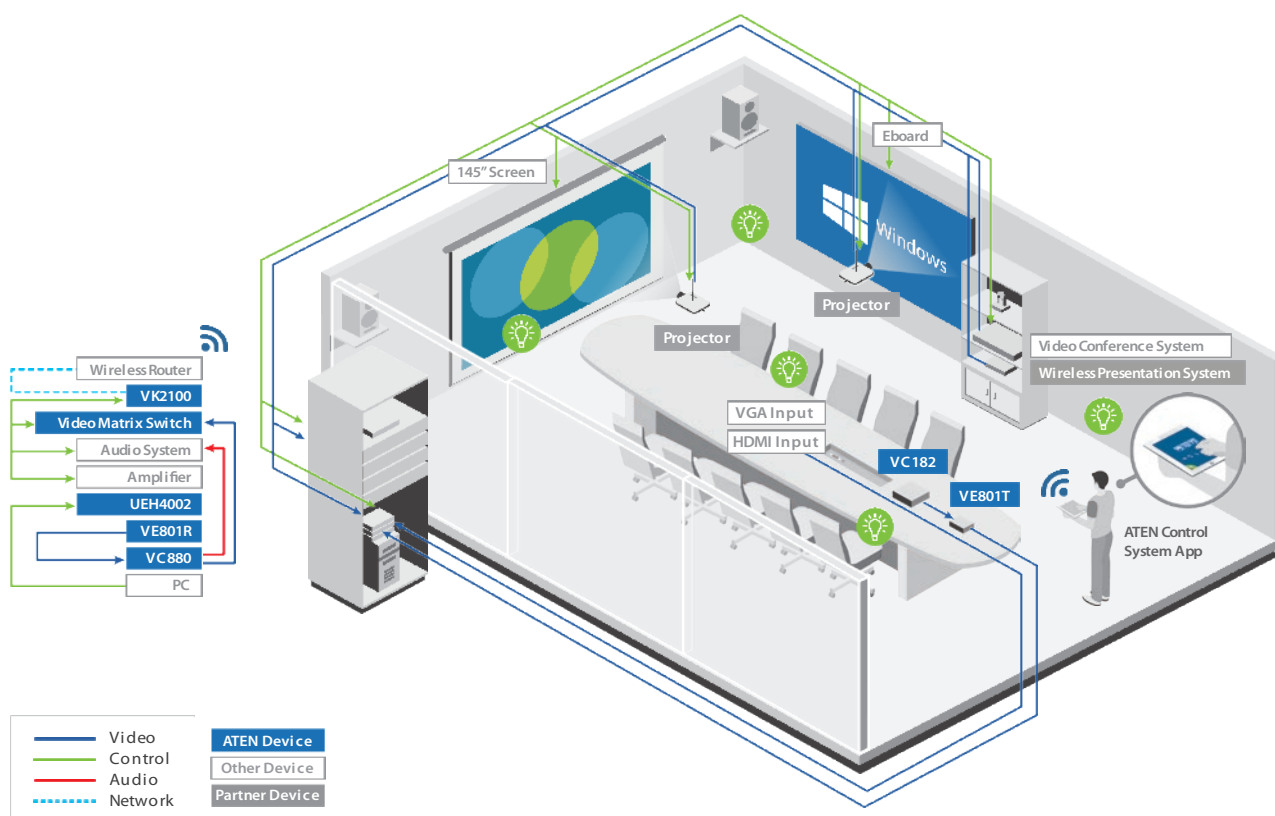
VK2100 - Control Box
VM5404H - 4 x 4 HDMI Matrix Switch with Scaler
VE801 - HDMI HDBaseT-Lite Extender
VC880 - HDMI Repeater Plus Audio De-embedder
VC182 - VGA/Audio to HDMI Converter with Scaler
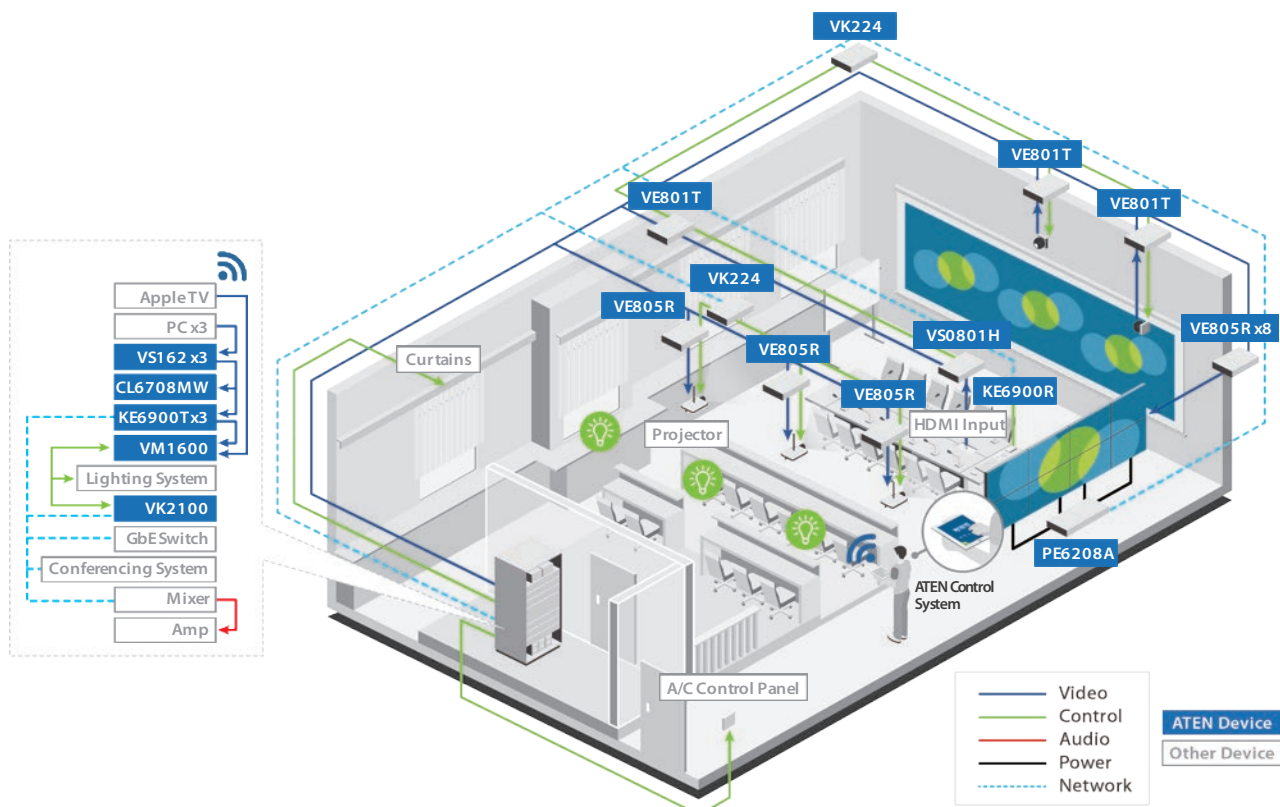UEH4002 - 4-Port USB 2.0 Cat 5 Extender

ATEN International, Taiwan

ATEN International is the leading provider of IT connectivity and management solutions including integrated KVM, professional A/V, and intelligent power solutions. The A/V equipment in the company's main conference room was in need of a makeover, and the company decided to transform the conference room into a state-of-the-art war room. The space would serve multiple functions as a conference room, a training space, and a demo area for the latest ATEN solutions, as well as a place for employees to experience and use ATEN products firsthand.

ATEN Solution

The ATEN solution provided one device to control everything that was easy to use and featured one tap functionality to switch between pre-configured meeting scenarios. It also delivered higher video quality and a more interactive meeting experience that was convenient and centralized, while wireless control from handheld devices was standard with the ATEN Control System App.

VK2100 - Control Box
VK224 - 4-Port Serial Expansion Box
VM1600 - 16x16 Modular Matrix Switch
VE805R - HDMI HDBaseT-Lite Receiver with Scaler
VE801T - HDMI HDBaseT-Lite Transmitter
VS162 - 2-Port DVI/Audio Splitter
VS0801H - 8-Port HDMI Switch
KE6900 - USB DVI-I Single Display KVM Over IP Extender
CL6708MW - Single Rail 8-Port DVI FHD LCD KVM Switch
PE6208A - 8-Outlet eco PDU

Multifunction Meeting Room Solution

ATEN Featured
Products

Upcoming Products

Q4, 2017

- 6 x 8 4K HDMI Matrix Switch
  VM6809H

- 16 x 16 HDMI Matrix Switch with Scaler
  VM51616H

- 4-Port True 4K HDMI Switch
  VS481C

- 8-Port True 4K HDMI Switch
  VS0801HA

Q1, 2018

- 4 x 4 / 8 x 8 True 4K HDMI Matrix Switch
  VM0404HB / VM0808HB

ATEN Pro A/V Solutions

Modular & Video Matrix Switches

- Modular Matrix Switches
  VM1600 / VM3200

- Matrix Switches with Scaler
  VM6404H (HDMI, 4K)
  VM3404H / VM3909H (HDBaseT-Lite, 4K)
  VM5404H / VM5808H (HDMI, 1080p)
  VM5404D / VM5808D (DVI, 1920 x 1200)

- 4K HDMI Matrix Switches
  VM0404HA / VM0808HA
  VM0202H

- The VM Seamless Switch Series Web GUI

reddot award 2015
winner interface design

Switches
VS481A / VS481B / VS482 / VS0801H

Converters
VC182 / VC981 / VC880

Extenders

• HDBaseT-Lite, Class B (4K@40m)
VE801 / VE802, VE601, VE901

• HDBaseT Class A (4K@100m)
VE812 / VE813 / VE814

• Wall Plates
VE806 / VE807

• Equalizers
VE800A / VE803 / VE810

• Wireless Extenders
VE819 / VE829

ATEN Control Solution

Control System

- **Control Box**
  VK1100 / VK2100

- **Expansion Boxes**
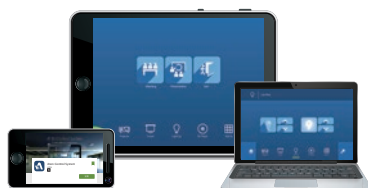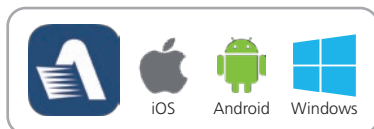 VK224 4-Port Serial
  VK236 6-Port IR
  VK248 8-Port Relay

- **Control Interface** **COMING SOON** **(Q4, 2017)**
  VK108US 8-Button Keypad (US, 1 Gang)
  VK112EU 12-Button Keypad (EU, 2 Gang)

- **Configurator Software**
  VK6000

- **ATEN Control System Mobile App**

  iOS Android Windows

  Want to know more?

ATEN
Simply Better Connections

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About ATEN

ATEN International Co., Ltd., established in 1979, is the leading provider of IT connectivity and management solutions. Offering integrated KVM, Professional Audiovisual, and Intelligent Power solutions, ATEN products connect, manage, and optimize electronics in corporate, government, industrial, educational, and retail environments. ATEN has 500+ issued international patents and a global R&D team that produces a constant stream of innovative solutions, resulting in a comprehensive portfolio of products available worldwide.