Turnkey standalone system for
1 to 1000+ cameras

Building a system as easy as stacking building blocks
This system features the integration of the camera, recorder, and software, satisfying divergent needs for surveillance solution. The modularized standalone system is constructed with minimized cost, and it is added with more value through Plug & Play.
"Smart IOT Scenario" is a new feature allowing you to customize a series of actions which will be run automatically after the specified event occurs. There are several scenario templates for you to choose when and what to do after a specific event occurs.

**Features**

**Healthy Check**

Users could immediately get notified of all abnormal system events for their surveillance systems (such as video loss, system being unlocked, no hard disk, etc.) from their smart phones by the function of Push Status.

**External I/O Application**

AVTECH Push Video series can be used to combine multiple sensors via its alarm I/O to build an alarm system. The alarm system not only sends text messages but video clips to users’ mobile devices to inform them of alarm events. The system can be applied to elderly caring, humidity control, CO2 control, access control, intrusion monitoring, and flood detection.

**IVS for Advanced Detection**

The built-in IVS feature allows more detection scenarios, i.e., people counting, virtual fence and one-way pass. Based on these three scenarios, you can configure the recorder to trigger different actions automatically depending on your need.

**Related Products**

- AVH8516 16CH 8-Bay Smart NVR
- AVH517 16CH Smart NVR
- AVH1109 9CH (w/8CH PoE) Smart NVR
- AVZ8136 36CH 8-Bay Smart XVR (W/Pentabrid)
When detecting an event, our PUSH VIDEO products (DVR, NVR or IP camera) will immediately send an event notification to your mobile device within five seconds, and meanwhile, EagleEyes, our mobile surveillance app will be activated automatically for remote video playback.

**Features**

- **00:02:00** (Left your office.)
- **02:46:00** (A thief broke into your office.)
- **02:46:05** (Received Push Video at home.)
- **02:46:07**

- Slide to enable Push Video
- Push Video All-in-One HD IP Camera
- Active Push MSG.
- Video Playback (3 sec Pre-alarm Record)
- Backup on Mobile Device

**Related Products**

- PUSH VIDEO All-in-One IP Camera
- External I/O IP Camera
- Push Video NVR
- HD CCTV PUSH VIDEO XVR
Cloud EaZy Networking is a free P2P service to connect AVTECH devices to the Internet automatically by plug-and-play, enabling you to check the live view via your mobile device or laptop at any time. The live display is usually smooth unless your network environment is a private IP-based one. If you feel the live display is not fluent enough in the private IP-based network environment, you could subscribe one of the data plans AVTECH offers to enhance the data transmission. We’ve also offered 2GB data allowance as a gift on each device for you to experience when your network environment turns into a private IP-based one. When 2GB is used up, the network transmission will restore to its original status.

**High Adaptability**

Easily traverse in different types of networks
Cloud EaZy Networking supports a wide range of network types, making network configurations easier.

**Buddy**

Intuitively Operate, Easily Share
With the friendly design of Cloud EaZy Networking, sharing your monitoring video with your family or friends will be a piece of cake. You can easily share your account and classify your Buddy to many levels to share your authority of accessing the device separately. What’s more, you are able to configure the life time of device access for each level to manage data resources.

**Health Check**

Device online / offline status in hand
Health Check informs you of device login / logout events via the cloud service of Cloud EaZy Networking.

**Related Products**

- EaZy Networking IP Camera
- EaZy Networking NVR
- EaZy Networking HD CCTV XVR
CMS Lite, the 32CH free software, is exclusively designed for monitoring multiple spots remotely. Common applications are chain stores and branch offices. Users can easily use functions such as live view, playback and backup with this software installed on a normal laptop. For advanced central control application, AVTECH provides you with 64CH CMS PLUS and 96CH CMS PRO. What's more, our mobile app, EagleEyes, is used for remote surveillance through tablets and mobile phones.

**Live Flexibility**

Live Group allows users to group the monitoring areas based on their needs.

**Search & Playback**

The specification of this playback system is the same as that of CMS PRO. The videos are categorized by events, so our users can easily find their target video segment.

**16CH Recording at PC (VMS)**

CMS Lite can not only back up the videos but also possess VMS function, enabling our users to skip the recorder and record directly.

**PC-Based CMS Software**

96CH CMS PRO / 64CH CMS PLUS / 32CH CMS LITE

**Mobile CMS Software**

EagleEyes for tablets and mobile phones
CCTV System / Software
Display Solution - 64CH TV Wall

HDM02 64CH TV Wall is exclusively designed for users looking for a solution carrying less than 64CH. It is compatible with 1080i/60 devices and allows 64CH real-time live display efficiently by hardware decoding on HDM02. Also, users are saved from complex installation. The above characteristics make HDM02 64CH TV Wall a perfect program with high cost-performance ratio for consumers.

<table>
<thead>
<tr>
<th>HDM02 (Standalone PC-Free TV Wall)</th>
<th>CMS ( PC-Based CMS TV Wall )</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live Efficiency</td>
<td>High</td>
<td>64CH real-time live display on the TV Wall is available by hardware decoding on HDM02. Channel sequence and basic control are also supported. It is not confined to the CPU efficiency and network transmission efficiency like PC (via software) is.</td>
</tr>
<tr>
<td>System Cost</td>
<td>Low</td>
<td>There's no need to use any PC, switch and high-end network cable between HDM02 TV Wall and recorders, which effectively saves the installation cost.</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Easy</td>
<td>When live lag occurs in CMS TV Wall, users need IT professionals to check CMS settings, network cables and the limitations of network bandwidth. Compared to CMS TV Wall, HDM02 TV Wall Plug &amp; Play is easier to maintain even for general users.</td>
</tr>
<tr>
<td>Installation</td>
<td>Easy</td>
<td>HDM02 is easy to be installed (Plug &amp; Play). Users only need HDMI cables and USB cables to build up the TV Wall. On the contrary, to build up CMS TV Wall, users have to configure the bitrate, frame rate, layout via the CMS software in addition to network settings.</td>
</tr>
</tbody>
</table>
| Features                          | • Live display under 64 channels with a single 42” or 52” monitor  
• Easy to install (only need HDMI cables and USB cables)  
• Easy to maintain  
• High cost-performance ratio | Necessary to configure bitrate, frame rate and layout via the CMS software in addition to network settings |

Advanced Features:
- HDMI Matrix Operation
- Coaxial 70m Transmission
- HDMI/USB Connection

Necessary to configure bitrate, frame rate and layout via the CMS software in addition to network settings.

Related Products:
- HDM02 HDMI Matrix
- AVX916R HoC converter (HDMI over coaxial)
When the NVR and IP cameras are disconnected, the recording task will switch to the cameras, and the recordings are saved to the microSD cards of the cameras. When the NVR and IP cameras are re-connected, the recordings saved in the microSD cards will be transferred to the NVR and saved in the hard disks without changing the original recording time. Users could still search the recordings they want by time on the NVR.

A proportion of FOS NVRs will be assigned as failover servers to the whole surveillance system. Usually 1 FOS NVR shall be worked with 7 NVRs. When any of the NVRs is down, the FOS NVR will soon take over all the works the NVR was doing to keep the whole system working properly. Users could be notified of this take-over event by checking the health check on CMS, and take necessary actions.

RAID5 is able to well preserve the video data when any hard disk is damaged or partially damaged. To change the hard disk, hot-swap is applicable without unplugging the whole system.

Features

Seamless Recording

Connection Lost

Failover System

Take Over

HDD Redundancy (RAID5)

Related Products
The tribrid HD CCTV DVR supports IP, TVI, AHD, CVI and 960H video signals for up to 2MP live display and video recording. It breaks the boundaries of different video systems and enhance the flexibility for system integration.

**PUSH VIDEO**

Every time an event is detected, the DVR will immediately send an event notification to your mobile device within five seconds, and meanwhile, EagleEyes, our mobile surveillance app will be activated automatically for remote video playback.

**Cloud EaZy Networking**

Cloud EaZy Networking is a free P2P service to connect AVTECH devices to the Internet automatically by plug-and-play, enabling you to check the live view via your mobile device or laptop at any time.

**Permission**

In addition to the default predefined user account – Supervisor / Power User / User / Guest. You can also create your own to assign different access rights to different functions for different user accounts.

**Related Products**

- 4CH Pentabrid XVR
- 8CH Pentabrid XVR
- 16CH Pentabrid XVR
- 16CH Pentabrid Smart XVR (with-bay HDD Storage)
For multiple channels monitoring and recording, AVTECH has released a series of recorders for 32CH ~ 64CH recording. In addition to the huge storage capacity to save video data, they can also connect to an external disk array to get more storage capacity and build a RAID5 system to keep your data safe if necessary.

**144CH TV Wall**

Users could combine the displays of up to 4 HDMI recorders into one monitor and control all four devices with one mouse, providing the most economic way to have a up to 144CH surveillance solution as an alternative to use a PC-based CMS software.

**IOT Scenario**

“Scenario” is a new feature allowing you to customize a series of actions which will be run automatically after the specified event occurs. There are several scenario templates for you to choose when and what to do after a specific event occurs.

**8-bay Huge Storage**

4K2K Long Time Recording
To solve the large storage requirement of 4K2K recording, a new 8-bay recorder is released to keep high quality H.265 video data without overwriting data so quickly.

**Related Products**

- **36CH NVR - AVH836**
  - 36CH XVR - AVZ8136
  - with 8-bay HDD Storage

- **64CH NVR - AVH564**
  - with 45-bay RAID 5 disk array

- **AVX997 (e-SATA / RAID 5)**
  - AVX992 (e-SATA)
  - 10-bay disk array
This standalone storage solution is able to fulfill the demand of high storage capacity to preserve video footage more than 30 days. It could be a 10-bay NVR with RAID5, or an AVTECH recorder with an eSATA interface built-in to connect to a 10-bay disk array, AVX992 or AVX997 with RAID5.

**Features**

**HDD Redundancy (RAID5)**

RAID5 is able to well-preserve video data when any hard disk is damaged or partially damaged. To change the hard disk, hot-swap is applicable without unplugging the whole system.

**Elegant Appearance**

The deluxe metal case appearance with matte silver finish attracts people’s attention. Furthermore, the hard disk, fan and power module are designed to be easily installed and replaced.

**Flexible Disk Array Mode**

The disk array, AVX992 / AVX997, has two modes, Single and Both, allowing users to assign the disk array to be used with one or two recorders if needed. When two recorders are connected to the disk array via eSATA cables, and the mode is switched to “Both”, the disk array will allocate five hard disks to one recorder for external video storage.

**Related Products**

- AVH364 64CH NVR (10-bay)
- AVH516+ 16CH NVR (10-bay / RAID5)
- AVX992 10-bay disk array (eSATA)
- AVX997 10-bay disk array (mini SAS / for AVH364 only)
- AVX993 10-bay disk array with RAID5 (eSATA)
The 2nd generation of DCCS technology allows you to use existing coaxial cables to control the motorized lens & motorized pan cameras without connecting RS485 wires, and the motorized camera control can be easily made via AVTECH DVR OSD, IE browser and EagleEyes APP.

**Motorized Zoom Lens**

Remote Adjustment

Equipped with a motorized zoom lens, this camera series eliminates the need to adjust focal length and focus manually on site. Installers could adjust camera focus and focal length remotely from the recorder or the mobile app, EagleEyes.

**Motorized Pan / Zoom**

Sequence & Push Video Lock

The motorized-pan IR dome camera series supports sequence control, Push Video, and Push Video Lock via the mobile APP EagleEyes.

**Related Products**

Starlight Version

Motorized Zoom Series

Motorized Pan / Zoom
True WDR Series

The WDR design is used to increase image recognizability in overexposure and dark areas, such as surveillance of entrance doors which have a darker indoor environment comparing to the outside. This is very common in retail shop and building.

Features

**Tunnel:** Vehicles entering a tunnel or parking garage with a high of luminance outside, and inside at low light levels.

**Car License:** Plate quick recognition of car license plates in B/W IR mode when the glare of the car light is too bright.

Related Products

- IR Bullet
- Box Camera
- Motorized Pan / Zoom
- IR Dome
- Vandal Proof IR Dome
- Starlight IR Bullet
- IR Speed Dome
To meet the IR PTZ needs for different surveillance scale, AVTECH provides users two total solutions. For the small-scaled cases such as outdoor parking lots, there is an USB joystick going with the free recording software, 32CH CMS LITE. As for the large-scaled case such as shopping mall, there is an USB joystick going with 96CH CMS PRO, NVR / TVI DVR, and several IP or TVI IR speed dome cameras.

Features

**USB Joystick**

Connect to PC, NVR or DVR to operate PTZ cameras for PTZ, AF, preset point, cruise, sequence, auto pan and further settings.

**Tribrid**

Compatible with recorder of different specifications: IP, TVI, and AHD. Easy to work with the software.

**IR Turbo Mode**

IR effective range up to 200 meters for night surveillance, and over 200 meters available in the IR Turbo mode.

Complete control options by:

- Joystick, NVR / DVR local OSD (Hot Point), and AVTECH mobile APP touch control (EagleEyes)
- DC / AC / POE support

Give several power options of installation (POE optional)

Health Check:

IR speed dome cameras are capable of self checking and sending push messages about abnormal events to your mobile devices via AVTECH mobile APP (EagleEyes) actively, effectively saving the maintenance cost.

Related Products

- AVM553 - S03X
- AVM554 - L10X
- AVM554 - L03X
- AVZ593 - 30x Zoom
- AVZ592 - 20x Zoom
- Speed Dome Tribrid Type
- 4CH / 8CH / 16CH Pentabrid Recorder
- 96CH CMS PRO
- 64CH CMS PLUS
- 32CH CMS LITE
- AVX102
- USB Joystick
AVTECH Push Video IP camera series can be used to combine multiple sensors via its alarm I/O to build an alarm system. The alarm system not only sends text message but video clips to users’ mobile devices to inform them of alarm events. The system can be applied to elderly caring, humidity control, CO2 control, access control, intrusion monitoring, and flood detection.

**Features**

**All-in-One IP Camera**

Apart from basic camera functions, All-in-One IP camera series has a microSD card slot for recording. Besides, it supports microphone & speaker built-in for two-way audio transmission and external alarm I/O device connection.

**Push Video - Event Notification**

Every time the camera detects an event, it will immediately send an event notification to your mobile device within five seconds, meanwhile, EagleEyes, the mobile surveillance App will be activated automatically for remote video playback.

**Easy Connection to Cloud**

AVTECH EaZy Networking helps to connect your device to the internet by plug and play. You can share your device to other account and classify your Buddy to have different access permission separately. Selected IP cameras also support Angelcam cloud service to offer an alternative for quick & secure connection.

**Related Products**

Box Camera, IR Bullet, IR Dome w/PIR, Vandal-proof Dome, Fisheye, IR Speed Dome.
This system provides various solutions to surveillance management in different industries such as campus and chain stores, cutting down personnel cost of management and providing instant alarm notification of abnormal events.
An IVS card from the 3rd party is integrated to provide lots of powerful intelligent surveillance functions like Loiters, Taken Away, Left Behind and Virtual Fence. With the IVS card, AVTECH CMS “TRIDENT” could search events and play the video.

**People Counting**

Please make sure the camera faces your target area and set up the walkers’ route. The system will count the numbers of walker and conduct business analysis. What’s more, CMS Event Monitor and Push Video will send notifications to users through mobile devices when there are abnormal events.

**Loitering**

Set up a specific area in which people are not allowed to stay longer than a certain period of time. When people stay in the area for too long, the alarm will be triggered and the system will notify users promptly through Push Video. This function could be used, for example, to the cashier area to control the queue length.

**E-Map / E-Voice Notification**

Users can record and assign different alert sounds for different abnormal events on different monitoring blocks of the map. The abnormality will activate the alarm, and the spot of the abnormal events will be shown on the map.

**Related Products**

- **PC-Based CMS Software**
  - 96CH CMS PRO

- **Plug-in**
  - LPR Solution
  - POS Solution
  - IVS Solution
  - Access Control Solution
Face Recognition could be used for access and security by simply looking at the camera instead of using passcodes or RFID cards. This technology nowadays is mature enough to identify whether a subject is a person or dog and to recognize the targeted face among a large crowd of people.

**Access Control**

Only the faces saved in the access database can be recognized and have the authorization to access the restricted area.

**Face Searching**

Search the targeted face among a large crowd of people to help the authorities catch the target they want.

**Deep Learning**

The cameras are designed to learn from each mistake and increase the accuracy to identify whether a subject is a person or dog, and the person's age and gender.

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**Related Products**

- Dome
- Pan / Tilt Dome
- Vandal Dome
- Motorized Lens
- Motorized Lens (Starlight)
- 10x Motorized Lens
- 8-Bay Storage Recorder (Smart IOT Scenario)
To quickly set up the whole surveillance system in a chain store with instant event notifications, AVTECH’s new wireless solution to include wireless Push Video NVR and IP cameras is the perfect solution to use. You can also add fisheye cameras to get seamless 360° surveillance.

**360° Fisheye View**

Fisheye cameras are especially suitable to monitor shop corners or areas displaying high-value products, offering you 360° seamless surveillance.

**Wireless Solution**

AVTECH’s new wireless solution includes not only wireless IP cameras but also wireless recorders to save all the troubles of cable arrangement and get efficient installation, especially suitable for middle-sized shops.

**PUSH VIDEO**

When an event is detected, the recorder will immediately send an event notification to your mobile device within five seconds, and meanwhile, EagleEyes, the mobile surveillance app will be activated automatically for remote video playback.

**Related Products**

Wireless IP IR Bullet / Wireless IP IR Dome / Fisheye IP Camera / 4CH Wireless DVR
AVTECH has packaged solutions for industries, including

1. Video surveillance: High quality image for monitoring cashier, entrance, and other important areas.
2. Staff Management: A simple attendance system combines access control devices which allow you to check staff attendance and get abnormal event notifications on smart phone.
3. Multiple stores management: The headquarters can manage all CCTV devices in branches through CMS. The mobile App allows managers to supervise all stores anytime anywhere.
4. Marketing data analysis: IVS analysis helps you evaluate the effects of marketing activities and optimize store performance.

High Definition Image
- Best Quality Image: Secure the environment and provide wonderful images day and night.
- At Cashiers: Record the transaction amount and the bill numbers
- At Entrance: Record every customer’s face
- Gateway of the Car Park: Record the car model and the license plate

Only the faces saved in the access database can be recognized and have the authorization to access the restricted area.
### Video Intelligent Analysis

- **People Counting:**
  - Count visitors during a period of promotion.
  - Customer Behavior Analysis
- **Queue Analysis:**
  - Analyze whether the queue is too long at the cashier or counter
  - Enhance customer's satisfaction
- **Loitering:**
  - Spotting customers unable to locate merchandise

### Marketing data analysis

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### Multi-site Management

- **Central Management (CMS Trident)**
  - Powerful functions: Event pop-up, health check, e-map, e-voice
  - Centralized management for each branch's video and attendance: the manager may look up the recording data or attendance data when necessary
  - User authority: To enhance the security level of management
  - Remote Event Backup to ensure employees' safety.
  - Periodical event report to save management time.
- **Local Management (Mobile App – EagleEyes)**
  - To-go Monitoring: Regional manager can check the branch's condition anytime anywhere.
  - Push Video: Send prompt notifications to when suspicious people are detected

### System diagram

- **Video surveillance**
  - Cash register
  - Entrance
  - Network Video Recorder
  - Router
  - Staff Management
  - Multi-site Management
  - Marketing data analysis
  - Multiple stores management
  - Event Monitor / Playback
  - People counting / Queue
  - IVS analysis
  - APP

### Multiple stores management

- **CMS PC**
  - Central Management (CMS Trident)
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AVTECH provides solutions to meet the relatively high requirement of campus security day and night, keeping the staff, students from intruders. AVTECH learned about the safety concerns from the students' families, and the solutions are listed as below.

1. Video Surveillance: AVTECH cameras provide HD image of the surrounding of the campus 24/7. And the security staff is able to monitor the campus through CMS and mobile APP.
2. Attendance Management: To track and report attendance condition of the staff and the students. Users can also set an access authority requirement on a RFID tag to unlock doors for rooms that can only be entered by the staff.
3. Campus intruder detection and notification: Report events when intruders try to break in the campus fences. Reports will be shown on CMS and mobile APP immediately.
4. Central management and mobile surveillance: All cameras will be monitored on CMS in the control room. Every event will be sent through a pop-out screen with E-map and voice indicating the event's location. Instant notification will be sent to certain mobile devices through APP to fulfill multiple safety purposes.

In the system, we especially focus on the safety issue and strengthen the protection measures. Its high flexibility in application and installation makes it the perfect choice for schools with different environments.

For preventing break in & forbidden area & object left behind:
- To track and report immediately through CMS when anyone tries to cross the fence or the parking lot.
- Power Transformer / Roof Top / Edge of Buildings: To avoid danger through E-Map and E-Voice on CMS when students try to access forbidden places on campus.
- Sidewalk around campus: Identify suspicious objects placed on the campus such as explosives or unknown stuff.

Features

**Campus intruder detection and notification**

- PC-based Central Management System:
  - Live View: Set group channels and run in sequence mode
  - Playback: Choose by event or specific time
  - Event: Pop-out screen to indicate events immediately
  - E-map & E-Voice: Show specific cameras with event & voice indicating the cameras' locations.
  - Push Video: Users can monitor and get event notifications through EagleEyes on mobile devices.
**Video Surveillance**

HD Performance:
- **Serious Light Contract:** WDR function can coordinate the image brightness for better image.
- **Auto Focus:** Adjust the focus to keep images clear.
- **New IR:** Farther IR distance and image balance at night time, able to adjust the lightness automatically.

**Attendant Management**

Attendant Management & Access Control:
- **Staff & Student Management:** HR can easily get the attendant condition of the faculty for monthly report. Teachers can receive notifications of students’ absence and skipping class. This function provides teachers a well control of students attendance condition.
- **At night time,** security can use the RFID tag to unlock the door and take snapshots to record the intruders coming into the campus.

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**System diagram**

- **Video surveillance**
- **Central management and mobile surveillance**
- **Attendant Management**
- **Campus intruder detection and notification**

**Features**

- **WDR**
- **New IR**

**Live Monitor / E - Map / Playback**

**CMS**

**Switch**

**Recorder**

**Access Card Reader**

**Third-party System Integration**

**Flow Counting**

**Internet**