Enable Your Intelligent Video Surveillance Solutions

- Intelligent Video Surveillance Systems
- Tribrid Recording & CMS Software
- Intelligent Video Analytics Software
- Video Ethernet Switch
- Video Capture Card Series

www.advantech.com
Provides a variety of selection from video capture cards, to appliances, to system solutions to fulfill different integration requirements.

DVP video capture card series provides complete solutions from mid-end SoC to high-performance TI DSP video capture cards.

IVS and ARK-VS series provides a complete line up of industrial-grade surveillance systems for various applications.

Powerful surveillance software, PowerView, provides complete recording, IVA and CMS functions to meet complex surveillance application needs.

Flexible integration with Advantech’s I/O module to provide a complete surveillance framework.

Structured Tribrid Surveillance Framework
- Great flexibility for analog, HD-SDI, and network camera integration in a single system
- Easy upgrade from current SD CCTV systems to HD-SDI and IP systems
- Easily integrate Intelligent Video Analytics (IVA) functions with analog, HD-SDI and IP cameras

Complete & Reliable Product Lines
- Provides a variety of selection from video capture cards, to appliances, to system solutions to fulfill different integration requirements
- DVP video capture card series provides complete solutions from mid-end SoC to high-performance TI DSP video capture cards
- IVS and ARK-VS series provides a complete line up of industrial-grade surveillance systems for various applications
- Powerful surveillance software, PowerView, provides complete recording, IVA and CMS functions to meet complex surveillance application needs
- Flexible integration with Advantech’s I/O module to provide a complete surveillance framework

Complete Solutions For Surveillance Systems
- 2U/4U industrial-grade, intelligent video surveillance system
- 1U TI DSP-based, digital recording system with PoE
- Compact size, fanless, industrial-grade intelligent video surveillance system
- Scalable and expandable Central Management System (CMS)
- Industrial- and commercial-grade Ethernet switch series

Intelligent Video Analytics (IVA)
- Built-in camera tamper detector and optical diagnostic functions to increase reliability
- Standard API to support different IVA integration for different vertical markets

Advantech Intelligent Video Surveillance Solutions
**Application Emphases:**

Real-time, high resolution and high quality video, high recording speed, high video compression rates, IVA functions, and industrial-grade systems that can work under harsh environments are the main challenges of surveillance system for transportation applications.

**Advantech Solutions:**

Advantech surveillance systems are perfectly designed for various transportation applications, including railway, bus, subway, train and even high-speed rail. Advantech provides extremely flexible, industrial-grade surveillance systems and Ethernet switches, using special video compression techniques that can be integrated into many environments. A highly-customized system can be built according to any special needs. The system can also be integrated with cloud services so that users have access to video or other recorded data, anywhere and anytime. As a result, transportation surveillance management, performance, and decision making can be optimized.

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**Application Emphases:**

Real-time monitoring is only a partial requirement of surveillance in the retail industry. The retailers are more concerned about real-time operations and customer information, counting people in specific product areas, analyzing customer behavior, as well as connectivity to POS, energy-saving systems, remote CMS, and terminal devices.

**Advantech Solutions:**

Advantech surveillance solutions for the retail industry support IVA functions for all analog, HD-SDI, and IP cameras. The cameras use self-detection techniques to avoid camera tampering activities, and can also quickly connect to smart phones and a CMS to offer a complete implementation of intelligent technologies for a retail store.
**Finance**

*Application Emphases:*
Real-time connectivity, high-resolution video streams, and reliable file management are critical for surveillance in the financial industry. In some sensitive areas that need higher levels of security, such as an ATM room, a bank counter or a treasury, intelligent video analysis (IVA) is required to prevent theft, or the intentional destruction of cameras or ATM machines.

A complete Central Management System (CMS) allows a bank to effectively manage the throughput at branches and ATMs, system performance, and event notifications, and this is the main reason why CMS is so critical to the financial industry.

*Advantech Solutions:*
Advantech’s industrial-grade surveillance systems offer high flexibility and reliability, suitable for financial industry applications. Tribrid capabilities allow the systems to support many different types of cameras. The systems also supports IVA functions for both analog and digital cameras, allowing banks to continue to make use of their investment in older technologies.

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**Education**

*Application Emphases:*
A main challenge in campus surveillance is how to inform campus security managers with limited human resources in a timely fashion about all the critical events that occur in open areas and different buildings on campuses.

*Advantech Solutions:*
Advantech provides industrial-grade surveillance solutions for campuses. The solutions provide both industrial- and commercial-grade network switches, as well as a video management system and software which fits into all kinds of campus environments. The surveillance systems are compact in size and fanless, offering a multi-channel central management system, and a server-level recording system.

The flexibility of the systems allows real-time video and instant I/O status to be integrated with an e-map. System managers are informed by a pop-up window when an event happens. With the Advantech surveillance system, campus security can be highly improved, and it can also be effectively managed, even with limited resources.
Military

**Application Emphases:**
The challenge of a military surveillance system is that it needs to be highly durable and reliable in order to fulfill the different video processing requirements of different military camps.

**Advantech Solutions:**
Advantech’s high-performance, industrial-grade surveillance system can easily integrate different IVA functions, and it can also provide a self-detection function for different cameras. The system can also work with an Ethernet switch to handle the massive video stream transfers required of the application. Furthermore, a SCADA system can be integrated with an e-map function to provide real-time access control data, regional monitoring, and an intelligent search service; video can also be augmented with location information to provide a better security implementation for military applications.

Factory

**Application Emphases:**
Protection from dust and resistance to heat are common requirements of a factory surveillance system. In addition, a factory surveillance system should also be easy to integrate with different monitoring systems, such as environmental, production line or transportation monitoring systems, access control systems, and cross-regional systems.

Based on the demands of different environments, the integration of different video resolutions, IVA functions, CCTV, HD-SDI, or IP cameras may be necessary. Using a production line system as an example, real-time video at 60 fps and 2M resolution is needed for effective monitoring; however, a camera supporting such a high frame rate may not be suitable for the material management area, which instead requires integration of access controls with an IVA system. All these kinds of systems should be bundled with a supervisory control and data acquisition system (SCADA) for uniform monitoring and control.

**Advantech Solutions:**
Advantech is unique in that it can provide an integrated system between that works with all facets of access control, factory and production line surveillance, warehouse management, an automatic controlling system and fire control.
**PowerView** Video Surveillance Software

- **Supports PTZ Control Function**
  - Camera direction control and pre-configured orientation

- **Flexible Record Scheduling Modes**
  - User friendly set up
  - Up to 7 recording modes are available
  - Separate recording schedule for each individual camera

- **PowerView Features:**
  - **Flexible Event Action Plan**
    - Flexible event action plans including alarm signal, snapshot, email/SMS notification, PTZ control, video record, file, execution and more.
    - Event sources include motion/sensor detection, camera signal loss, log status, backup/recording status, system status, etc.
  - **Flexible and Diverse Recording Modes**
    - Supports diverse recording modes and schedules for each individual camera
  - **Quick Search for Event Logs**
    - Quick search for event logs including login status, remote connection status, system events, camera status, motion/sensor detection, and more.
    - Users can print out or save the event logs into excel or HTML files.
**Built-in standard IVA functions:**
- Camera tamper detection
- Optical self-diagnostic
- Motion detection

**Standard API to support different types of IVA integration:**
- License plate recognition
- Forbidden zone
- People counting
- More.

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**Intelligent eMap Function**

When event occurs, PowerView’s intelligent eMap will display the camera location and live view.

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**Powerful Video Smart Search Function**

Users can define certain regions of interest on recorded video for extracted video with motion detection, and can also find corresponding video through event logs, shortening search time.

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**Multiple Event Action Plan**

Users can select corresponding event action for different event sources including motion/sensor detection, camera signal loss, log status, backup/recording status, system status, and more.

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**Powerful IE Browser Monitoring**

Monitor historical recorded video data and remote control for live view video, set up, and client system status monitoring through IE browser.

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**Multiple Backup Mode**

- Backup recorded data to hard disk, CD, DVD, Disk Array, and USB without stopping video recording.
- Flexible selection of backup time, camera and storage location.
- Automatically calculate storage space required for backing up recorded data.

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**Intelligent Video Analysis Functions (IVA)**

- Built-in standard IVA functions: camera tamper detection, optical self-diagnostic, and motion detection functions
- Standard API to support different types of IVA integration, such as license plate recognition, forbidden zone, people counting, and more.

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**License Plate Recognition**

**Face Detection**

**Forbidden Zone**

**People Counting**
 Advantech provides various platforms of DVR/NVR solutions including both X86 PC based platform and TI DSP platform for different surveillance applications. Our appliance ranges from 2U/4U industrial PC based Tribrid DVR, TI DSP based standalone Hybrid DVR/NVR, to compact size fanless standalone Tribrid DVR/NVR solutions.

### IVS Series Tribrid DVR

<table>
<thead>
<tr>
<th>Description</th>
<th>IVS-4000R</th>
<th>IVS-7242R</th>
<th>IVS-7442R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Camera Support</td>
<td>Economic 4U Tribrid DVR</td>
<td>Advanced 2U Tribrid DVR</td>
<td>Advanced 4U Tribrid DVR</td>
</tr>
<tr>
<td>Max. Analog Camera Support</td>
<td>64</td>
<td>64</td>
<td>64</td>
</tr>
<tr>
<td>Max. HD-SDI Camera Support</td>
<td>32</td>
<td>24</td>
<td>32</td>
</tr>
<tr>
<td>Max. IP Camera Support</td>
<td>8</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>PVU Capacity</td>
<td>64</td>
<td>64</td>
<td>64</td>
</tr>
<tr>
<td>Compression Type</td>
<td>H.264</td>
<td>H.264</td>
<td>H.264</td>
</tr>
<tr>
<td>Max. Number of HDD</td>
<td>4</td>
<td>6</td>
<td>5 + 4 (with storage upgrade kit)</td>
</tr>
<tr>
<td>CPU</td>
<td>Intel Core i7-3770 (3.4GHz)</td>
<td>Intel Core i7-3770 (3.4GHz)</td>
<td>Intel Core i7-3770 (3.4GHz)</td>
</tr>
<tr>
<td>Operating System</td>
<td>Windows 7 Embedded</td>
<td>Windows 7 Embedded</td>
<td>Windows 7 Embedded</td>
</tr>
<tr>
<td>Display</td>
<td>VGA + DVI Dual Display</td>
<td>VGA + DVI Dual Display</td>
<td>VGA + DVI Dual Display</td>
</tr>
<tr>
<td>RAID</td>
<td>SW RAID 0, 1, 5,10</td>
<td>SW RAID 0, 1, 5,10</td>
<td>SW RAID 0, 1, 5,10</td>
</tr>
<tr>
<td>Dimension (W x H x D)</td>
<td>482 x 177 x 479 mm (19” x 7” x 18.9”)</td>
<td>482 x 86 x 525 mm (19” x 3.46” x 20.67”)</td>
<td>482 x 177 x 600 mm (19” x 7.0” x 23.6”)</td>
</tr>
<tr>
<td>Embedded IVA</td>
<td>Support</td>
<td>Support</td>
<td>Support</td>
</tr>
<tr>
<td>IVA Integration</td>
<td>Support</td>
<td>Support</td>
<td>Support</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>IVS-2203</th>
<th>IVS-2222</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Camera Support</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Max. Analog Camera Support</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>Max. IP Camera Support</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>Max. Number of HDD</td>
<td>SATA II 3.5” HDD * 2</td>
<td>SATA II 3.5” HDD * 2</td>
</tr>
<tr>
<td>PoE Support</td>
<td>802.3 at *4 + 802.3af * 12</td>
<td>802.3af * 8</td>
</tr>
<tr>
<td>Processor</td>
<td>TI DM8168</td>
<td>TI DM8168</td>
</tr>
<tr>
<td>Operating System</td>
<td>Linux</td>
<td>Linux</td>
</tr>
<tr>
<td>Display</td>
<td>HDMI</td>
<td>HDMI</td>
</tr>
<tr>
<td>Embedded IVA</td>
<td>Support</td>
<td>Support</td>
</tr>
<tr>
<td>IVA Integration</td>
<td>Support</td>
<td>Support</td>
</tr>
</tbody>
</table>
Advantech Tribrid DVR allows you to implement CCTV, HD-SDI, and IP cameras all on the same system, which provides the best compatibility and flexibility for your surveillance system.

For analog and HD-SDI camera, the numbers supported by each Advantech IVS system depends on the numbers and types of video capture card installed. The maximum number of camera support listed is for each type of camera respectively; one cannot add the numbers together for the whole system. Please consult our sales representative for more detailed information.

<table>
<thead>
<tr>
<th>Description</th>
<th>ARK-1122H-VS</th>
<th>ARK-2150F-VS</th>
<th>ARK-3500F-VS</th>
</tr>
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<tbody>
<tr>
<td>Max. Camera Support</td>
<td>2</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Max. Analog Camera Support</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Max. HD-SDI Camera Support</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Max. IP Camera Support</td>
<td>2</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>PVU Capacity</td>
<td>2</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Compression Type</td>
<td>H.264</td>
<td>H.264</td>
<td>H.264</td>
</tr>
<tr>
<td>Max. Number of HDD</td>
<td>SATA II 2.5&quot; HDDx1</td>
<td>SATA II 2.5&quot; HDDx1</td>
<td>SATA III 2.5&quot; HDD x 2</td>
</tr>
<tr>
<td>CPU</td>
<td>Intel Atom DC N2600 1.6 GHz</td>
<td>Intel ULV Core i7 3517UE</td>
<td>Intel Core i7-3610QE</td>
</tr>
<tr>
<td>Operating System</td>
<td>Windows 7 Embedded</td>
<td>Windows 7 Embedded</td>
<td>Windows 7 Embedded</td>
</tr>
<tr>
<td>Dimension</td>
<td>133.8 x 43.1 x 94.2 mm (6.27&quot; x 1.7&quot; x 3.71&quot;)</td>
<td>264.5 x 75.1 x 133.0 mm (10.41&quot; x 2.96&quot; x 5.24&quot;)</td>
<td>250 x 110 x 230 mm (9.84&quot; x 4.33&quot; x 9.06&quot;)</td>
</tr>
<tr>
<td>Embedded IVA</td>
<td>Support</td>
<td>Support</td>
<td>Support</td>
</tr>
<tr>
<td>IVA Integration</td>
<td>Support</td>
<td>Support</td>
<td>Support</td>
</tr>
</tbody>
</table>

PowerView Unit Requirement Table

<table>
<thead>
<tr>
<th>Types of Camera</th>
<th>PVU Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD Analog Camera</td>
<td>1PVU</td>
</tr>
<tr>
<td>HD-SDI Camera</td>
<td>4PVU</td>
</tr>
<tr>
<td>SD IP Camera</td>
<td>1PVU</td>
</tr>
<tr>
<td>1 MP IP Camera</td>
<td>2PVU</td>
</tr>
<tr>
<td>2 MP IP Camera</td>
<td>4PVU</td>
</tr>
<tr>
<td>3 MP IP Camera</td>
<td>5PVU</td>
</tr>
<tr>
<td>5 MP IP Camera</td>
<td>8PVU</td>
</tr>
</tbody>
</table>

PowerView Unit (PVU) is the basic capacity unit of the system. Different Advantech PowerView system has different maximum PVU capacity. One can use PVU to calculate the numbers of different types of camera supported, but to keep in mind that for analog and HD-SDI cameras, the numbers of camera supported also depends on the numbers and types of video capture card installed.

For megapixel IP cameras, the frame rate used for PVU calculation is based on 15 fps; for HD-SDI and SD resolution cameras, the frame rate used in PVU calculation is based on 30fps. The video quality used for PVU calculation for all cameras is 6 (range from 1 - 10).

All product specifications are subject to change without notice.

For analog and HD-SDI camera, the numbers supported by each Advantech IVS system depends on the numbers and types of video capture card installed. The maximum number of camera support listed is for each type of camera respectively; one cannot add the numbers together for the whole system. Please consult our sales representative for more detailed information.
## DVP Series Video Capture Card

### Part Number
- **DVP-7630HE**
- **DVP-7030E**
- **DVP-7636E**
- **DVP-7638E**

### Video
- **Compression**
  - H/W H.264 Main Profile
  - S/W H.264/MPEG4
  - H/W H.264
  - H/W H.264

- **Channels**
  - 4
  - 4
  - 4
  - 4

- **Host Interface**
  - PCIe x4
  - PCI v3.0~2.2 compatible
  - PCI v3.0~2.2 compatible
  - PCIe x1

- **Input Interface**
  - SDI
  - BNC
  - BNC
  - BNC

- **Max. Display Resolution**
  - 1920 x 1080p
  - D1
  - CIF
  - CIF

- **Max. Recording Resolution**
  - 1920 x 1080p + 960 x 540p
  - D1
  - D1
  - D1

- **Max. Display Rate**
  - 120/100 fps (NTSC/PAL)
  - 120/100 fps (NTSC/PAL)
  - 120/100 fps (NTSC/PAL)
  - 120/100 fps (NTSC/PAL)

- **Max. Recording Rate**
  - 120/100 fps (NTSC/PAL)
  - 120/100 fps (NTSC/PAL)
  - 120/100 fps (NTSC/PAL)
  - 120/100 fps (NTSC/PAL)

- **Dual Stream**
  - Yes

### Audio
- **Audio Inputs**
  - 4 x SDI
  - 4 x RCA
  - 4 x RCA
  - 4 x RCA

- **Format**
  - STEREO/16 bits/32000~48000 Hz
  - Mono8~16 bits/8000~48000 Hz
  - MONO/16 bits/8000 Hz
  - MONO/16 bits/8000 Hz

- **GPIO**
  - 16
  - 8
  - 8
  - 16

- **Watchdog**
  - Yes

### Physical Characteristic
- **Operating Temperature**
  - -20 ~ 70° C (-4 ~ 158° F)
  - -20 ~ 70° C (-4 ~ 158° F)
  - -20 ~ 70° C (-4 ~ 158° F)
  - -20 ~ 70° C (-4 ~ 158° F)

- **Storing Temperature**
  - -40 ~ 85° C (-40 ~ 185° F)
  - -40 ~ 85° C (-40 ~ 185° F)
  - -40 ~ 85° C (-40 ~ 185° F)
  - -40 ~ 85° C (-40 ~ 185° F)

- **Dimensions**
  - 166 x 109 mm
  - 120 x 96.4 mm
  - 121 x 85 mm
  - 111 x 104 mm

- **Safety**
  - CE/FCC
  - CE/FCC
  - CE/FCC
  - CE/FCC

- **CPU (Display)**
  - Intel Core 2 Duo E2200 2.2 GHz
  - Intel Pentium 4 2.0 GHz
  - Intel Pentium 4 2.0 GHz
  - Intel Core 2 Duo E2200 2.2 GHz

- **CPU (Recording)**
  - Intel Core 2 Duo E2200 2.2 GHz
  - Intel Core 2 Duo E2200 2.2 GHz
  - Intel Pentium 4 2.0 GHz
  - Intel Core 2 Duo E2200 2.2 GHz

- **Memory**
  - 2 GB
  - 512 MB
  - 512 MB
  - 2 GB

### System Requirement
- **VGA**
  - 1024 x 768, DirectX 9.0c
  - 1024 x 768, DirectX 9.0c
  - 1024 x 768, DirectX 9.0c
  - 1024 x 768, DirectX 9.0c

- **Operating System**
  - Windows XP/XP/Pe/Vista/7; Linux 2.6.14 or higher; 32/64 bits
  - Windows XP/XP/Pe/Vista/7; Linux 2.6.14 or higher; 32/64 bits
  - Windows XP/XP/Pe/Vista/7; Linux 2.6.14 or higher; 32/64 bits
  - Windows XP/XP/Pe/Vista/7; Linux 2.6.14 or higher; 32/64 bits
<table>
<thead>
<tr>
<th>Part Number</th>
<th>DVP-7640E</th>
<th>DVP-7650E</th>
<th>DVP-8610E</th>
<th>DVP-8650E</th>
</tr>
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<tbody>
<tr>
<td><strong>Video</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compression</td>
<td>H/W H.264 Main Profile</td>
<td>H/W H.264 Main Profile</td>
<td>H.264/RAW</td>
<td>H.264/MJPEG</td>
</tr>
<tr>
<td>Channels</td>
<td>8</td>
<td>16</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Host Interface</td>
<td>PCIe x4</td>
<td>PCIe x4</td>
<td>USB 2.0 High Speed</td>
<td>PCIe x1</td>
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<tr>
<td>Input Interface</td>
<td>BNC</td>
<td>BNC</td>
<td>BNC</td>
<td>BNC</td>
</tr>
<tr>
<td>Max. Display Resolution</td>
<td>D1</td>
<td>D1</td>
<td>D1</td>
<td>D1</td>
</tr>
<tr>
<td>Max. Recording Resolution</td>
<td>D1 + CIF</td>
<td>D1 + CIF</td>
<td>D1</td>
<td>D1</td>
</tr>
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<td>Max. Display Rate</td>
<td>240/200 fps (NTSC/PAL)</td>
<td>480/400 fps (NTSC/PAL)</td>
<td>30/25 fps (NTSC/PAL)</td>
<td>480/400 fps (NTSC/PAL)</td>
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<tr>
<td>Max. Recording Rate</td>
<td>240/200 fps (NTSC/PAL)</td>
<td>480/400 fps (NTSC/PAL)</td>
<td>30/25 fps (NTSC/PAL)</td>
<td>480/400 fps (NTSC/PAL)</td>
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<tr>
<td>Dual Stream</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Video Outputs</td>
<td>No</td>
<td>No</td>
<td>HDMI: up to 1080p@60fps Loop-out: 16-ch pin header on board (optional)</td>
<td></td>
</tr>
<tr>
<td>Audio Inputs</td>
<td>8 x RCA</td>
<td>16 x RCA</td>
<td>1 x Phone jack</td>
<td>8 +8 (Optional) RCA</td>
</tr>
<tr>
<td>Format</td>
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<td>MONO / 16 bits / 16000 Hz</td>
<td>PCM / G.711</td>
<td>Up to 16-bit, 44KHz</td>
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<tr>
<td>GPIO</td>
<td>16</td>
<td>16</td>
<td>0</td>
<td>16 DI + 8 DO (Optional)</td>
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<tr>
<td>Watchdog</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<tr>
<td><strong>Physical Characteristic</strong></td>
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<td></td>
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<tr>
<td>Operating Temperature</td>
<td>-20 ~ 70° C (-4 ~ 158° F)</td>
<td>-20 ~ 70° C (-4 ~ 158° F)</td>
<td>0 ~ 70° C (32 ~ 158° F)</td>
<td>-20 ~ 70° C (-4 ~ 158° F)</td>
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<tr>
<td>Storing Temperature</td>
<td>-40 ~ 85° C (-40 ~ 185° F)</td>
<td>-40 ~ 85° C (-40 ~ 185° F)</td>
<td>0 ~ 60° C (32 ~ 140° F)</td>
<td>-40 ~ 85° C (-40 ~ 185° F)</td>
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<tr>
<td>Dimensions</td>
<td>166 x 111 mm</td>
<td>166 x 111 mm</td>
<td>70 x 38 mm</td>
<td>140 x 111.15 mm</td>
</tr>
<tr>
<td>Safety</td>
<td>CE/FCC</td>
<td>CE/FCC</td>
<td>CE/FCC</td>
<td>CE/FCC</td>
</tr>
<tr>
<td>CPU (Display)</td>
<td>Intel Core 2 Duo E2200 2.2 GHz</td>
<td>Intel Core 2 Duo E2200 2.2 GHz</td>
<td>Intel Core 2 Duo E2200 2.2 GHz</td>
<td>Intel Core 2 Duo E2200 2.2 GHz</td>
</tr>
<tr>
<td>CPU (Recording)</td>
<td>Intel Core 2 Duo E2200 2.2 GHz</td>
<td>Intel Core 2 Duo E2200 2.2 GHz</td>
<td>Intel Core 2 Duo E2200 2.2 GHz</td>
<td>Intel Core 2 Duo E2200 2.2 GHz</td>
</tr>
<tr>
<td>Memory</td>
<td>2 GB</td>
<td>2 GB</td>
<td>2 GB</td>
<td>2 GB</td>
</tr>
<tr>
<td><strong>System Requirement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VGA</td>
<td>1024 x 768, DirectX 9.0c</td>
<td>1024 x 768, DirectX 9.0c</td>
<td>1025 x 768, DirectX 9.0c</td>
<td>1026 x 768, DirectX 9.0c</td>
</tr>
<tr>
<td>Operating System</td>
<td>Windows XP/XP/Pe/Vista/7; Linux 2.6.14 or higher; 32/64 bits</td>
<td>Windows XP/XP/Pe/Vista/7; Linux 2.6.14 or higher; 32/64 bits</td>
<td>Windows XP/XP/Pe/Vista/7</td>
<td>Windows XP/XP/Pe/Vista/7</td>
</tr>
</tbody>
</table>
Advantech VS series provides flexible choices of Ethernet switch solutions including industrial/commercial grade, PoE/non-PoE, management/unmanagement, and Fast Ethernet/Gigabit/SFP connectors for your video surveillance system. Ethernet switch has started to play an important role in current surveillance system due to the ongoing trend of IP cameras, the improvement of video resolution, and the development of remote management system structure.

<table>
<thead>
<tr>
<th>VS Series Ethernet Switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advantech VS series provides flexible choices of Ethernet switch solutions including industrial/commercial grade, PoE/non-PoE, management/unmanagement, and Fast Ethernet/Gigabit/SFP connectors for your video surveillance system. Ethernet switch has started to play an important role in current surveillance system due to the ongoing trend of IP cameras, the improvement of video resolution, and the development of remote management system structure.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VS-2525PA</th>
<th>VS-2726FHP</th>
<th>VS-2528PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>5-Port Industrial PoE Switch with 24/48 VDC Power Input</td>
<td>4G+2 SFP W/ 4 IEEE 802.3at High Power PoE Industrial Wide Temperature Switch</td>
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<tr>
<td>Total Port Number</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>10/100Base-T(X)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>10/100/1000Base-T(X)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max. 1000Mbps Combo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000Mbps SFP</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PoE(10/100Mbps)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PoE(10/100/1000Mbps)</td>
<td></td>
<td>4 (802.3at)</td>
</tr>
<tr>
<td>Console</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance</td>
<td>MAC Address Table Size</td>
<td>2K</td>
</tr>
<tr>
<td>Power</td>
<td>Power Input Voltage</td>
<td>24/48 VDC</td>
</tr>
<tr>
<td></td>
<td>Dual Power Input</td>
<td>V</td>
</tr>
<tr>
<td>Mechanism</td>
<td>Housing Dimensions ( WxHxD ) mm</td>
<td>48.6x140x95 mm</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>Operating Temperature</td>
<td>-10~60° C (14 ~ 140° F)</td>
</tr>
</tbody>
</table>
Advantech’s managed industrial Ethernet switch incorporates X-Ring technology that offers the fastest redundant ring recovery time (<20ms) for higher reliability. Advantech’s reliable and high performance Ethernet switch solutions are the most suitable solutions for different surveillance applications.

### VS-7659CPI
- **Total Port Number:** 10
- **10/100Base-T(X):** 10
- **10/100/1000Base-T(X):** 24
- **Max. 1000Mbps Combo:** 2
- **1000Mbps SFP:** 2
- **PoE(10/100Mbps):** 8
- **PoE(10/100/1000Mbps):** 24
- **Console:**
- **MAC Address Table Size:** 8k
- **Power Input Voltage:** 48 VDC
- **Dual Power Input:**
- **Housing Dimensions:** 79x152x105 mm
- **Operating Temperature:** -40~75°C (-40~167°F)

### VS-4744FP
- **Total Port Number:** 26
- **10/100Base-T(X):** 26
- **10/100/1000Base-T(X):** 24
- **Max. 1000Mbps Combo:** 2
- **1000Mbps SFP:** 2
- **PoE(10/100Mbps):** 8
- **PoE(10/100/1000Mbps):** 24
- **Console:**
- **MAC Address Table Size:** 16k
- **Power Input Voltage:** 100V~240VAC
- **Dual Power Input:**
- **Housing Dimensions:** 440x44x205 mm
- **Operating Temperature:** 0~40°C (32~104°F)

### VS-4744F
- **Total Port Number:** 26
- **10/100Base-T(X):** 26
- **10/100/1000Base-T(X):** 24
- **Max. 1000Mbps Combo:** 2
- **1000Mbps SFP:** 2
- **PoE(10/100Mbps):** 8
- **PoE(10/100/1000Mbps):** 24
- **Console:**
- **MAC Address Table Size:** 16k
- **Power Input Voltage:** 100V~240VAC
- **Dual Power Input:**
- **Housing Dimensions:** 440x44x205 mm
- **Operating Temperature:** 0~40°C (32~104°F)