

# ARK-5420VS

**Intel® 3rd Generation Core™ i Processor  
Fanless System with PCIe4 & PCI Slot**



## Features

- Supports Intel i5-3610ME 2.7GHz CPU
- Intel® HM76 PCH
- Supports wide temperature -25 °C ~ 60 °C
- Supports VGA & HDMI
- 1 x 2.5" HDD+1 x m-SATA
- Supports PCIe4 /PCI slot /Mini-PCIE
- Supports 9 ~ 36V wide range DC input

**WebAccess/IVS**



## Specifications

System Chipset	CPU	Intel i5-3610ME Processor		
	Max Speed	2.7 GHz		
	L3 Cache	4 MB		
	Chipset	Intel HM76		
	BIOS	AMI SPI 64 Mb		
Memory	Technology	DDR3 1333/1600, non ECC		
	On board memory	4 GB on board		
	Socket	1 x 204-pin SODIMM (up to 8GB per DIMM) Note: SODIMM and HDD Tray has mechanism interferences, only 1 x HDD or 1 x CF can be used when you request to expand memory size		
	Maximum Capacity	12 GB		
Display	Chipset	Intel Integrated Graphics HD4000, support Direct x11		
	VGA	1 x DB15, max resolution up to 2048 x 1536		
	HDMI	1 x HDMI, support HDMI1.4 standard, max to 1920 x 1200 @ 60Hz		
	Display Option	Supports Dual independent display		
Ethernet	Controller	Intel I210-AT, 10/100/1000 Mbps		
	Interface	2 x RJ-45		
Storage	HDD	Support 1x 2.5"HDD + CF module (Optional function)		
	SSD	mSATA 32G		
I/O	USB	2 x USB3.0 + 3x USB 2.0		
	Serial Port	2 x DB9, RS232/422/485 with automatic flow control		
	DIO	1 x DB9, 8-bit		
	Audio	2 (1 x Line-Out, 1 x Mic-in)		
	LPT	1 x DB26 (Front panel, option)		
Expansion Slot	PCIe	1 x PCIe4		
	PCI	1 x PCI32 33Mhz Slot 1 x Internal Mini-PCle (Full-Size)		
LED & Button	LED	Power x 1/Storage x 1/Fault x 1		
	Button	Power on/off Switch x 1 Reset button x 1		
Power	Power Type	ATX/AT		
	Power Input Voltage	9 ~ 36V <sub>DC</sub>		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1~255 sec/min		
Environment	Temperature	Operating (With Industrial SSD)	Operating (with HDD)	Non-Operating
		-25 ~ 60 °C with 0.7m/s air flow	0 ~ 40 °C	-40 ~ 85 °C
	Humidity	95% @ 40 °C (non-condensing)		
	Vibration	With SSD: 2 Grms @ 5 ~ 500 Hz, random, 1 hr/axis With 2.5" HDD: 0.5 Grms @ 5 ~ 500 Hz, random, 1 hr/axis		
	Shock	With SSD: 20G, IEC-68-2-27, half-sine wave, 11 ms duration With 2.5" HDD: 10G, IEC-68-2-27, half-sine wave, 11 ms duration		
Mechanical Features	Dimension (W x H x D)	253 x 129 x 240 mm		
	Install	Desktop/Wall-mounting		
Certifications	EMC	CE/FCC Class A, CCC, BSMI		
	Safety	UL,CCC,BSMI		

## WebAccess/IVS Function Description

Function	Specification	Description
Monitoring	Status display	<ul style="list-style-type: none"> <li>Displays status and lists events of system login/logout, lost video, cameras status, web and remote connection, storage space, backup, sensors, and DO status</li> </ul>
	e-Map	<ul style="list-style-type: none"> <li>e-map layout shows the locations of video cameras, sensors and alarm devices, allowing you to control them and link actions to the surveillance system simultaneously; also provides a free tool for e-map editing</li> </ul>
	Event log displaying	<ul style="list-style-type: none"> <li>Real time display for event listings and automatic refresh of video events in ViewLog</li> </ul>
	Screen Split	<ul style="list-style-type: none"> <li>Full screen, 1, 4, 9, 10, 13, 16 Sequencer, (Able to change time interval)</li> </ul>
	Camera layout	<ul style="list-style-type: none"> <li>Assign name and adjustable font to each camera</li> </ul>
	Quality adjustment	<ul style="list-style-type: none"> <li>Adjustable color control of Hue, Contrast, Brightness, and Saturation for preview, record and playback.</li> </ul>
Recording	Resolutions	<ul style="list-style-type: none"> <li>Selectable recording resolutions (Depends on the capture card and IP camera selected)</li> </ul>
	Compression format	<ul style="list-style-type: none"> <li>H.264</li> </ul>
	Recording modes	<ul style="list-style-type: none"> <li>Cyclic Recording, Non-Cyclic recording, Event Triggered Recording, and Scheduled Recording</li> </ul>
	Recording Quality	<ul style="list-style-type: none"> <li>Adjustable recording quality</li> </ul>
	Recording Frame	<ul style="list-style-type: none"> <li>Adjustable recording frames of each camera and event</li> </ul>
	Pre & Post Alarm Recording	<ul style="list-style-type: none"> <li>Adjust pre-alarm and post-alarm recording time (Pre-alarm recording: 10 seconds, post-alarm recording: 100 seconds)</li> </ul>
	Record file length	<ul style="list-style-type: none"> <li>Adjustable file length for record searching segment</li> </ul>
Search & Playback	Playback Speed	<ul style="list-style-type: none"> <li>Single frame, 1/16x, 1/8x, 1/4x, 1/2x, 1x, 2x, 4x, 8x, 16x, fast forward and rewind</li> </ul>
	Playback Mode	<ul style="list-style-type: none"> <li>Can show up to 4 cameras' playback images simultaneously</li> </ul>
	Search Mode	<ul style="list-style-type: none"> <li>Allows image searching by date, time, camera, and event.</li> <li>Calendar and time segment for day and time search.</li> <li>Selectable event time, event type, and camera IDs for event search</li> </ul>
	Smart Search	<ul style="list-style-type: none"> <li>Able to search archives for incidents. Smart search list</li> </ul>
	Image Transfer	<ul style="list-style-type: none"> <li>Able to save image as BMP, JPG and AVI format.</li> <li>Selectable day and time for video saving or using bookmark time record list directly.</li> </ul>
	Bookmark	<ul style="list-style-type: none"> <li>Stores many bookmarks to facilitate searching.</li> </ul>
Data Storage	Recording Time	<ul style="list-style-type: none"> <li>Recording length varies depending on recording quality, resolution, mode and activity</li> <li>Auto continuous recording-- oldest recorded data will automatically be overwritten when hard drive is full</li> </ul>
	Backup	<ul style="list-style-type: none"> <li>Local: HDD/CD-RW/DVD-RW selectable/External USB HDD/CD-RW/DVD-RW</li> <li>Backup mode: Auto (schedulable) and Manual to backup video file</li> </ul>
	Storage Path	<ul style="list-style-type: none"> <li>Adjust each storage path of each camera and reserve size.</li> <li>Setup each storage path to automatically delete the oldest file records</li> </ul>
Alarm Notification	Event Action Plan	<ul style="list-style-type: none"> <li>Flexible, multiple event action plan. Able to define multiple actions taken for event source.</li> <li>Event source: motion detected, sensor triggered, video signal breaks, login failed, system abnormal and backup disk full etc.</li> <li>Event action: DO output, PTZ Control, e-mail sending, SMS notify, video file record, snapshots, phone/mobiles notification, warning sounds, video group play and specific program execute etc.</li> </ul>
	E-mail and Phone notification	<ul style="list-style-type: none"> <li>E-mail notification with attached recording file or snapshot image of any event triggered</li> <li>E-mail and phone notification on multi event source. (with voice modem option)</li> </ul>
	PTZ Activation	<ul style="list-style-type: none"> <li>Supports alarm setup with PTZ preset location.</li> </ul>
	Sensor and DO	<ul style="list-style-type: none"> <li>Adjustable sensor, DO layout, schedulable</li> </ul>
Network Control	IE Remote Control	<ul style="list-style-type: none"> <li>View live video, event list, PTZ control, and do remote recording, remote playback, remote setting, e-map function and remote snapshot through IE browser</li> <li>Supports 1, 4, 9, 10, 13, 16 screen split</li> </ul>
Operation	User Authority	<ul style="list-style-type: none"> <li>Multi-level password protection and unlimited user accounts for logins and passwords.</li> </ul>
	Authority setting	<ul style="list-style-type: none"> <li>Allows authority settings of each user to each camera (local and remote monitor, playback, PTZ control, DO and e-map control, network connecting user numbers, with time limits, print and save function, control, etc.)</li> </ul>
	PTZ Control	<ul style="list-style-type: none"> <li>Embedded PTZ control panel: Pan &amp; Tilt, zoom control and preset function.</li> <li>Supports most popular PTZ protocol</li> </ul>
	Dynamic IP support	<ul style="list-style-type: none"> <li>Built-in Web server. Supports dynamic IP.</li> </ul>
	Language	<ul style="list-style-type: none"> <li>English, Traditional Chinese, Simplified Chinese</li> </ul>
	Others	<ul style="list-style-type: none"> <li>Windows lockup</li> <li>Auto DVR login</li> <li>Auto reboot</li> </ul>

## Plus Package Benefits

**WebAccess/IVS SDK**  
available for 3<sup>rd</sup> party CMS or  
AP software integration



**WebAccess/IVS**  
Intelligent Video Analytics (IVA)



Object Counting



People Counting



Camera  
Tamper



Optical Self  
Diagnostic



Motion Detection



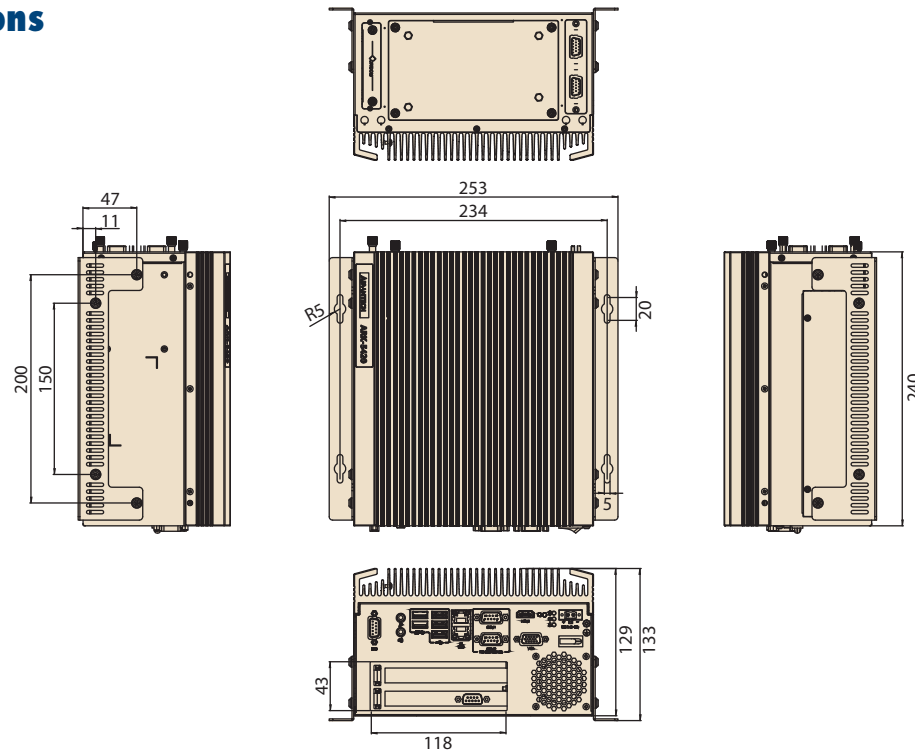
Forbidden Zone



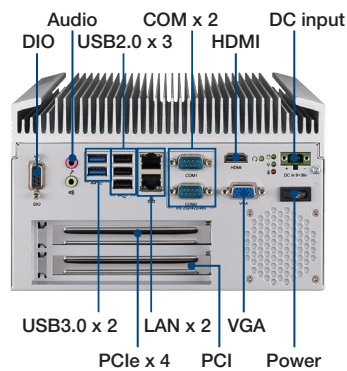
Demographic

## Dimensions

Unit: mm



## Front View



## Rear View



## Ordering Information

Part No.	Description
ARK-5420VS-00A1E	Intel Core i5-3610ME 2.7GHz on-board 4Gb, VGA/HDMI, 2xGbE, 5xUSB ports, 2xCOM ports, audio, PCIe4 & PCI, 9 ~ 36 V <sub>DC</sub> power with 2pin Phoenix connector, 4G RAM, mSATA 32G

## Optional Item

Part Number	Description
1700001524	Power Cord 3P UL 10A 125V 180cm (for 65W)
170203183C	Power Cord 3P Europe (WS-010+WS-083) 183cm (for 65W)
17000021376-01	Power Cord 3P PSE 7A 125V 250cm (IEC60320-C5) (for 65W)

## Packing List

Part No.	Description
-	ARK-5420VS
-	1 x Driver CD
1960059401N001	2 x Supporting-angels
1652002205	1 x 2-pin Terminal Block
96PSA-A65W19P2-2	Power adaptor

## Embedded OS

Description
Windows 7 embedded 64bit