

EH5216H Hybrid DVR



Key Features

- Embedded Linux
- 16 Channel, True Hybrid DVR
- Hardware H.264 Compression
- Graphical User Interface
- D1 Real-time over 8 Channels
- Adjustable Frame Rates and Resolution on Every Channel (Analog Cameras Only)

AVerMedia's EH5216H is a true hybrid DVR that fuses Linux reliability with a fully featured Graphical User Interface (GUI) designed for ease-of-use, high performance and exceptional image quality - at a great price. Perfect for deployments in small to medium businesses, the system utilizes existing analog infrastructure while allowing for future IP expansion.

The GUI - Built for Efficiency

As opposed to typical and laborious menu driven interfaces, the EH5216H's Graphical User Interface (GUI) maximizes user effectiveness while minimizing training time. The visual layouts and intuitive controls of the EH GUI, ensures that users can simply point-and-click to see who's entering the building, search through alarms for the week or take immediate command of an unraveling event!



Hybrid - The Power of Choice

Every channel of the EH's 16 channels can be connected to either an analog or IP camera, with support for 50+ brands of IP cameras. For the miniscule percent of cameras that aren't supported yet, just notify AVerMedia and they will be integrated for free! No worrying about camera compatibility, no added licensing fees, no restrictions on IP channels - the AVerMedia EH truly defines hybrid.

H.264 - Revolution in Quality

Industry leading H.264 compression ensures that the EH drastically reduces video file sizes while maintaining the integrity and quality of images. Amplifying the benefits of H.264 is the EH's Hardware Compression that enhances system performance by utilizing very little PC CPU and RAM resources.

Search - Locate. Locate. Locate.

Having search features are meaningless if you cannot locate important video quickly and accurately. Along with parameter searches (date/time/event log), the EH includes Visual Search that breaks footage into image thumbnails that can be visually drilled down (hour/minute/second) to rapidly locate crucial events. The footage then can be exported or bookmarked for later retrieval.

The Features - Specialized Settings for Special Needs

Offices facing busy streets, stores in strip malls, schools with abundant trees - a few examples of facilities whose motion based recordings could eat up valuable storage space. One of the many solutions the EH offers is the Video Mask through which users can partition off areas from triggering motion based recordings. Other features include: robust remote access via iPhone, Blackberry and Windows mobile devices for the on-the-go security professional, Central Management Software for users with DVRs in multiple locations, POS video text overlay for retail users and more.



EH5216H Capabilities

SYSTEM

- System: Hybrid Linux OS
- Video compression: Hardware H.264
- Channels
 - Video - 16 Total: Analog (BNC) or IP (H.264/MPEG4/MJPEG streams)
 - Audio - 16 channel in, 1 channel out and 1 microphone
 - IP cameras support: 50+ brands (check support list)
 - up to 2.3 MP in MJPEG and 1.3 MP in MPEG4/H.264 for CHs 1- 15
 - up to 5 MegaPixel support for CH 16 In MJPEG
 - Individually adjust the resolution/frame rates for all analog channels
- Interface and Outputs
 - Award winning Graphical User Interface (GUI)
 - 1 VGA and 2 BNC spot monitor outputs
 - 16 channel loop through outputs (analog cameras only)
 - 16 sensors /4 relays and up to 128 more with additional E-I/O box
- E-maps
 - Up to 8 E-maps (jpg or .bmp)
 - Drag and Drop DVR/NVR locations (icons) on E-maps
 - Associated DVR/NVR icon will flash and turn red during an alarm
 - DVR events are entered in the E-map alarm log
- Multi-language interface with variable date formats
- Integrated with a virtual on-screen keyboard
- Easy system and/or IP camera support updates via USB drives
- Schedule system functions including recording, backup, reboot, alarm and relay controls as a one-time or recurring weekly task
- Up to 32 user accounts with individually assigned passwords and user privileges (operation, control and remote access)

RECORDING

- Recording modes - Always, Smart*, Alarm (motion), No Recording
- Video Mask - Mask (partition off) areas from triggering motion based recordings
- Configurable to save up to 10 seconds pre-event and 10 minutes post-event recordings

*Smart - activity based escalation of recording frame rates (from low to high)

LIVE MONITORING

- PTZ: Analog/IP cameras with Zoom, Focus, Direction, Speed, Preset point & Auto-Pan (check support list for camera models)
- If there is video loss due to network failure, the system will continually try to reconnect to the DVR until video is restored
- Digital zoom incorporated for greater detail in live video

FORENSICS

Search

- Parameter search: date, time and event log file
- Advanced event log search with alarm, operation, system and network activities
- Visual Search - breaks footage into image thumbnails that can be visually drilled down (hour, minute, second)
- Time search to scroll through footage by moments
- Easy retrieval and playback of footage by "Bookmarking" significant segments

Playback

- Supports local and remote playback
- Users can segment and bookmark critical portions of recorded video for easy and rapid access to significant events

Export/Backup

- Easily export image to .jpg or video to .dvr
- Backup to DVR RW or USB

STORAGE

- Supports 3 (4th optional) SATA HDDs and 1eSATA HDD

VIDEO ENHANCEMENTS

- iEnhance - color, noise and light manipulation
- iStable - smooths shaking and jolts
- Two types of de-interlace methods (for analog cameras): optimized for static or dynamic scenes for smoother images

ALARMS AND NOTIFICATIONS

Incoming Alarms:

- Unit events (video loss, DVR reboot, DVR HDD fail, etc.)
- Monitoring events (Motion, Sensor)
- Network events (connection loss/success)

Notifications:

- Enlarges alarmed camera's view and Launches E-Map
- Repositions views to PTZ preset points
- Sends emails and Plays audio alarms
- Initiates DVR/IP camera relay protocols
- Sends footage to spot monitor
- Sends video to Central Management System

REMOTE MONITORING

Free DDNS and iDispatch (multicasts video streams to drastically lower network, server and camera loads for effective remote viewing)

Mobile:

- iPhone (iViewer): View live video
- Blackberry (iBBViewer): View live video
- Win Mobile (Smart Viewer): View live video
- Win Mobile (PDViewer): View Live/Recorded video, store multiple DVR log-ins, control PTZ, zoom and take video snapshots

Web and remote computers:

- Internet Explorer WebViewer: View live video w/ 2-way audio
- Remote Console (view Live/Recorded video and control PTZ, setup, E-maps, recording, playback, sensors/relays)

Multiple Systems: With CM3000 central management software, command up to 1000 remote systems from one central location

- Monitor with E-maps, record, playback and 2-way audio
- Control sensors and relays
- Setup and modify DVR configurations

EH5216H Detailed Specifications

Front Panel Connections				
Front panel controls	Power switch, Keypad, PTZ Controls			
DVD writer	Included, supported medias: DVD±R, DVD±RW			
USB 2.0	3			
Rear Panel Connections				
Video Inputs (analog)	16 - Looping, BNC connectors			
Video Inputs (IP)	16 video H.264/MPEG4/JPEG data streams			
Video Output	1 - VGA out, 2 - Spot Monitor Out			
Audio Input/Output	16/1			
Microphone Input	1			
Alarm Inputs/Relay Outputs	16/4			
E-SATA	1			
USB 2.0	0			
Communication	1x - RS232, 1x - RS485			
AC Power	Power Adapter, 19V DC			
Unit				
Operating system	Embedded Linux			
Compression (analog)	Hardware: H.264			
Video Format	Analog	NTSC: 352 x 240 (CIF), 720 x 240 (Half-D1), 720 x 480 (D1)		
	IP	Up to 1920X1200/CH, 16 th CH up to 5 megapixel		
Recording Rates	Analog	Individually Adjustable (0 - 30fps for analog inputs)	CIF	480fps
			Half-D1	480fps
			D1	240fps
	IP	Per camera specifications		
Storage	Capacity	Supports up to 3 Internal SATA HDD (4th Optional)		
	eSATA	1 eSATA connector, Support eSATA RAID		
Communication Ports	RS 485	1, Terminal block, Tx+, Tx-, Rx+, Rx-		
	RS 232	1, 9 Pin, Male		
Networking	1x - 10/100/1000 Base-T Ethernet, RJ-45			
Supported IP cameras (support IP PTZ, IP IO, & IP audio if IP cameras built-in)	AXIS, Panasonic, SONY, Arecont, Mobotix, BOSCH, IQinvision, JVC, TOSHIBA, VIVOTEK, ACTi, D-Link, PIXORD, PELCO, Apron, Lilin and more			
Operator Interface	USB mouse, USB PC keyboard, Remote controller (supports optional IR extension cable)			
Browser/Remote Client	MS Internet Explorer 6+, Windows 2000, XP, VISTA			
Mechanical				
Dimensions (H x W x D)	2.6 x 16.9 x 14.5in			
Weight	10 lbs (not including optional HDD)			
Rack Mountable	Optional rack ears			

Software		
Interface	Graphical user Interface (world's first in Emb. Linux)	
Account Administration	Up to 32 accounts with configurable user privileges	
Camera Administration	Individually adjust fps/resolution per analog camera	
PTZ Control	Zoom-in/Zoom-out, Focus-in/Focus-out, Direction, Speed, Preset point, Autopan	
De-interlace options	Optimize for dynamic or static analog scenes	
Playback Administration	Playback while recording or setup	
	Play, rewind, fast-forward, frame-by-frame control	
	Digitally zoom to specific regions on recorded video	
	Export single frame to .jpg, export video clip to .DVR	
Motion Detection	Configurable to sense mass/motion; can partition off areas in monitoring regions from motion triggers	
Event Recording	Schedule: Continuous, Smart, Motion, Alarm, Manual	
Video Event Search	Visual Search, date/time, camera, event & log files	
Advanced Event Log	Full event, operation, system & network activities log	
Alarm Notifications	Launch or send E-map, relay, video capture, CM3000 or E-mail notification	
E-map Display	Positions of cameras, sensors, relays & event status	
iEnhance	Enhance video quality such as Brightness/Contrast/Hue/ Saturation/ Sharpness/ Noise Reduction/De-interlace/ Gray Scale of recorded video	
iStable	One-click fix for shaky video caused by camera movement (such as wind or vandalism)	
Remote Management		
Central Management	CM3000 software - supports up to 1000 DVRs	
Remote DVR connectivity	WebViewer (MS Internet Explorer only), Remote Console, JavaViewer, PDAViewer	
Dispatch Server	Balance NVR communication for added client access and greater data transfer speeds	
DDNS	Allow remote clients to search dynamic servers without enquiring for server's IP address	
Environmental		
Temperature	Operating	32 ° to 104 °F
	Storage	-22°F to 140 °F
Relative humidity	Operating	50%-80%
	Stored	90%
Regulatory		
Emissions	FCC: Part 15, Class A	
Warranty		
2 Year Limited Parts and Labor		

EH Series Hardware Recommendations

NOTE: We highly recommend against using Samsung Hard Disk Drives for SA, XR and EXR DVR products.

SATA HDD

Brand	Model	Capacity
Hitachi	HDT725050VLA360	500GB
Seagate SV35.3	ST31000340SV	2 TB
Seagate SV35.2	ST3500630SV	500GB

PTZ Camera (visit our website support/download page for a complete list)

Brand	Product Number
AmericanDynamics	UltraS - all products
Canon	VC-C4R
CD55	all products
DiGiDome	DRX -502A (DOH-240)
DMP23-H2	DMP23-H2
DynaColor	All products
Eastel	all products
ELMO	PTC -200C
Fastrax II	HID-2404
JVC	TK-C676 / TK-C675
Lilin	PIH 717X / 7000 / 7600 / PIH 7622/ 7622DH / 7635DH
MD101	all products
MicroJack-P	all products
NiceCam	all products
Panasonic	WV-CS850 / WV-CW860 / WV-CS950 / CS850B / CW860A / WV-CZ352
Pelco	Pelco-D/ Pelco-P
Philips	TC8560, TC700
SamSung	SCC-641
Sony	15-CZ45-1 /EVI-D70P
Yoko	all products

Raid System

Brand	Product Number
Stardom	SR3610-2S-SB2
AVerDigi	RA4000e

BASIC REQUIREMENTS FOR MOBILE APPLICATIONS

PDA Phones

Notice: This feature is only available on AP versions 5.1 or above. For customers who are using 5.0 version of AP, please visit the Support/Download page to download and upgrade to the latest version of AP

1. CPU: Arm architecture, for example, Intel Xscale.
2. OS: MS Window Pocket PC 2002/2003 or Mobile 5 and above.
3. GPRS or WLAN module is recommended.

Windows Mobile Smartphones

Notice: This feature is only available on AP versions 5.7 or above. For customers who are using v.5.5, v5.1 or v5.0 version of AP please visit the Support/Download page to download and upgrade to the latest version of AP

1. CPU: Arm architecture, for example, Intel Xscale.
2. OS: Windows-base, Windows Mobile 2002/2003 for Smart Phone Edition or Windows Mobile version.
3. Network module such as WAP,GPRS,WLAN...etc is required .

Symbian Smartphones

Notice: This feature is only available on AP versions 7.1 or above. For customers who are using v5.7, v.5.5, v5.1 or v5.0 version of AP please visit the Support/Download page to download and upgrade to the latest version of AP

1. OS: Symbian Smartphone
2. The OS needs to support JAVA MIDP 2.0 (JAVA2 ME)
3. Network module such as WAP, GPRS, WLAN, etc is required.

*Hardware recommendations are the minimum required hardware specifications for running our systems and not a guarantee to achieve the best performance of our DVR systems. Hardware specifications required to achieve the best performance of our DVR systems are subjected to different system settings and operation conditions.