

## GV-Hot Swap NVR System V5 - 4U, 20-Bay



### INTRODUCTION

The GV-Hot Swap NVR System V5 features a powerful data storage capacity. It comes with a selection of 4U (20 / 8 / 4-bay) or 3U (16 / 8-bay) and hot-swappable SATA mobile racks. Depending on HDD size, the GV-Hot Swap NVR System V5 can store more than 40 terabytes of recorded data. Support for hot-swapping makes data storage and management more convenient.

GeoVision Surveillance System empowers the GV-Hot Swap NVR System V5 with a maximum of 32 audio and video channels. Its networking capability makes remote access and control of the system possible. Additionally, its compatibility with other GeoVision accessories can cater to any kind of needs or budgets. By extending the compatibility to the third-party IP devices, GV-NVR provides a pure IP solution to GV-Hot Swap NVR System V5.

### KEY FEATURES

- ▶ Powered by Intel Core i7 Processor
- ▶ 64-bit Windows Embedded Standard 7
- ▶ Support GPU Decoding
- ▶ Support 32-channel GV-NVR (pure IP surveillance)
- ▶ Dual monitor display
- ▶ Maximum storage capacity of more than 40 terabytes
- ▶ Hot-swap status LED panel
- ▶ Dual Gigabit LAN ports
- ▶ 4U (20 / 8 / 4-bay) or 3U (16 / 8-bay) hot-swap SATA HDDs for data storage
- ▶ Built-in 4 inputs and 4 outputs
- ▶ Extreme performance for GV-NVR operation
- ▶ Recovery DVD in case of failure
- ▶ RAID 0 / 1 / 5 / 6 data protection (optional)\*
- ▶ Compatible with full selections of GeoVision accessories

\* Only for 4U (8 / 4-bay) and 3U (8-bay) models



### AVAILABLE MODELS

- ▶ GV-NVRH V5

## SPECIFICATIONS

System		
CPU	Intel Core i7 Processor	
RAM	4 GB Dual Channels	
OS	64-bit Windows Embedded Standard 7	
DirectX	9.0c	
Connector	Ethernet	RJ-45, 10 / 100 / 1000 Mbps x 2
	VGA Output	DB-15 VGA Monitor Output, DVI-D Output (DVI-D signal Only), or HDMI Output
	USB 2.0	Front: 2 ports, Rear: 6 ports
	USB 3.0	Rear: 2 ports
DVD (±) RW	5.25"	-
	Slim	8X
Fan	12 cm (4 3/4")	3 units
	8 cm (3 1/8")	2 units
Power	1000 W, 90-264 V, 47-63 Hz	

Model	GV-NVR (GV)	GV-NVR (3rd Party)
<b>Video and Audio</b>		
Video Input	32 channels	1, 2, 4, 6, 8, 10, 12, 16, 18, 20, 22, 24, 26, 28, 30, 32 channels
Audio Input	32 channels	1, 2, 4, 6, 8, 10, 12, 16, 18, 20, 22, 24, 26, 28, 30, 32 channels

**Note** for GV-NVRH V5: The number of supported channels may vary depending on the resolution and codec of connected IP videos. If you want to know the number of supported channels according to your requirements, please write us at [support@geovision.com.tw](mailto:support@geovision.com.tw) or click ([here](#)) for more information.

Camera Name	Max. 32 characters
Screen Split Control	1x1 / 2x2 / 1+5 / 1+7 / 3x3 / 2+8 / 1+12 / 1+16 / 4x4 / 5x5 / 6x6
Screen Rotate Control	1 ~ 10 sec.
Image Control	Contrast / Brightness / Saturation / Hue
Recording Mode	Round the Clock / Motion Detection / Sensor Detection / Pre & Post Recording / Schedule Recording
Schedule	96 groups per day by 15 min.
Instant Playback	10 sec. / 30 sec. / 1 min. / 5 min.
Pre Recording	1~ 90 sec. (1 FPS)
Watermark	Support

Searching and Playback	
Search Method	Date / Time
Date / Time / Event Search	Selectable on the tree list and calendar
Log Search	Through the log data to find the video event / time
Backup Type	DVD+R (DL) / DVD-R (DL) / DVD+R / DVD+RW / DVD-R / DVD-RW / CD-R / CD-RW

Remote Client Software	
Monitoring Environment	WebCam / Twin Server / CenterV2 / VSM / Control Center / Remote View / IP Multicast / GV-AView for Android Smartphone, GV-Eye HD for iPad, GV-Eye for iPhone and iPod Touch, GV-GView for Windows PDA, GV-MSView for Windows Smartphone, GV-SSView for Symbian Smartphone, 3G-enabled phone
WebCam Live View	Max. 32 channels transmission (Max. 200 channels accessible)
Remote Search	WebCam's Remote Playback

System Monitoring and Recovery	
Power Restoration	Power restored after AC power loss
Monitoring	Two independent Watchdogs (Hardware Watchdog + Software Watchdog)
Recovery DVD	Automatic system rebuild

Alarm		
Sensor Input	Standard	4 inputs
	GV-IO 12-In Card (Optional)	12 inputs
	GV-IO Box 16 Ports (Optional)	16 inputs
	GV-IO Box 8 Ports (Optional)	8 inputs
	GV-IO Box 4 Ports (Optional)	4 inputs

Alarm Output	Standard	4 outputs
	GV-IO 12-Out Card (Optional)	12 outputs
	GV-IO Box 16 Ports (Optional)	16 outputs
	GV-IO Box 8 Ports (Optional)	8 outputs
	GV-IO Box 4 Ports (Optional)	4 outputs
<b>Peripheral Devices</b>		
Audio Input	RCA 8 / 16 / 32 ports	
Audio Microphone In	Mini stereo jack	
Audio Output	Mini stereo jack	
<b>Networking</b>		
Type	TCP / IP, LAN, WAN, Internet, Modem Dial-up, Modem-to-Modem, ISDN	
<b>Environment</b>		
Operating Temp.	0 ~ 45 °C / 32 ~ 113 °F	
Humidity	0 ~ 80% RH (non-condensing)	
<b>Language</b>		
Type	Arabic / Bulgarian / Czech / Danish / Dutch / English / Finland / French / German / Greek / Hebrew / Hungarian / Italian / Japanese / Lithuanian / Norwegian / Polish / Portuguese / Romanian / Russian / Serbian / Simplified Chinese / Slovakian / Slovenian / Spanish / Sweden / Thai / Traditional Chinese / Turkish	
<b>Physical</b>		
Color	Black	
Dimensions (W x H x D)	483 x 178 x 660.4 mm / 19 x 7 x 26 in	
Net Weight	24 kg / 52.8 lb (± 1 kg / 2.20 lb)	

**Note:** All specifications are subject to change without notice.

## Hard Disk Requirements

The total of recording frame rates that you can assign to a single hard disk is listed as below:

### IP Cameras

Video resolution	MJPEG		H.264		MPEG4	
	Frame Rate	Bit Rate	Frame Rate	Bit Rate	Frame Rate	Bit Rate
2560x1920 (5MP)	30 fps	102.26 Mbit/s	240 fps	21.24 Mbit/s	-	-
2560x1600 (4MP)	60 fps	73.49 Mbit/s	240 fps	15.28 Mbit/s	-	-
2048x1536 (3MP)	60 fps	64.73 Mbit/s	480 fps	10.52 Mbit/s	-	-
1600x1200 (2MP)	120 fps	41.16 Mbit/s	480 fps	9.16 Mbit/s	-	-
1280x960 (1.3MP)	200 fps	30.04 Mbit/s	480 fps	5.77 Mbit/s	480 fps	6.30 Mbit/s
640x480 (VGA)	480 fps	11.42 Mbit/s	640 fps	2.54 Mbit/s	640 fps	3.27 Mbit/s
320x240 (CIF)	480 fps	5.16 Mbit/s	640 fps	0.75 Mbit/s	640 fps	1.03 Mbit/s

**Note:** The above data was determined using the bit rate listed above and hard disks with average R/W above 80 MB/s.

## Options

GV-IO 12-In Card	With 12-point digital inputs, this card can expand the GV-Hot Swap NVR V5 up to 16 sensor inputs. ** This device is not available for 3U (8-bay) models.
GV-IO 12-Out Card	With 12-point relay outputs, this card can expand the GV-Hot Swap NVR V5 up to 16 alarm outputs. ** This device is not available for 3U (8-bay) models.
GV-Data Capture V3 Box	GV-Data Capture V3 Box can integrate the GV-Hot Swap NVR V5 to an electronic POS system, while GV-Data Capture V3E Box can establish such integration through LAN or Internet.
GV-Hub V2	An easy way for serial port extension. This hub can add 4 RS-232/RS-485 serial ports through the GV-Hot Swap NVR V5's USB port.
GV-COM V2	This unit can add 1 RS-232/RS-485 serial port through the GV-Hot Swap NVR V5's USB port.
GV-IO Box (4 Ports)	GV-IO Box 4 provides 4 inputs and 4 relay outputs, and supports both DC and AC output voltages. A USB port is also provided for PC connection.
GV-IO Box (8 Ports)	GV-IO Box 8 provides 8 inputs and 8 relay outputs, and supports both DC and AC output voltages. A USB port is also provided for PC connection.
GV-IO Box (16 Ports)	GV-IO Box 16 provides 16 inputs and 16 relay outputs, and supports both DC and AC output voltages. A USB port is also provided for PC connection.
GV-Joystick	GV-Joystick facilitates the PTZ camera control. It can be either plugged into the GV-Hot Swap NVR V5 for independent use or connected to GV-Keyboard to empower the operation. However, this device can only work on GV-System version 8.2 or later.
Graphic Card	The Graphic Card comes with HDMI, DVI-D, and VGA ports. Up to 2 Graphic Cards can be installed on the GV-Hot Swap DVR V5 with a maximum of 6 displays. ** This card is not available for GV-3016H / GV-3008H V5 Models.
RAID Controller (0 / 1 / 5 / 6)	The RAID Controller supports a maximum of 8 SATA hard drives and enhances data protection. The supported RAID types include RAID 0, RAID 1, RAID 5 and RAID 6. ** This device is only available for all 3U (8-bay) and 4U (8 / 4-bay) models.
AVP Dongle	Internally inserted to the GV-Hot Swap NVR V5, the AVP Dongle provides the functions of advanced video analysis in GV-System: Panorama View, Video Stabilizer, Defogging, Crowd Detection, Advanced Scene Change, Advanced Missing Object and Advanced Unattended Object.

**Note:** Product design and specifications are subject to change without notice.

## Packing List

- GV-Hot Swap NVR System V5 x 1
- AC Power Cord x 1
- GV-Keyboard Package x1
- GV-IR Remote Control x 1
- GV-IR Remote Control Receiver x 1 \*  
\* Only available for 4U (8 / 4-bay) models
- Key for hard disk safety lock x 1\*  
\* Only available for 4U (8 / 4-bay) models
- Self-Stick Rubber Pad x 4
- Recovery DVD x 1
- Surveillance System Software DVD x 1
- GV-Hot Swap NVR System V5 User's Manual x 1
- GV-Hot Swap NVR System V5 Quick Start Guide x 1