

GV-Hot Swap VMS System V5 (Rev. B) – 4U, 20-Bay



INTRODUCTION

The GV-Hot Swap VMS System V5 features a powerful data storage capacity. It comes with a selection of 4U (20-bay) or 3U (16 / 8-bay) and hot-swappable SATA mobile racks. Depending on HDD size, the GV-Hot Swap VMS System V5 can store up to 120 terabytes of recorded data. Support for hot-swapping makes data storage and management more convenient.

GeoVision Surveillance System empowers the GV-Hot Swap VMS System V5 with a maximum of 64 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 (license required), GV-VMS software provides a pure IP solution to GV-Hot Swap VMS System V5.

KEY FEATURES

- ▶ Powered by Intel Core i7 Processor
- ▶ 64-bit Windows Embedded Standard 7
- ▶ Support GPU Decoding
- ▶ Support up to 64 channels (pure IP surveillance)
- ▶ Three-monitor display
- ▶ Maximum storage capacity up to 120 TB (4U 20-Bay) / 96 TB (3U 16-Bay) / 48 TB (3U 8-Bay)
- ▶ Hot-swap status LED panel
- ▶ Dual Gigabit LAN ports
- ▶ 4U (20-bay) or 3U (16 / 8-bay) hot-swap SATA HDDs for data storage
- ▶ Built-in 4 inputs and 4 outputs
- ▶ Extreme performance for GV-VMS software operation
- ▶ Recovery from internal hard disk
- ▶ RAID 0 / 1 / 5 / 6 / 00 / 10 / 50 / 60 data protection (optional)
- ▶ Compatible with full selections of GeoVision accessories



AVAILABLE MODELS

- ▶ GV-VM5H V5
- ▶ GV-VM5H Pro V5

SPECIFICATIONS

System		
CPU	Intel Core i7 Processor	
RAM	16 GB Dual Channels	
OS	64-bit Windows Embedded Standard 7	
DirectX	11	
No. of HDD	20 (3.5" HDD)	
Internal Storage	500 GB (3.5" HDD)	
Connector	Ethernet	RJ-45, 10 / 100 / 1000 Mbps x 2
	Video Output	3 displays with outputs VGA, DVI-D (DVI-D signal Only) and HDMI
	USB 2.0	Front: 2 ports, Rear: 2 ports
	USB 3.0	Rear: 4 ports
DVD (±) RW	Slim	8X
Fan	12 cm (4 3/4")	3 units
	8 cm (3 1/8")	2 units
Power	Output: 1000 W Input: 100-240 V, 47-63 Hz	

Model	GV-VMS	GV-VMS (Pro)
Video and Audio		
Video Input	32 channels	64 channels
Audio Input	32 channels	64 channels

Note for GV-VMSH 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 or click ([here](#)) for more information.

Live View Playback	
Image Control	Contrast / Brightness / Saturation / Hue
Recording Mode	Round the Clock / Motion Detection / Sensor Detection / Pre & Post Recording / Schedule Recording
Pre Recording	1 ~ 45 min.
Instant Playback	10 sec. / 30 sec. / 1 min. / 5 min.
Watermark Marking	Supported

Searching and Backup	
Search Method	Date / Time / Camera / Event Type
Backup Type	DVD+R (DL) / DVD-R (DL) / DVD+R / DVD+RW / DVD-R / DVD-RW / CD-R / CD-RW

Remote Monitoring	
Network Type	LAN, WAN, Internet
Monitoring Environment	Web browser (IE, Chrome, Firefox and Safari) Mobile device (Android and iOS)

System Monitoring and Recovery	
Power Restoration	Automatic restart after power outage
Monitoring	Two independent Watchdogs (Hardware Watchdog + Software Watchdog)
Recovery	Automatic system rebuild from internal hard disk

Alarm		
Sensor Input	Standard	4 inputs
	GV-IO 12-In Card (Optional)	12 inputs
	GV-IO Box (Optional)	4 / 8 / 16 inputs
Alarm Output	Standard	4 outputs
	GV-IO 12-Out Card (Optional)	12 outputs
	GV-IO Box (Optional)	4 / 8 / 16 outputs

Peripheral Devices	
Audio Microphone In	Mini stereo jack
Audio Output	Mini stereo jack

Environment	
Operating Temp.	0 ~ 45 °C / 32 ~ 113 °F
Humidity	0 ~ 80% RH (non-condensing)

Language		
Type	Bulgarian / Czech / Danish / English / French / German / Greek / Hebrew / Hungarian / Italian / Japanese / Persian / Polish / Portuguese / Russian / Serbian / Simplified Chinese / Slovakian / Slovenian / Spanish / Traditional Chinese / Turkish	
Physical		
LED Indicator	Yes (Fan, Power, HDD)	
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 / 2.2 lb)	
Physical		
Supported Devices	Channels	License
GV IP Devices Only	32 ch	No license required
	64 ch	GV-VMS Pro license required, 32 ch per license
GV + 3 rd -Party IP Devices	32 ch	3 rd -Party license required, in increments of 1 ch
	64 ch	2 licenses required: <ul style="list-style-type: none"> • GV-VMS Pro license, 32 ch per license. • 3rd-Party license, in increments of 1 ch.
Dongle Type	Internal	

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:

Frame rate limit in a single hard disk when connecting to IP cameras

IP Cameras				
Video resolution	H.264		MJPEG	
	Frame Rate	Bit Rate	Frame Rate	Bit Rate
5 MP (2560 x 1920)	220 FPS	8.5 Mbit/s	80 FPS	30.4 Mbit/s
4 MP (2048 x 1944)	330 FPS	10.4 Mbit/s	105 FPS	40.53 Mbit/s
3 MP (2048 x 1536)	440 FPS	9.83 Mbit/s	140 FPS	38.67 Mbit/s
2 MP (1920 x 1080)	660 FPS	12.59 Mbit/s	210 FPS	44.93 Mbit/s
1.3 MP (1280 x 1024)	660 FPS	6.16 Mbit/s	300 FPS	32.26 Mbit/s

Note: The above data was determined using the bitrate listed above and hard disks with average R/W speed above 110 MB/s.

Packing List

- GV-Hot Swap VMS System V5 x 1
- AC Power Cord x 1
- GV-Keyboard Package x1
- GV-IR Remote Control x 1
- Self-Stick Rubber Pad x 4
- Quick Start Guide x 1

Overview

Front View



Rear View - GV-VMS



Options

GV-IO 12-In Card	With 12-point digital inputs, this card can expand the GV-Hot Swap VMS V5 up to 16 sensor inputs.
GV-IO 12-Out Card	With 12-point relay outputs, this card can expand the GV-Hot Swap VMS V5 up to 16 alarm outputs.
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 VMS V5's USB port.
GV-COM V2	This unit can add 1 RS-232/RS-485 serial port through the GV-Hot Swap VMS V5's USB port.
GV-COM V3	This unit can add 1 RS-485 port to your computer through a USB connector.
GV-IO Box (4 Ports V1.0/V1.1)	GV-IO Box 4 Ports V1.0/V1.1 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 (4 Ports V1.2)	GV-IO Box 4 Ports V1.2 provides 4 inputs and 4 relay outputs. It supports both DC and AC output voltages, and provides a USB port 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 V2	GV-Joystick facilitates the PTZ camera control. It can be either plugged into the GV-Hot Swap VMS V5 for independent use or connected to GV-Keyboard to empower the operation.
GV-Keyboard V3	The GV-Keyboard V3 is designed to program and operate the system, and it can also be connected with PTZ cameras directly for PTZ control.
Gigabit Network Card	The Gigabit Network Card can support a single gigabit port. The number of gigabit ports supported varies based on models and combination of optional cards. Up to 3 gigabit ports can be supported.
RAID Card	The RAID Card supports a maximum of 20 SATA hard drives and enhances data protection. The supported RAID types include RAID 0, RAID 1, RAID 5, RAID 6, RAID 00, RAID 10, RAID 50 and RAID 60.
Redundant Power Supply	The Redundant Power Supply comes with 2 hot-swap modules for 3U models and 3 hot-swap modules for 4U models. When 1 module is down, the remaining module(s) can still supply full power to the system. - 3U models: 600 W 1+1 mode; 100 ~ 240 V, 47-63 Hz - 4U models: 1000 W N+1 mode; 100 ~ 240 V, 47-63 Hz

Note:

1. The optional accessories will be built in the GV-Hot Swap Surveillance System V5 (Rev. B) and tested before shipment. Opening the case and installing the accessories yourself will void the warranty.
2. The optional accessories are only supported in GV-Hot Swap Surveillance System V5 (Rev. B) or later.
3. Please contact our sales representatives for more information when combining optional cards for your system.