GV-Hot Swap VMS System V5 (Rev. C) – 3U, 16 / 8-Bay

16-Bay Model   8-Bay Model

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 kinds 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 H.265 CPU and 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
- Pre-installed SSD for recovery
- RAID 0 / 1 / 5 / 6 / 00 / 10 / 50 / 60 data protection (optional)
- Compatible with full selections of GeoVision accessories

AVAILABLE MODELS

- GV-VMSH V5
- GV-VMSH Pro V5

SPECIFICATIONS

System		
Model		
CPU	Intel Core i7 Processor	
RAM	16 GB Dual Channels	
OS	64-bit Windows Embedded Standard 7	
DirectX	11	
No. of HDD	16-bay	16 (3.5" HDD)
	8-bay	8 (3.5" HDD)
Internal Storage	64 GB SSD	
Connector	Ethernet	RJ-45, 10 / 100 / 1000 Mbps x 2
	Video Output	3 displays: VGA, DVI-D, and HDMI
	USB 2.0	Rear: 2 ports
	USB 3.0	Front: 2 ports, Rear: 2 ports
Fan	12 cm (4 3/4")	-
	8 cm (3 1/8")	4 units
Power	16-bay	Output: 550 W Input: 100-240 V, 47-63 Hz
	8-bay	Output: 400 W Input: 100-240 V, 47-63 Hz

Model	GV-VMS (GV)	GV-VMS (Pro)
Video and Audio		
Video Input	32 channels	64 channels
Audio Input	32 channels	64 channels
Video Compression	Geo MPEG4, Geo H.264 / H.265	

Note

1. 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.
2. The H.265 CPU and GPU decoding are only supported by GV-VMS V15.11.0.0 or later versions.

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[1]	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 Ports (Optional)	4 / 8 / 16 inputs
Alarm Output	Standard	4 outputs
	GV-IO 12-Out Card (Optional)	12 outputs
	GV-IO Box Ports (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		
Color		Black
Dimensions (W x H x D)	16-bay	483 x 132.5 x 650 mm / 17 x 5.2 x 25.5 in
	8-bay	483 x 132.5 x 580 mm / 17 x 5.2 x 22.8 in
Net Weight	16-bay	19 kg / 41.8 lb (± 1 kg / 2.2 lb)
	8-bay	18 kg / 39.6 lb (± 1 kg / 2.2 lb)
Software License		
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 + 3rd-Party IP Devices	32 ch	3rd-Party license required, in increments of 1 ch
	64 ch	2 licenses required: • **GV-VMS Pro** license, 32 ch per license • **3rd-Party** license, in increments of 1 ch
Dongle Type		Internal

Note:

1. For backup function, you need to connect an external USB DVD/CD burner.

2. All specifications are subject to change without notice.

Total Frame Rate and Max. No. of Channels Supported

For GV-IP Camera (Dual Streams)

Video Resolution	Dual-stream Resolution		Max. Frame Rate / Camera	Channel	Total Frame Rate / System
	Stream 1 (H.264)	Stream 2 (H.264)			
1.3 MP	1280 x 1024	320 x 256	30 fps	64	1920 fps
2 MP	1920 x 1080	448 x 252	30 fps	64	1920 fps
3 MP	2048 x 1536	320 x 240	20 fps	64	1280 fps
5 MP	2560 x 1920	320 x 240	10 fps	64	640 fps
8 MP	3840 x 2160	1280 x 720	25 fps	64	1600 fps
12 MP	4000 x 3000	1024 x 768	15 fps	64	960 fps

Video Resolution	Dual-stream Resolution		Max. Frame Rate / Camera	Channel	Total Frame Rate / System
	Stream 1 (H.265)	Stream 2 (H.264)			
1 MP	1280 x 720	640 x 360	30 fps	64	1920 fps
2 MP	1920 x 1080	640 x 360	30 fps	64	1920 fps
3 MP	2048 x 1536	640 x 480	30 fps	64	1920 fps
4 MP	2560 x 1440	640 x 360	25 fps	64	1600 fps
5 MP	2592 x 1944	640 x 480	30 fps	64	1920 fps

For GV-Fisheye Camera (Single Stream De-warping)

Video Resolution	Single-Stream Resolution (H.264)	Max. Frame Rate / Camera	Channel	Total Frame Rate / System
1.3 MP	1280 x 1200 (4:3)	15 fps	51	765 fps
2 MP	1440 x 1376 (4:3)	15 fps	43	645 fps
3 MP	2048 x 1536 (4:3)	15 fps	27	405 fps
4 MP	2048 x 1944 (4:3)	15 fps	22	330 fps
5 MP	2560 x 1920 (4:3)	10 fps	19	190 fps
8 MP	2896 x 2768 (16:9)	25 fps	9	225 fps
12 MP	4000 x 3000 (4:3)	15 fps	10	150 fps

For Third-Party IP Camera (Single Stream GPU Decode)

Video Resolution	Single-Stream Resolution (H.264)	Max. Frame Rate / Camera	Channel	Total Frame Rate / System
1.3 MP	1260 x 1024	30 fps	47	1410 fps
2 MP	1920 x 1080	30 fps	32	960 fps
3 MP	2048 x 1536	20 fps	32	640 fps
4 MP	2048 x 1944	15 fps	38	570 fps
5 MP	2560 x 1920	10 fps	41	410 fps
8 MP	3840 x 2160	30 fps	8	240 fps
12 MP	4000 x 3000	15 fps	11	165 fps

Packing List

- GV-Hot Swap VMS System V5 x 1
- AC Power Cord x 1
- Self-Stick Rubber Pad x 4
- Documents Download Guide
- Warranty Card

Overview

Front View – 16-Bay Model

Front View – 8-Bay Model

Rear View– 16 / 8-Bay Model

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. This option is only supported for the 3U 8-Bay model.
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-Data Capture V3 Box	GV-Data Capture V3 Box can integrate the GV-Hot Swap VMS 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 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 V1.2)	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.
GV-IR Remote Control	The GV-IR Remote Control provides easy control of the GV-Hot Swap DVR / NVR / VMS System.
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 4 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. C) 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. C) or later.
3. Please contact our sales representatives for more information when combining optional cards for your system