

GV-Hot Swap System V6 (Rev. D) – 4U, 20-Bay



INTRODUCTION

GV-Hot Swap System V6 (Rev. D) features a powerful data storage capacity. It comes with hot-swappable SATA mobile racks in sizes of 4U (20-bay) and 2U (12 / 8-bay). Depending on HDD capacity, GV-Hot Swap System V6 (Rev. D) can store up to 480 terabytes of recorded data.

GeoVision surveillance software empowers GV-Hot Swap System V6 (Rev. D) with 129–256 audio and video channels for GV-VMS V20.

KEY FEATURES

- ▶ Powered by Intel Core Ultra 7 K Series Processor
- ▶ 64-bit Windows 11 IoT Enterprise
- ▶ RAM 32 GB (GV-VMSH Rev. D)
- ▶ H.265 CPU and GPU decoding
- ▶ Maximum storage capacity of up to 480 TB (4U 20-Bay) / 288 TB (2U 12-Bay) / 192 TB (2U 8-Bay)
- ▶ Hot-swap SATA HDDs for data storage
- ▶ Hot-swap status LED panel
- ▶ Dual 2.5 Gigabit LAN ports for GV-VMS
- ▶ Multiple monitor display for up to 2 monitors
- ▶ Compatible with full selections of GeoVision accessories
- ▶ 129–256 channels for GV-VMS V20 (pure IP surveillance)
- ▶ Extreme performance for preinstalled GV-VMS software
- ▶ Anti-vibration feature to provide the disk throughput of 95% or higher
- ▶ Sliding rail kit for rackmount chassis with loading up to 80 kg
- ▶ RAID type: 0, 1, 5, 6, 10, 50, 60 (optional)
- ▶ Redundant Power Supply (optional)
- ▶ GV-AI Accelerator Module to enhance PVD detection channels and reduce CPU demand (optional)
- ▶ CE, FCC, LVD compliant (by request)



AVAILABLE MODELS

- ▶ GV-VMSH V6 (Rev. D): 129–256 channels for **GV-VMS V20**

SPECIFICATIONS

System		Rev. D
CPU		Intel Core Ultra 7 K Series Processor
RAM	GV-VMS	32 GB Dual Channel
OS		64-bit Windows 11 IoT Enterprise
No. of HDD		20 (2.5" / 3.5" HDD)
Internal Storage		128 GB SSD
HDD Storage		Up to 480 TB*
Connector	Ethernet	RJ-45, 2.5 GbE x 2
	Video Output	2 Displays: HDMI, DisplayPort
	USB	Front: USB 2.0 (Type-A) x 1, USB 3.2 (Type-A) x 1 Rear: USB 2.0 (Type-A) x 4, USB 3.2 (Type-A) x 2, USB 3.2 (Type-C) x 1
Fan		8 cm x 2 / 12 cm x 3
Power		Output: 850 W Input: 100-240 V AC, 50-60 Hz, 11-5.5A
Software Specifications – GV-VMS V20		Rev. D
Video Input		129–256 channels**
Audio Input		129–256 channels
Video Compression		Geo MPEG4, Geo H.264 / H.265

Note:

- 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 for more information.
- For HDD storage capacity of different brands, please see [here](#) for details.*
- To support 129–256 channels, please purchase GV-VMS Pro License Level #3 or above. For details on software licenses, see the [GV-VMS V20 Datasheet](#).**

Live View Playback (for GV-VMS)	
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 (for GV-VMS)	
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 (Edge, Chrome, Firefox, and Safari) Mobile device (Android and iOS)
System Monitoring	
Power Restoration	Automatic restart after power outage
Monitoring	Two independent Watchdogs (Hardware Watchdog + Software Watchdog)

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		
GV-VMS V20		Bulgarian / Chinese Simplified / Chinese Traditional / Czech / Danish / English / French / German / Greek / Hebrew / Hungarian / Italian / Japanese / Persian / Polish / Portuguese / Russian / Serbian / Slovakian / Slovenian / Spanish / Turkish / Ukrainian
Physical		
LED Indicator		Yes (Fan, Power, HDD)
Color		Black / silver
Dimensions (W x H x D)		442 x 175 x 660 mm / 17 x 7 x 26 in
Net Weight		20.7 kg / 45 lb (± 1 kg / 2.2 lb)
LED Indicator	Chassis LED Panel	4 LEDs: Power x 1, OS HDD activity x 1, LAN x 2 (not functional)
	HDD LED Panel	2 LEDs: HDD Power, HDD activity
Certification		
Type		CE, FCC, LVD compliant (by request)

Note:

1. For backup function, you need to connect an external USB DVD/CD burner.
2. The disk throughput test was conducted by a 3rd-party HDD manufacturer. The level of vibration produced by the system's hard drive operation and fan energy is minimized to have an effect of less than 5% on the disk throughput when using 8 TB hard drives.
3. If you are in an area with unstable voltage, make sure to install an automatic voltage regulator (AVR) or a UPS power supply with AVR function, to maintain a constant voltage.
4. All damages to the power supply caused by unstable voltage are not included in the 2-year warranty service.
5. All specifications are subject to change without notice.

TOTAL FRAME RATE AND MAX. NO. OF CHANNELS SUPPORTED – FOR GV-VMS V20

For GV-IP Camera (Dual Streams)

Video Resolution	Dual-Stream Resolution		Max. Frame Rate / Camera	Channels Supported	Total Frame Rate / System	
	Stream 1 (H.265)	Stream 2 (H.264)			Recording	Live View ¹
2 MP	1920 x 1080	640 x 360	30 fps	256	7680 fps	1792 fps
4 MP	2688 x 1520	640 x 360	30 fps	256	7680 fps	1792 fps
8 MP	3840 x 2160	1280 x 720	20 fps	200	4000 fps	1400 fps

Note:

1. For GV-VMS V20, if more than 32 channels are connected during initial setup, all sub streams default to 7 fps. In this case, the total live view frame rate per system is:
 - $Total\ Live\ View\ Frame\ Rate\ (fps) = 7\ (fps) \times Channels\ Supported$
2. The supported channel count was tested using a Full HD (1080p) monitor.
3. The total frame rate and channels supported are determined in round-the-clock recording settings with live view only, while remote connections and video analysis features are disabled.

PACKING LIST

- GV-Hot Swap System V6 (Rev. D)
- AC Power Cord
- Sliding Rail Kit
- Documents Download Guide

OPTIONS

GV-AI Accelerator Module (for GV-VMS)	GV-AI Accelerator Module increases the number of PVD motion detection channels in GV-VMS or GV-AI Guard.
GV-Data Capture V3 Box (for GV-VMS / NVR)	GV-Data Capture V3 allows the integration of POS systems and the GeoVision surveillance system through cable or network connection.
GV-IO Box Series (for GV-VMS / NVR)	GV-IO Box series provides 4 / 8 / 16 inputs and relay outputs, and supports both DC and AC output voltages, with optional support for Ethernet module and 4E additionally supporting PoE connection.
GV-Joystick V2 (for GV-VMS / NVR)	GV-Joystick facilitates the PTZ camera control. It can be either plugged into the GeoVision surveillance system for independent use or connected to GV-KeyBoard to empower the operation.
Gigabit Network Card	Gigabit Network Card is provided with the two options of 1-port 2.5 Gb card and 2-port 10-Gb (20 Gb) card. The supported number of network cards varies based on models and combination of RAID card. Contact our sales representatives for more information.
RAID Card	The supported RAID types include 0, 1, 5, 6, 10, 50, 60.
Redundant Power Supply	Redundant Power Supply comes with 2 hot-swap modules for 2U models and for 4U models. When 1 module is down, the other module can still supply full power to the system. <ul style="list-style-type: none"> - 2U 8-Bay models: 460 W 1+1 mode; 100 ~ 240 V, 47 ~ 63 Hz - 2U 12-Bay models: 550 W 1+1 mode; 100 ~ 240 V, 47 ~ 63 Hz - 4U 20-Bay models: 800 W 1+1 mode; 90 ~ 264 V, 47 ~ 63 Hz

Note:

1. The optional accessories will be built in the GV-Hot Swap Surveillance System V6 (Rev. D) 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 V6 (Rev. D) or later.
3. Please contact our sales representatives for more information when combining optional cards for your system.

OVERVIEW

Front Panel



Rear Panel - GV-Hot Swap VMS System (Rev. D)

