

# GV-VMS System Lite V2



### Introduction

The GV-VMS System Lite V2 (Rev. D) is an ultimate upgraded mini VMS system, which you can record video files directly to the internal hard drive. The GV-VMS System Lite V2 supports up to 16 GV IP cameras or 10 third-party IP cameras (license required) for networking surveillance, with the plug-and-play function for GV IP cameras to connect to the unit automatically. Plus, with supported HDMI output, you could connect the unit to HDTV for better video quality. The GV-VMS System Lite V2 is a perfect VMS system for small business, retail stores, and home security.

Its four USB ports enable to connect with multiple peripheral devices, such as USB HDD, USB DVD player and etc. Its Gigabit Ethernet function enables high-speed Internet access for seamless Web browsing. Moreover, our VESA mounting solution allows you to mount the ultra-slim unit on the back of a computer monitor.

## The Supported IP Camera Combinations:

The GV-VMS System Lite V2 supports connections to GV IP cameras and third-party IP cameras. You can adopt one of the following combinations:

### IP cameras excluding GV Fisheye cameras

- Connect up to 16 GV IP cameras. See Section A.
- Connect up to 3 GV IP cameras (of 3840 x 2160 resolution, H.264). See Section A.
- Connect up to 6 GV IP cameras (of 4000 x 3000 resolution, H.264). See Section A.
- Connect up to 10 third-party cameras (of 1280 x 1024 resolution, H.264). See Section C.
- Connect up to 9 third-party cameras (of 1920 x 1080 resolution, H.264). See Section C. Connect up to 7 third-party cameras (of 2048 x 1536 resolution, H.264). See Section C.
- Connect up to 7 third-party cameras (of 2048 x 1944 resolution, H.264). See Section C.
- Connect up to 7 third-party cameras (of 2560 x 1920 resolution, H.264). See Section C.
- Connect up to 1 third-party cameras (of 3840 x 2160 resolution, H.264). See Section C.
- Connect up to 1 third-party cameras (of 4000 x 3000 resolution, H.264). See Section C.
- Connect up to 10 cameras from GV-IP cameras and third-party cameras (of 1280 x 1024 resolution, H.264). See Section A and C.
- Connect up to 9 cameras from GV-IP cameras and third-party cameras (of 1920 x 1080 resolution, H.264). See Section A and C.
- Connect up to 7 cameras from GV-IP cameras and third-party cameras (of 2048 x 1536 resolution, H.264). See Section A and C.
- Connect up to 7 cameras from GV-IP cameras and third-party cameras (of 2048 x 1944 resolution, H.264). See Section A and C.
- Connect up to 7 cameras from GV-IP cameras and third-party cameras (of 2560 x 1920 resolution, H.264). See Section A and C. Connect up to 1 cameras from GV-IP cameras and third-party cameras (of 3840 x 2160 resolution, H.264). See Section A and C.
- Connect up to 1 cameras from GV-IP cameras and third-party cameras (of 4000 x 3000 resolution, H.264). See Section A and C.



### IP cameras including GV Fisheye cameras

- GV-Fisheye Camera 1.3 MP + one of the following options:
  - GV-IP Camera x 15
  - Third-party Camera (1 / 1.3 / 2 MP) x 8
  - Third-party Camera (3 / 4 / 5 MP) x 1
- GV-Fisheye Camera 2 MP + one of the following options:
  - GV-IP Camera x 15
  - Third-party Camera (1 / 1.3 / 2 MP) x 6
  - Third-party Camera (3 / 4 / 5 MP) x 1
- **GV-Fisheye Camera 4 MP** + one of the following options:
  - GV-IP Camera x 11
  - Third-party Camera (1 / 1.3 / 2 MP) x 4
  - Third-party Camera (3 / 4 / 5 MP) x 1
- **GV-Fisheye Camera 5 MP** + one of the following options:
  - GV-IP Camera x 8
  - Third-party Camera (1 / 1.3 / 2 MP) x 3
  - Third-party Camera (3 / 4 / 5 MP) x 1

### **GV-Fisheye** cameras

- Connect up to 9 GV-Fisheye cameras (of 1280 x 1024 resolution, H.264). See Section B.
- Connect up to 6 GV-Fisheye cameras (of 1440 x 1376 resolution, H.264). See **Section B**.
- Connect up to 3 GV-Fisheye cameras (of 2048 x 1944 resolution, H.264). See Section B.
- Connect up to 3 GV-Fisheye cameras (of 2560 x 1920 resolution, H.264). See **Section B.**
- Connect up to 1 GV-Fisheye cameras (of 3840 x 2160 resolution, H.264). See **Section B.**
- Connect up to 1 GV-Fisheye cameras (of 4000 x 3000 resolution, H.264). See **Section B**.

The number of supported channels is based on the following resolution:

Coation A		<b>Dual-stream Resolution</b>		Max. Frame Rate	Total Frame Rate / System
Section A		Stream 1	Stream 2	/ Camera	
	1.3 MP	1280 x 1024	320 x 256	30 fps	480 fps
	2 MP	1920 x 1080	448 x 252	25 fps	450 fps
	3 MP	2048 x 1536	320 x 240	20 fps	320 fps
GV-IP Cameras	4 MP	2048 x 1944	320 x 240	15 fps	240 fps
	5 MP	2560 x 1920	320 x 240	10 fps	160 fps
	8 MP	3840 x 2160	1280 x 720	9 fps	27 fps
	12 MP	4000 X 3000	1024 X 768	5 fps	30 fps
Section B		Single Stream Resolution (H.264)		Max. Frame Rate / Camera	Total Frame Rate / System
GV-Fisheye	1.3 MP	1280 x 1024 (4:3)	1280 x 1024 (4:3)		75 fps
	2 MP	1440 x 1376 (4:3)		10 fps	60 fps
	4 MP	2048 x 1944 (4:3)		15 fps	45 fps
	5 MP	2560 x 1920 (4:3)		10 fps	30 fps
	8 MP	3840 x 2160		8 fps	8 fps
	12 MP	4000 X 3000		5 fps	5 fps
Section C		Single Stream Resolution (H.264)		Max. Frame Rate / Camera	Total Frame Rate / System
Third-Party Camera	1.3 MP	1280 X 1024		18 fps	180 fps
	2 MP	1920 X 1080	1920 X 1080		180 fps
	3 MP	2048 x 1536		20 fps	140 fps
	4 MP	2048 X 1944		15 fps	110 fps
	5 MP	2560 X 1920		10 fps	70 fps
	8 MP	3840 x 2160		9 fps	9 fps
	12 MP	4000 X 3000		5 fps	5 fps



#### Note:

#### **GV IP cameras**

- 1. For GV IP cameras (excluding GV Fisheye), stream 1 is used for recording and single view, and stream 2 for live viewing in multi-
- 2. The default resolution for stream 1 is set at its maximum. Several resolution, aspect ratio and codec options are available for each IP camera.
- 3. It is highly recommended to set the panel resolution to 1280 x 1024 (default) or lower when connecting to GV Fisheye to get better CPU performance.

### Third-party cameras

4. For third-party cameras, be sure the resolution and codec are configured as specified above to achieve the best performance and maximum frame rate. To find the supported third-party cameras, go to http://www.geovision.com.tw/english/4\_21.asp.

#### **Frame Rate**

- 5. To calculate the number of channels supported by the system, find the total frame rate supported by the system and divide it by max. frame rate per camera.
- 6. If you record the images, access live view and see the playback simultaneously, the CPU loading will increase massively. Therefore, the frame rates may drop.

#### **Main Features**

- Compact and sleek
- Up to 16 channels
- Automatic connection to GV IP cameras
- Support for 3rd party IP cameras (license required)
- All-in-one solution (Live View, Playback, Recording, Backup, CMS)
- GPU decoding and dewarping
- H.264 / MJPEG / MPEG4
- Dual video streams
- VGA and HDMI outputs
- 1 TB hard drive
- Video analysis (Advanced Motion Detection, Privacy Mask, Scene Change Detection and Counter only)
- Standing mount and VESA mount options
- Direct recording to the internal hard drive
- Low power consumption
- Smart phones access
- Fisheye camera dewarping
- Multiple languages

### **Available Model**

• GV-VMS Lite V2 (Rev. D) 1 TB



# **Applications**

### One Shop, One Fisheye Camera, One GV-VMS System Lite V2

The easiest and most cost-efficient solution for video surveillance



### **One Fisheye Camera**

- Megapixel resolution up to 12 MP
- Wide angle view to cover all angles of a location

The wide-angle fisheye camera eliminates the need to install multiple conventional cameras, saving both costs and the trouble of maintenance. The circular source image can be dewarped into rectangular view and adjust into different modes and positions according to your preference.



Source Image

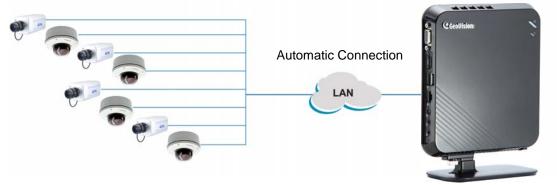


Dewarped Image: 2 PTZ views & 1 360 degree view

### One GV-VMS System Lite V2

- Automatic connection with GV IP cameras without configuration
- Easy to install and use

Using GV-VMS System Lite V2, video files are recorded directly to the internal hard drive without setting up a separate computer. The user interface is intuitive and the plug-and-play function allows GV IP cameras to automatically connect to the unit without further configurations.



IP Address: 192.168.X.X Subnet Mask: 255.255.255.0 Default IP Address: 192.168.0.200 Subnet Mask: 255.255.255.0

<sup>\*</sup> All GV-Fisheye IP Cameras are supported.



#### **Remote and Wireless Access**

- Remote access through IE browser
- Mobile applications to receive live view and play back recorded videos



iPhone / Android

# **Centralized Monitoring for Multiple Locations**

- GV-Control Center
- GV-Center V2
- GV-Dispatch Server
- GV-Vital Sign Monitor
- GV-GIS

The Central Monitoring Station programs provide a centralized management solution by allowing you to monitor live view, receive alarm notification and play back recordings from numerous cameras or GV-VMS System Lite V2.

# **Specifications**

# Hardware

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System				
CPU			Intel Processor	
RAM			4 GB	
Storage			1 TB	
OS			Microsoft Windows 7 Embedded 64-Bit SP1	
DirectX			11	
Power			Output: 65W, 19V, 3.42A; Input: 100~240V, 50~60Hz	
Connector	Ethernet		RJ-45, 10 / 100 / 1000 Mbps	
	Video Output		VGA and HDMI	
	USB 2.0	Right Side	1 port	
		Left Side	2 ports	
	USB 3.0	Right Side	1 ports	
Environment	t			
Operating Temp			0 °C ~ 35 °C / 32 °F ~ 95 °F	
Humidity			0% ~ 80% RH (non-condensing)	
Physical				
Color			Black	
Dimensions (W x H x D)			153.6 x 25.2 x 172.6 mm / 6.04 x 0.99 x 6.8 in	
Weight			800 g / 1.77 lbs	
Sensor and A	<b>Alarm</b> (Option	nal)		
GV-IO Box 4 Ports			4 inputs, 4 outputs	
GV-IO Box 8 Ports			8 inputs, 8 outputs	
GV-IO Box 16 Ports			16 inputs, 16 outputs	



#### Software

30111141.0		
Video and Audio		
Video Input	16 channels	
Audio Input	16 channels	
Compression	MJPEG / MEPG4 / H.264	
Live Resolution	CIF for 16 screen divisions	
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	N/A	
Watermark Marking	Supported	
Searching and Playback		
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	
Note: For backup function, you need to co	nnect an external USB DVD/CD burner.	
Remote Monitoring		
Monitoring Environment	Web browser (IE, Chrome, Firefox and Safari) Mobile device (iOS, Android)	
Live View	Max. 16-channel multi views (Up to 200 channels connection to GV-VMS System Lite V2)	
Network Type	LAN, Internet	
System Monitoring and Recovery		
Power Restoration	Automatic restart after power outage	
Monitoring	Software watchdog	
Recovery	Automatic system rebuild from internal hard disk.	
Language		
Туре	Bulgarian / Czech / Danish / English / French / German / Greek / Hebrew / Hungarian / Italian / Japanese / Persian / Polish / Portuguese / Russian / Serbian / Simplified Chinese / Slovakian / Slovenian / Spanish / Traditional Chinese / Turkish	
Software License		
Free License	16 channels from GV-IP Cameras	
Maximum License	10 channels from third-party IP Cameras (*)	
Increment for Each License	1 to 10 third-party IP cameras at an increment of 1	

<sup>\*</sup> The Maximum License is a paid service.

### Note:

- 1. This product includes a lite version of video process applications, featuring Privacy Mask, Counter/Intrusion, Scene Change Detection and Text Overlay only.
- 2. The ViewLog player only supports Single View playback. Instant playback is not supported.

N/A

External

- 3. The Focus View function is not supported on Live View.
- 4. Product design and specifications are subject to change without notice.

# **Packing List**

- GV-VMS System Lite V2 x 1
- AC Power Cord x 1

**Optional Combinations** 

Dongle Type

- Power Adapter x 1
- Standing Mount Kit (1 Base Stand and 1 Base Stand Screw included) x 1
- VESA Monitor Mount Kit (1 Stand Screw and 4 Fix Screws included) x 1
- GV-Surveillance System Lite V2 Quick Start Guide x 1
- GV-Surveillance Lite V2 Dongle for third-party IP cameras (optional)
- Warranty Card