

## GV-Tower VMS System V2



### Introduction

The GV-Tower VMS System V2 comes with 4 hot-swap drive bays for the storage of 24 TB. This system has two CPU options: Intel Core i3 and i5. It features the latest upgraded VMS system and 64-bit Microsoft Windows Embedded OS. GV-Tower VMS System V2 supports up to 32 channels of GV-IP devices or third-party IP devices (license required). You can also bring the surveillance on the HDTV with a HDMI cable. It is a towering, affordable, and efficient VMS system that you have ever seen.

### Features

- Powered by Intel Core i3 or i5 Processor
- 64-bit Windows Embedded OS
- Support for GPU Decoding
- 4-bay hot-swap data HDD
- Maximum storage capacity of 24 TB
- Pre-installed SSD for recovery
- Dual Gigabit LAN ports
- 3-monitor display (VGA, DVI-D and HDMI outputs)
- Support for 3rd party IP devices
- Support for 32 channels (Pure IP solution)
- All-in-one solution (Live View, Playback, Recording, Backup, CMS)
- Video analysis
- Fisheye camera dewarping function
- Automatic connection to GV-IP devices
- H.265 / H.264 / MJPEG / MPEG4
- On-screen LED panel for HDD status
- Smart device access
- Multiple (22) languages

### Packaging

- GV-Tower VMS System V2 x 1
- Keys for Hard Disk Safety Lock x 2
- Hard Disk Drive Screw x 16
- AC Power Cord x 1
- GV-Tower System V2 Quick Start Guide x 1

## Specifications

### Hardware

System		
CPU		Intel Core i3 Processor
		Intel Core i5 Processor (optional)
RAM		4 GB
No. of HDD		4 (3.5" HDD; SATA3 interface)
Internal Storage		64 GB (SSD)
OS		64-bit Windows Embedded OS
DirectX		11
Power		250 W, 110-115 V, 60 Hz
		250 W, 220-230 V, 50 Hz
Connector	Ethernet	RJ-45, 10 / 100 / 1000 Mbps x 2
	Video Output	VGA, DVI-D and HDMI
	USB 2.0	Front: 2 ports
		Rear: 4 ports
	USB 3.0	Rear: 2 ports
Environment		
Operating Temp.		0 ~ 45 °C / 32 ~ 113 °F
Humidity		0 ~ 80% RH (non-condensing)
Physical		
Color		Silver
Dimensions (W x H x D)		200 x 270 x 335 mm / 7.87 x 10.63 x 13.19 in
Net Weight		8 kg / 17.64 lb (± 1 kg / 2.2 lb)
Sensor and Alarm (Optional)		
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

Video and Audio		
Model	GV-Tower VMS (GV)	GV-Tower VMS (3rd Party)
Video Input	32 channels	32 channels in increments of 1 channel (license required)
Audio Input	32 channels	32 channels in increments of 1 channel (license required)
Live View and 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		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
Remote Monitoring		
Monitoring Environment		Web browser (IE, Chrome, Firefox and Safari) Mobile device (Android Smartphone and tablet; iPad, iPhone and iPod Touch)
Live View		Max. 32-channel multi views (Up to 200 channels connection to GV-Tower System V2)
Network Type		LAN, WAN, Internet
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 SSD.
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

Software License	
Free License	32 channels from GV-IP devices
Maximum License	32 channels from third-party IP devices
Increment for Each License	1 to 32 third-party IP cameras increments of 1 channel
Optional Combinations	N/A
Dongle Type	Internal

**Note:**

1. The Maximum License is a paid service.
2. It is required to enable the dual-stream function on GeoVision and third-party IP cameras to have the maximum number of channels supported. For single streaming third-party IP cameras, please see "Total Frame Rate and Max. No. of Channels Supported" below.
3. For backup function, you need to connect an external USB DVD/CD burner.
4. Product design and 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 Streams		Max. FPS	Intel Core i3 / i5	
	Stream 1 (H.264)	Stream 2 (H.264)		Total FPS	Full-Frame Channels
1.3 MP	1280 x 720 / 1280 x 1024	448 x 252 / 320 x 256	30 fps	960 fps	32 ch
2 MP	1920 x 1080	448 x 252	30 fps	960 fps	32 ch
3 MP	2048 x 1536	320 x 240	20 fps	640 fps	32 ch
5 MP	2560 x 1920	320 x 240	10 fps	320 fps	32 ch

Video Resolution	Dual Streams		Intel Core i3			Intel Core i5		
	Stream 1 (H.265)	Stream 2 (H.264)	Max. FPS	Total FPS	Full-Frame Channels	Max. FPS	Total FPS	Full-Frame Channels
1 MP	1280 x 720	640 x 360	30 fps	960 fps	32 ch	30 fps	960 fps	32 ch
2 MP	1920 x 1080	640 x 360	25 fps	800 fps	32 ch	30 fps	960 fps	32 ch
3 MP	2048 x 1520	640 x 480	20 fps	640 fps	32 ch	30 fps	960 fps	32 ch
4 MP	2560 x 1440	640 x 360	20 fps	640 fps	32 ch	25 fps	800 fps	32 ch
5 MP	2592 x 1944	640 x 480	15 fps	480 fps	32 ch	30 fps	960 fps	32 ch

**For GV-Fisheyes Camera (Single Stream De-warping)**

Video Resolution	Single Stream (H.264)	Max. FPS	Intel Core i3		Intel Core i5	
			Total FPS	Full-Frame Channels	Total FPS	Full-Frame Channels
1.3 MP	1280 x 1200	15 fps	195 fps	13 ch	210 fps	14 ch
2 MP	1440 x 1376	15 fps	150 fps	10 ch	165 fps	11 ch
4 MP	2048 x 1944	15 fps	75 fps	5 ch	90 fps	6 ch
5 MP	2560 x 1920	10 fps	60 fps	6 ch	70 fps	7 ch

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

Video Resolution	Single Stream (H.264)	Max. FPS	Intel Core i3		Intel Core i5	
			Total FPS	Full-Frame Channels	Total FPS	Full-Frame Channels
1.3 MP	1280 x 720 / 1280 x 1024	30 fps	930 fps	31 ch	960 fps	32 ch
2 MP	1920 x 1080	30 fps	750 fps	25 ch	960 fps	32 ch
3 MP	2048 x 1536	20 fps	440 fps	22 ch	580 fps	29 ch
4 MP	2048 x 1944	15 fps	255 fps	17 ch	390 fps	26 ch
5 MP	2560 x 1920	10 fps	160 fps	16 ch	240 fps	24 ch

## Options

GV-Hub V2	An easy way for serial port extension. This hub can add 4 RS-232/RS-485 serial ports through the GV-Tower VMS System V2'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 V2 facilitates the PTZ camera control. It can be either plugged into the GV-Tower VMS System V2 for independent use or connected to GV-Keyboard to empower the operation.
GV-Keyboard V3	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-Tower DVR/NVR/VMS System V2.

## Overview



Front View



Rear View