

GV-Tower VMS System V2 Series



Introduction

The GV-Tower VMS System V2 Series 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 Series 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 for GV-Tower VMS System V2 (VGA, DVI-D and HDMI outputs) / 2-monitor display for GV-Tower VMS System V2 (Rev. B) (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

Models:

- GV-Tower VMS System V2-Core i3
- GV-Tower VMS System V2 (Rev.B)-Core i5

Packaging

- GV-Tower VMS System V2 / V2 (Rev. B)
- Keys for Hard Disk Safety Lock x 2
- Hard Disk Drive Screw x 16
- GV-IR Remote Control (for GV-Tower VMS System V2-Core i3 only)
- GV-IR Remote Control Receiver (for GV-Tower VMS System V2-Core i3 only)
- AC Power Cord
- Download Guide

Specifications

Hardware

System: GV-Tower VMS System V2-Core i3		
CPU	Intel Core i3 Processor	
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
System: GV-Tower VMS System V2 (Rev. B)-Core i5		
CPU	Intel Core i5 Processor	
RAM	8 GB Dual Channels	
No. of HDD	4 (3.5" HDD; SATA3 interface)	
Internal Storage	64 GB (SSD)	
OS	64-bit Windows Embedded OS	
DirectX	11	
Power	300 W, 110-115 V, 60 Hz 300 W, 220-230 V, 50 Hz	
Connector	Ethernet	RJ-45, 10 / 100 / 1000 Mbps x 2
	Video Output	2 HDMI ports
	USB 3.0	Front: 2 ports Rear: 4 ports
	USB 2.0	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 Series)
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

• GV-Tower VMS System V2-Core i3

For GV-IP Camera (Dual Streams)

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

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

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

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

Video Resolution	Single Stream (H.264)	Max. FPS	Intel Core i3	
			Total FPS	Full-Frame Channels
1.3 MP	1280 x 720 / 1280 x 1024	30 fps	930 fps	31 ch
2 MP	1920 x 1080	30 fps	750 fps	25 ch
3 MP	2048 x 1536	20 fps	440 fps	22 ch

4 MP	2048 x 1944	15 fps	255 fps	17 ch
5 MP	2560 x 1920	10 fps	160 fps	16 ch

• GV-Tower VMS System V2 (Rev. B)-Core i5

For GV-IP Camera (Dual Streams)

Video Resolution	Dual Streams		Max. FPS	Intel Core i5	
	Stream 1 (H.264)	Stream 2 (H.264)		Total FPS	Full-Frame Channels
1.3 MP	1280 x 1024	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
8 MP	3840 x 2160	1280 x 720	25 fps	575 fps	23 ch
12 MP	4000 x 3000	1024 x 768	15 fps	480 fps	32 ch

Video Resolution	Dual Streams		Max. FPS	Intel Core i5	
	Stream 1 (H.265)	Stream 2 (H.264)		Total FPS	Full-Frame Channels
3MP	2048 x 1536	640 x 480	30 fps	960 fps	32 ch
4MP	2560 x 1440	640 x 360	25 fps	800 fps	32 ch
5MP	2592 x 1944	640 x 480	30 fps	960 fps	32 ch

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

Video Resolution	Single Stream (H.264)	Max. FPS	Intel Core i5	
			Total FPS	Full-Frame Channels
1.3 MP	1280 x 1200	15 fps	480 fps	32 ch
2 MP	1920 x 1080	15 fps	405 fps	27 ch
3 MP	2048 x 1536	15 fps	285 fps	19 ch
4 MP	2048 x 1944	15 fps	270 fps	18 ch
5 MP	2560 x 1920	10 fps	320 fps	32 ch
8 MP	3840 x 2160	25 fps	225 fps	9 ch
12 MP	4000 x 3000	15 fps	135 fps	9 ch

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

Video Resolution	Single Stream (H.264)	Max. FPS	Intel Core i5	
			Total FPS	Full-Frame Channels
1.3 MP	1280 x 1024	30 fps	960 fps	32 ch
2 MP	1920 x 1080	30 fps	810 fps	27 ch
3 MP	2048 x 1536	20 fps	560 fps	28 ch
4 MP	2048 x 1944	15 fps	480 fps	32 ch
5 MP	2560 x 1920	10 fps	320 fps	32 ch
8 MP	3840 x 2160	30 fps	210 fps	7 ch
12 MP	4000 x 3000	15 fps	165 fps	11 ch

Options

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 Series 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 VMS System V2 Series.

Overview

- GV-Tower VMS System V2-Core i3

Front View



Rear View



- GV-Tower VMS System V2 (Rev. B)-Core i5

Front View



Rear View

