GV-Tower NVR System V3 (Rev. B)



Introduction

GV-Tower NVR System V3 (Rev. B) comes with 8 hot-swap drive bays for a total storage of 192 TB and a key-operated safety lock for enhanced HDD data protection. This system features an Intel Core Ultra 5 Processor, the latest NVR system, and 64-bit Windows 11 IoT Enterprise. GV-Tower NVR System V3 (Rev. B) supports up to 32 channels of GV-IP devices or third-party IP devices (license required). You can output surveillance video to HDTVs using the system's HDMI port or DisplayPort. This towering NVR system delivers a powerful, cost-effective, and efficient solution.

Features

- Powered by Intel Core Ultra 5 Processor
- 64-bit Windows 11 IoT Enterprise
- Support for GPU Decoding
- 8-bay hot-swap data HDD
- Maximum storage capacity of 192 TB
- One Gigabit LAN port
- Multiple monitor display for up to 2 monitors simultaneously (HDMI, DisplayPort)
- Wireless Communication (Wi-Fi)
- Key-operated safety lock for enhanced HDD data protection
- 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 (31) languages

Specifications

Hardware

System		
CPU		Intel Core Ultra 5 Processor
RAM		16 GB Dual Channel
No. of HDD		8 (3.5” HDD; SAS / SATA3 interface)
Internal Storage		128 GB (SSD)
OS		64-bit Windows 11 IoT Enterprise
Power		450 W, 110-115 V, 60 Hz 450 W, 220-230 V, 50 Hz
Wireless Communication		Wi-Fi 6 (2.4 / 5 GHz), IEEE 802.11a/b/g/n/ax Bluetooth 5.3
Connector	Ethernet	RJ-45, 2.5 GbE Ethernet Port x 1
	Video Output	HDMI x 1, DisplayPort x 1 (applicable simultaneously)
	USB	Front: USB 3.2 (Type-A, 5 Gbps) x 2, USB 3.2 (Type-C, 5 Gbps) x 1 Rear: USB 3.2 (Type-A, 5 Gbps) x 2, USB 2.0 (Type-A) x 4
	Wi-Fi Antenna	Rear: 2 ports
Environment		
Operating Temp.		0 ~ 45 °C / 32 ~ 113 °F
Humidity		0 ~ 80% RH (non-condensing)
Physical		
Color		Black
Dimensions (W x H x D)		217 x 405 x 451 mm / 8.54 x 15.94 x 17.76 in
Net Weight		15.5 kg / 34.17 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 NVR (GV)	GV-Tower NVR (3rd Party)
Video Input	32 channels	1, 2, 4, 6, 8, 10, 12, 16, 18, 20, 22, 24, 26, 28, 30, 32 channels (license required)
Audio Input	32 channels	1, 2, 4, 6, 8, 10, 12, 16, 18, 20, 22, 24, 26, 28, 30, 32 channels (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	
Remote Monitoring		
Monitoring Environment	Web browser (Edge, 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 V3 (Rev. B))	
Network Type	LAN, WAN, Internet	
System Monitoring		
Power Restoration	Automatic restart after power outage	
Monitoring	Two independent Watchdogs (Hardware Watchdog + Software Watchdog)	
Language		
Type	Arabic / Bulgarian / Chinese Simplified / Chinese Traditional / Czech / Danish / Dutch / English / Finnish / French / German / Greek / Hebrew / Hungarian / Indonesian / Italian / Japanese / Lithuanian / Norwegian / Persian / Polish / Portuguese / Romanian / Russian / Serbian / Slovakian / Slovenian / Spanish / Swedish / Thai / Turkish	

Software License	
Free License	32 channels from GV-IP devices
Maximum License	32 channels from third-party IP devices
Increment for Each License	2 to 32 third-party IP cameras in increments of 2
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. 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. 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	Stream 1 (H.264)	Mbps	Stream 2 (H.264)	Mbps	Max. FPS	Intel Core Ultra 5	
						Total FPS	Full-Frame Channels
1.3 MP	1280 x 720	3.99	640 x 360	1.99	30 fps	960 fps	32 ch
2 MP	1920 x 1080	6.12	640 x 360	2.19	30 fps	960 fps	32 ch
3 MP	2048 x 1520	9.17	640 x 360	1.99	30 fps	960 fps	32 ch
4 MP	2560 x 1440	9.21	640 x 360	1.72	25 fps	800 fps	32 ch
5 MP	2592 x 1944	9.19	640 x 480	2.29	30 fps	960 fps	32 ch
8 MP	3840 x 2160	13.47	1280 x 720	3.14	25 fps	700 fps	28 ch
12 MP	4000 x 3000	13.73	1024 x 768	3.07	15 fps	450 fps	30 ch
Video Resolution	**Stream 1 (H.265)**	**Mbps**	**Stream 2 (H.264)**	**Mbps**	**Max. FPS**	**Intel Core Ultra 5**	
						Total FPS	**Full-Frame Channels**
1.3 MP	1980 x 720	0.83	640 x 360	0.84	30 fps	960 fps	32 ch
2 MP	1920 x 1080	1.6	640 x 360	0.84	30 fps	960 fps	32 ch
3 MP	2048 x 1536	2.05	640 x 360	0.83	30 fps	960 fps	32 ch
4 MP	2560 x 1440	2.21	640 x 360	0.82	25 fps	800 fps	32 ch
5 MP	2560 x 1920	2.41	640 x360	0.83	30 fps	960 fps	32 ch
8 MP	3840 x 2160	3.52	640 x 360	1.24	20 fps	640 fps	32 ch

For GV-Fisheye Camera (Single Stream, 360° De-warping)

Video Resolution	Stream 1 (H.264)	Mbps	Max. FPS	Intel Core Ultra 5	
				Total FPS	Full-Frame Channels
8 MP	2896 x 2768	6.39	25 fps	25 fps	1
12 MP	4000 x 3000	13.74	15 fps	30 fps	2
Video Resolution	**Stream 1 (H.265)**	**Mbps**	**Max. FPS**	**Intel Core Ultra 5**	
				Total FPS	**Full-Frame Channels**
3 MP	2048 x 1536	3.3	30 fps	120 fps	4
5 MP	2592 x 1944	7.75	30 fps	30 fps	1
12 MP	4000 x 3000	9.85	20 fps	20 fps	1

Note: 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.

Options

GV-Data Capture V3 Box	GV-Data Capture unit allows the integration of POS systems and the GeoVision surveillance system through cable or network connection.
GV-IO Box Series	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.

Packing List

- GV-Tower NVR System V3 (Rev. B)
- Keys for Hard Disk Safety Lock x 2
- Hard Disk Drive Screw x 16
- AC Power Cord
- Wi-Fi Antenna x 2
- Download Guide

Overview

