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Comparison Chart for GV-Tower System V3 (Rev. B)

Model	GV-Tower System V3 (Rev. B)		
			
System			
Form Factor	Tower		
Hybrid	Pure IP Solution (GV-NVR / VMS)		
CPU	Intel Core Ultra 5 Processor		
RAM	16 GB Dual Channel		
OS	64-bit Windows 11 IoT Enterprise		
No. of HDD	8 (3.5" HDD; SAS / SATA3 interface)		
Internal Storage	128 GB SSD		
Extended Storage Interface	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		
Display	HDMI x 1 DisplayPort x 1 Support up to 2 monitors from the video outputs		
Ethernet	RJ-45, 2.5 GbE Ethernet Port x 1		
RAID	N/A		
Power	Output: 450 W; Input: 110 ~ 115 V, 60 Hz Input: 220 ~ 230 V, 50 Hz		
Wireless Communication	Wi-Fi 6 (2.4 / 5 GHz), IEEE 802.11a/b/g/n/ax Bluetooth 5.3		
	Sensor/Alarm		
Input/Output	Optional		
	Environment		
Operating Temperature	0 °C ~ 45 °C / 32 °F ~ 113 °F		
Anti-shock / Vibration	N/A		
Physical			
Weight	15.5 kg / 34.17 lb (± 1 kg / 2.2 lb)		
Dimensions (W x H x D)	217 x 405 x 451 mm / 8.54 x 15.94 x 17.76 in		
Software			
Total Frame Rate (Max.)	NVR (H.264)	VMS V17 / V18 (H.264)	VMS V20 (H. 264)
	1.3 ~ 3 MP: 960 fps 4 MP: 800 fps 5 MP: 960 fps 8 MP: 700 fps 12 MP: 450 fps	1.3 ~ 3 MP: 960 fps 4 MP: 800 fps 5 MP: 960 fps 8 MP: 800 fps 12MP: 480 fps	N/A
	NVR **(H.265)**	VMS V17 / V18 **(H.265)**	VMS V20 **(H. 265)**
	1.3 ~ 3 MP: 960 fps 4 MP: 800 fps 5 MP: 960 fps 8 MP: 640 fps	1.3 ~ 3 MP: 960 fps 4 MP: 800 fps 5 MP: 960 fps 8 MP: 640 fps	**Recording** / **Live View** 4 MP: 1920 fps / 4 MP: 448 fps 8 MP: 1280 fps / 8 MP: 448 fps
Video Input	NVR	VMS V17 / V18	VMS V20
	32 channels*	32 channels*	64 channels*
Audio Input	32 channels	32 channels	64 channels
Remote Live View	Edge, Chrome, Firefox, and Safari		
Mobile Monitoring	iOS / Android		
Language	31 (GV-NVR) / 23 (GV-VMS) **		

All specifications are subject to change without notice.

* The maximum supported GV-NVR and GV-VMS channels depend on the video resolution, video codec, and camera type. For details, see *Total Frame Rate and Max. No. of Channels Supported* in the GV-Tower System V3 (Rev. B) datasheets.

** For supported languages and software licenses, see *GV-NVR Datasheet*, *GV-VMS V17/V18 Datasheet*, and *GV-VMS V20 Datasheet*.

Comparison Chart for GV-Hot Swap System V6 (Rev. C)

Model	GV-Hot Swap System V6 (Rev. C) 2U (8-Bay)	GV-Hot Swap System V6 (Rev. C) 2U (12-Bay)	GV-Hot Swap System V6 (Rev. C) 4U (20-Bay)
			
	System		
Form Factor	2U Rack-mount	2U Rack-mount	4U Rack-mount
Hybrid	Pure IP solution (GV-NVR / VMS)	Pure IP solution (GV-NVR / VMS / Recording Server)	
CPU	Intel Core i7 Processor		
RAM	GV-NVR: 8 GB Dual Channel, GV-VMS: 16 GB Dual Channel	GV-NVR: 8 GB Dual Channel, GV-VMS / Recording Server: 16 GB Dual Channel	
OS	64-bit Windows 11 IoT Enterprise		
No. of HDD	8 (2.5” / 3.5” HDD)	12 (2.5” / 3.5” HDD)	20 (2.5” / 3.5” HDD)
Internal Storage	128 GB SSD		
External Storage Interface	Front: USB 2.0 (Type-A) x 1, USB 3.2 (Type-A) x 1 Rear: USB 2.0 (Type-A) x 4, USB 2.0 (Type-A) x 2, USB 3.2 (Type-C) x 1	Front: USB 3.2 (Type-A) x 2 Rear: USB 2.0 (Type-A) x 4, USB 3.2 (Type-A) x 2, USB 3.2 (Type-C) x 1	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 (Type-C) x1
Display	2 displays: HDMI, DisplayPort		
Gigabit LAN	2 LAN ports:2.5 GbE x 2	GV-VMS / NVR: 2 LAN ports: 2.5 GbE x 2 GV-Recording Server: 3 LAN ports: 2.5 GbE x 3	
RAID	Optional (RAID 0 / 1 / 5 / 6 / 10 / 50 / 60)		
Power	Output: 400W; Input: 100 ~ 240V AC, 47 ~ 63 Hz, 8 ~ 4A	Output: 600W; Input: 100 ~ 240V AC, 47 ~ 63 Hz, 10 ~ 5A	Output: 850W; Input: 100 ~ 240V AC, 50 ~ 60 Hz, 11 ~ 5.5A
	Environment		
Operating Temp.	0 °C ~ 45 °C / 32 °F ~ 113 °F		
Anti-shock/ Vibration	N/A		
	Physical		
Weight	14.6 kg / 32 lb (± 1 kg / 2.2 lb)	15.4 kg / 33 lb (± 1 kg / 2.2 lb)	20.7 kg / 45 lb (± 1 kg / 2.2 lb)
Dimensions (W x H x D)	430 x 88.5 x 660 mm / 17 x 3.5 x 26 in	430 x 88.5 x 660 mm / 17 x 3.5 x 26 in	442 x 175 x 660 mm / 17 x 7 x 26 in
	Software		
GV-NVR Specification			
Total Display Rate (Max.)	H.264		
Total Recording Rate (Max.)	1.3 MP: 960 fps 2 MP: 960 fps 3 MP: 640 fps 5 MP: 320 fps 8 MP: 800 fps 12 MP: 480 fps		
Total Display Rate (Max.)	H.265		
Total Recording Rate (Max.)	1 MP: 960 fps 2 MP: 960 fps 3 MP: 960 fps 4 MP: 800 fps 5 MP: 960 fps		
Video Input	32 channels		
Audio Input	32 channels		
Remote Live View	Edge, Chrome, Firefox and Safari		
Mobile Monitoring	iOS / Android		
Language	31**		



Model		GV-Hot Swap System V6 (Rev. C) 2U (8-Bay)	GV-Hot Swap System V6 (Rev. C) 2U (12-Bay)	GV-Hot Swap System V6 (Rev. C) 4U (20-Bay)
		Software		
GV-VMS Specification				
Total Display Rate (Max.)		H.264		
Total Recording Rate (Max.)		1.3 MP: 1920 fps 2 MP: 1920 fps 3 MP: 1920 fps 5 MP: 1600 fps 8 MP: 1600 fps 12 MP: 960 fps		
Total Display Rate (Max.)		H.265		
Total Recording Rate (Max.)		1 MP: 1920 fps 2 MP: 1920 fps 3 MP: 1920 fps 4 MP: 1600 fps 5 MP: 1920 fps		
Video Input	V17 / V18	64 channels*		
	V20	128 channels		
Audio Input	V17 / V18	64 channels		
	V20	128 channels		
Remote Live View		Edge, Chrome, Firefox, and Safari		
Mobile Monitoring		iOS / Android		
Language		23**		

Model	GV-Hot Swap System V6 (Rev. C) 2U (12-Bay)	GV-Hot Swap System V6 (Rev. C) 4U (20-Bay)
	Software	
GV-Recording Server		
IP Video Device Connections	256 channels	
Remote Client Connections	600 channels	
Recording Channels	256 channels	
Remote Live View	Edge, Chrome, Firefox, and Safari	
Language	31**	

All specifications are subject to change without notice.

* The maximum supported GV-VMS channels depend on the video resolution, video codec, and camera type. For details, see *Total Frame Rate and Max. No. of Channels Supported* in the GV-Hot Swap System V6 (Rev. C) datasheets.

** For supported languages and software licenses, see *GV-NVR Datasheet*, *GV-VMS V17/V18 Datasheet*, *GV-VMS V20 Datasheet*, and *GV-Recording Server Datasheet*.

Comparison Chart for GV-Hot Swap System V6 (Rev. D)

Model	GV-Hot Swap System V6 (Rev. D) 2U (8-Bay)	GV-Hot Swap System V6 (Rev. D) 2U (12-Bay)	GV-Hot Swap System V6 (Rev. D) 4U (20-Bay)
			
	System		
Form Factor	2U Rack-mount	2U Rack-mount	4U Rack-mount
Hybrid	Pure IP solution (GV-VMS)		
CPU	Intel Core Ultra 7 K Series Processor		
RAM	32 GB Dual Channel		
OS	64-bit Windows 11 IoT Enterprise		
No. of HDD	8 (2.5” / 3.5” HDD)	12 (2.5” / 3.5” HDD)	20 (2.5” / 3.5” HDD)
Internal Storage	128 GB SSD		
External Storage Interface	Front: USB 2.0 (Type-A) x 1, USB 3.2 (Type-A, 5 Gbps) x 1 Rear: USB 2.0 (Type-A) x 4, USB 3.2 (Type-A, 5 Gbps) x 1, USB 3.2 (Type-A, 10 Gbps) x 2, USB 3.2 (Type-C, 20 Gbps) x 1	Front: USB 3.2 (Type-A, 5 Gbps) x 2 Rear: USB 2.0 (Type-A) x 4, USB 3.2 (Type-A, 5 Gbps) x 1, USB 3.2 (Type-A, 10 Gbps) x 2, USB 3.2 (Type-C, 20 Gbps) x 1	Front: USB 2.0 (Type-A) x 1, USB 3.2 (Type-A, 5 Gbps) x 1 Rear: USB 2.0 (Type-A) x 4, USB 3.2 (Type-A, 5 Gbps) x 1, USB 3.2 (Type-A, 10 Gbps) x 2, USB 3.2 (Type-C, 20 Gbps) x 1
Display	2 displays: HDMI, DisplayPort		
Gigabit LAN	2 LAN ports:2.5 GbE x 2		
RAID	Optional (RAID 0 / 1 / 5 / 6 / 10 / 50 / 60)		
Power	Output: 400W; Input: 100 ~ 240V AC, 47 ~ 63 Hz, 8 ~ 4A	Output: 600W; Input: 100 ~ 240V AC, 47 ~ 63 Hz, 10 ~ 5A	Output: 850W; Input: 100 ~ 240V AC, 50 ~ 60 Hz, 11 ~ 5.5A
	Environment		
Operating Temp.	0 °C ~ 45 °C / 32 °F ~ 113 °F		
Anti-shock/ Vibration	N/A		
	Physical		
Weight	14.6 kg / 32 lb (± 1 kg / 2.2 lb)	15.4 kg / 33 lb (± 1 kg / 2.2 lb)	20.7 kg / 45 lb (± 1 kg / 2.2 lb)
Dimensions (W x H x D)	430 x 88.5 x 660 mm / 17 x 3.5 x 26 in	430 x 88.5 x 660 mm / 17 x 3.5 x 26 in	442 x 175 x 660 mm / 17 x 7 x 26 in
	Software		
GV-VMS V20 Specifications			
Total Frame Rate (Max.)	H.265 **Recording**: 2 MP: 7680 fps; 4 MP: 7680 fps; 8 MP: 4000 fps **Live View**: 2 MP: 1792 fps; 4 MP: 1792 fps; 8 MP: 1400 fps		
Video Input	129–256 channels*		
Audio Input	129–256 channels		
Remote Live View	Edge, Chrome, Firefox, and Safari		
Mobile Monitoring	iOS / Android		
Language	23**		

All specifications are subject to change without notice.

* The maximum supported GV-VMS channels depend on the video resolution, video codec, and camera type. For details, see *Total Frame Rate and Max. No. of Channels Supported* in the GV-Hot Swap System V6 (Rev. D) datasheets.

** For supported languages, see *GV-VMS V20 Datasheet*.

*** To support 129–256 channels, please purchase GV-VMS Pro License Level #3 or above. For details on software licenses, see *GV-VMS V20 Datasheet*.

GV-Mini System V2 (Rev. B)

Model	GV-Mini System V2 (Rev. B)
	
	System
Form Factor	Mini System
CPU	Intel Core i7 Processor
RAM	16 GB Dual Channel
OS	64-bit Windows 11 IoT Enterprise
OS SSD	1 TB SSD
Internal Storage	Slots for 2.5” HDD/SSD x 2
USB Interface	USB (3.2 Gen 1, Type-A) x 2 USB (3.2 Gen 2, Type-A) x 1 USB (3.2 Gen 2, Type-C) x 1 USB (3.2 Gen 2 x 2, Type-C) x 1 USB 2.0 x 2
Display	VGA x 1 HDMI x 1 DisplayPort 1.4 x 1 DisplayPort (USB 3.2 Gen 2 Type-C Port alt mode) x 1 Support up to four monitors from the four graphics outputs
Gigabit LAN	2.5
RAID	N/A
Power	19V, 120W
	Sensor / Alarm
Input/Output	N/A
	Environment
Operating Temperature	0 °C ~ 35 °C / 32 °F ~ 95 °F
Anti-shock/Vibration	N/A
	Physical
Weight	1.92 kg / 4.23 lb
Dimensions (W x H x D)	155 x 155 x 80 mm / 6.11 x 6.11 x 3.15 in

All specifications are subject to change without notice.

GV-AI System V2 (Rev. B)

Model	GV-AI System V2 (Rev. B)
	
	System
Form Factor	4U Rack-mount
CPU	Intel Core i7 Processor
RAM	Standard: 16 GB Dual Channel Advanced: 32 GB (16 GB x 2) Dual Channel
OS	64-bit Windows 11 IoT Enterprise
OS SSD	1 TB SSD
Internal Storage	Slots for 3.5” HDD x 4
USB Interface	Front: USB 3.2 (Type-A) x2 Rear: USB 2.0 (Type-A) x 4, USB 3.2 (Type-A) x 2, USB 3.2 (Type-C) x 1
Display	2 displays: HDMI, DisplayPort
Gigabit LAN	LAN 2.5 GbE x 1
RAID	N/A
Power	Output: 850 W; Input: 100-240V AC, 50-60 Hz, 11-5.5A
	Sensor / Alarm
Input/Output	N/A
	Environment
Operating Temperature	0 ~ 45 °C / 32 ~ 113 °F
Anti-shock/Vibration	N/A
	Physical
Weight	14.8 kg / 32.63 lb (±1 kg / 2.2 lb)
Dimensions (W x H x D)	469 x 430 x 176 mm / 18.47 x 16.93 x 6.93 in

All specifications are subject to change without notice.

GV-Control Center System V2 (Rev. B)

Model	GV-Control Center System V2 (Rev. B)
	
	System
Form Factor	4U Rack-mount
CPU	Intel Core i7 Processor
RAM	16 GB Dual Channel
OS	64-bit Windows 11 IoT Enterprise
OS SSD	128 GB SSD
Internal Storage	Slots for 3.5” HDD x 4
USB Interface	Front: USB 3.2 (Type-A) x 2 Rear: USB 2.0 (Type-A) x 4 USB 3.2 (Type-A) x 2 USB 3.2 (Type-C) x 1
Display	HDMI x 2 (up to 4K / 60Hz) DisplayPort 1.4 x 4 (up to 4K / 60Hz) Support up to 6 monitors from the video outputs simultaneously, or up to 10 monitors with an optional graphics card added
Gigabit LAN	2.5 GbE x 2
RAID	N/A
Power	Output: 850 W; Input: 100 ~ 240 V AC, 50 ~ 60 Hz, 11 ~ 5.5 A
	Sensor/Alarm
Input/Output	N/A
	Environment
Operating Temperature	0 °C ~ 45 °C / 32 °F ~ 113 °F
Anti-shock / Vibration	N/A
	Physical
Weight	15.3 kg / 33.74 lb (± 1 kg / 2.2 lb)
Dimensions (W x H x D)	469 x 430 x 176 mm / 18.47 x 16.93 x 6.93 in

All specifications are subject to change without notice.

GV-Storage System V3 (Rev. C)

Model		GV-Storage System V3 (Rev. C)
		
System		
CPU		Intel Xeon Processor
RAM		8 GB DDR4 ECC
Ports	Ethernet	Standard: 1 Gigabit Ethernet port x 6 Advanced: 1 Gigabit Ethernet port x 6, 10 Gigabit Ethernet port x 2
	UPS	RS232 port (Phone Jack) for UPS x 1
	SAS	Mini SAS HD port x 1 (for connecting GV-Expansion System V3 16/24/64 bay
No. of Hot Swap Drive Bays		16
HDD Type		2.5” & 3.5” SAS III / SATA III
Power		Input: 100 ~ 240 V, Full Range Output 460 W x 2
Fan		Hot pluggable and redundant fan x 2
Storage		
Capacity	Storage System	352 TB (22 TB HDD)
	Fully Expanded	Up to 256 HDDs for 5,632 TB
Max. Expansion Connections		4
Environment		
Operating Temperature		0 °C ~ 40 °C / 50 °F ~ 104 °F
Humidity		10 ~ 85% RH (non-condensing)
Physical		
Weight		30 kg / 66.14 lb (Diskless)
Dimensions (W x H x D)		482 x 133 x 730 mm / 18.98 x 5.26 x 28.74 in

GV-Mobile System

Model		GV-MNVR1000 System	GV-Mobile System 2710
			
		System	
Form Factor		Mobile System	
Video Capture Card		N/A	
Analog Inputs		N/A	
CPU		Intel Atom Processor	Intel Core i7 Process
RAM		4 GB Single Channel	16 GB Dual Channel
OS		64-bit Windows 7 Embedded SP1	64-bit Windows 11 IoT Enterprise
No. of Drive Bay		1 (2.5” HDD / SSD)	2 (2.5” HDD / SSD)
Internal Storage		32 GB (CFast Card)	128 GB (Industrial SSD)
Extended Storage Interface		USB (2.0) x 2 USB (3.0) x 1	USB (3.2) x 6
Display		DisplayPort, VGA	HDMI, DisplayPort, VGA
LAN		1 GbE Ethernet Port x 2	2.5 GbE PoE Port x 4 (IEEE 802.3af/at) 1 GbE Ethernet Port x 1
RAID		N/A	
Power		10 ~ 35V DC	9 ~ 36V DC
		Sensor/Alarm	
Input/Output		Optional	
		Environment	
Operating Temperature	HDD	0°C ~ 60°C / 32°F ~ 140°F	
	SSD	-30°C ~ 70°C / -22°F ~ 158°F	-20°C ~ 60°C / -4°F ~ 140°F
Anti-shock / Vibration		Yes	
		Physical	
Weight		2.1 kg / 4.63 lb (± 1 kg / 2.2 lb)	5.7 kg / 12.57 lb (± 1 kg / 2.2 lb)
Dimensions (W x H x D)		260 x 50 x 176 mm / 10.24 x 1.97 x 6.93 in	Without mount bracket: 260 x 210 x 81 mm / 10.24 x 8.27 x 3.19 in With mount bracket: 293 x 210 x 90 mm / 11.54 x 8.27 x 3.54 in
		Software	
Total Display Rate (Max.)		H.264: 1 MP: 600 fps 2 MP: 510 fps 3 MP: 480 fps 5 MP: 160 fps	H.265: 1.3 MP: 150 fps 2 MP: 125 fps 3 MP: 120 fps 4 MP: 120 fps 5 MP: 100 fps
Total Recording Rate (Max.)			H.265: Recording / Live (VMS V20) / Live (VMS V17/V18) 2 MP: 1920 fps / 448 fps / 960 fps 4 MP: 1920 fps / 448 fps / 960 fps 8 MP: 1280 fps / 448 fps / 960 fps
Video Input	GV-NVR	24 channels**	32 channels**
	GV-VMS	N/A	64 channels**
Audio Input	GV-NVR	24 channels	32 channels
	GV-VMS	N/A	64 channels
Remote Live View		Edge, Chrome, Firefox, and Safari	
Mobile Monitoring		iOS / Android	
Recovery		Automatic system rebuild from internal HDD	
Language		29***	

All specifications are subject to change without notice.

** The maximum supported GV-NVR and GV-VMS channels depend on the video resolution, video codec, and camera type. For details, see *Maximum Channels and Frame Rate Supported* in *GV-MNVR1000 System Datasheet* and *GV-Mobile System 2710 Datasheet*.

*** For supported languages and software licenses, see *GV-NVR Datasheet*, *GV-VMS V17/V18 Datasheet*, *GV-VMS V20 Datasheet*, *GV-ASManager Datasheet*, and *GV-AI FR Datasheet*.

Advantages of Each Surveillance System

GV-Hot Swap System –



Unparalled Performance & Storage Capacity

Advantages:

- Exceptional Performance
- Most Storage Capacity with 8 / 12 / 20 hotswap drive bays
- Multi-Monitor Display support
- Optional Redundant PSU available
- Optional RAID and Gigabit Network card available

Suited Applications: Large-scale Corporate, Factory

GV-Tower System –



Economically Sound All-in-1 Surveillance Solution

Advantages:

- Medium Performance
- Super Storage Capacity with 8 hotswap drive bays
- Multi-Monitor Display support
- Easy Installation
- Best C/P value

Suited Applications: Small-Medium Corporate, Retail

GV-AI / Mini System –



The Most Compact Sufvveillance System with High Customizabilty



Advantages:

- Power desktop CPU Intel Core
- 4-Monitor Display (GV-Mini System), Double-Monitor Display (GV-AI System)
- VESA Mount (GV-Mini System)

Suited Applications: Small Corporate, Retail, Home

GV-Mobile System –



A Surveillance with Fortitude for High Durability & Mobility

Advantages:

- Fan-less Design with Wide Temperature Tolerance
- Ability to Withstand Harsh Environments
- Wireless Suppers support
- Optional GPS support

Suited Applications: Automotive, Vessel, Outdoor High-temp Site, Factory, Train, Surveiliance with No Air Condition