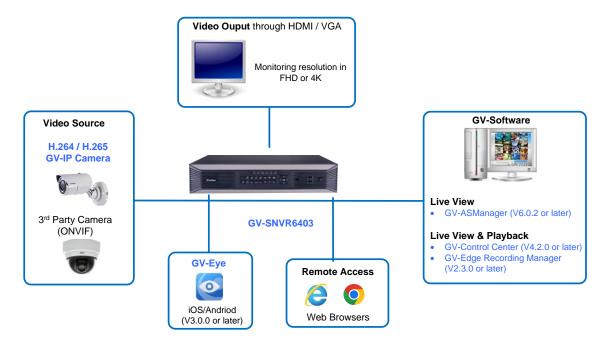


# **GV-SNVR6403**



#### Introduction

GV-SNVR6403 is a standalone network video recorder with Linux embedded that records video files directly to the internal hard drive and supports up to 64 IP camera channels for video surveillance. Thanks to its up to 4K resolution video output, GV-SNVR6403 eliminates the need of a separate PC to view and play back video from the unit. It has USB ports that can be used to import or export system settings, update firmware, store snapshot files and back up videos.



### **Features**

- 64-channel video recording
- Up to 4000 x 3000 resolution for each channel
- Dual stream support
- Triple display from 3 video outputs: One 4K (HDMI), 2 1080p (HDMI / VGA)
- 8 SATA HDD drawers (3.5") for up to 80 TB storage
- Two-way audio
- 16 sensor inputs and 4 alarm outputs
- Automatic search and setup for IP cameras
- Support for third-party IP cameras through ONVIF and RTSP protocol
- Continuous, motion, alarm and scheduled recordings

- Timeline playback
- Multi-channel playback
- Display of HDD status and temperature
- DST (Daylight Saving Time) support
- NTP (Network Time Protocol) support
- GeoVision DDNS server support
- E-mail notifications for recording error
- Recording export
- Remote live view through Web browser
- Smart device access (iOS and Android)
- Support for 12 languages

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# **Specifications**

System	Specifications				
No. of Drive Bay					
No. of Drive Bay					
Power Source	OS		Embedded Linux		
Gigabit Ethernet   Video Output   HDMI output ports x 2, VGA output port x 1			8 (3.5" HDD), up to 80 TB		
Video Output	Power Source		· ·		
Connectors					
USB					
R5-485	Connectors				
LED Indicators					
LED Indicators					
Operating Temperature		1/0		·	
Humidity	LED Indicators		6 LEDs: RUN, N	IET, GUARD, HD, ALM, CLOUD (not functional)	
Net Weight   S.7 kg (12.57 lb)   S.7 kg (12	Operating Tempo	erature	-10°C ~ 55°C (14°F ~ 131°F)		
Net Weight   S.7 kg (12.57 lb)   Regulatory   FCC, CE, BSMI, RoHS compliant	Humidity			<u> </u>	
FCC, CE, BSMI, RoHS compliant           Video and Audio           Video Compression         H. 264, H. 265           Video Compression         G. 731           Audio Compression         G. 731           Audio Compression         G. 731           Audio Support         Yes           Two-Way Audio         Yes           Disk Array           Array Type         RAID 0. 1, 5, 6, 10           Interface           WGA Output         1 port (1920 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 720 / 60 Hz, 1280 x 720 / 60 Hz, 1280 x 1080p / 60 Hz, 1920 x 1080p / 60 Hz, 1024 x 768 / 60 Hz)           HDMI Output         1 port (1920 x 1080p / 60 Hz, 1920 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 720 / 60 Hz, 1024 x 768 / 60 Hz)           **HDMI Output         1 port (1920 x 1080p / 60 Hz, 1920 x 1080p / 60 Hz, 1920 x 1080p / 60 Hz, 1920 x 1080p / 60 Hz, 1020 x 1080p	Dimensions (L x \	W x H)	442 mm × 426 mm × 89 mm (17.4" × 16.8"× 3.5")		
Video And Audio           Video Compression         B. 12.64, H.265           Video Output         4K (HDMI), 1080p (HDMI / VGA)           Audio Compression         G.711           Audio Compression         G.712           Audio Support         Yes           Two-Way Audio         Yes           Disk Array         RAID 0, 1, 5, 6, 10           Interface         Interface           VGA Output         1 port (1920 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 720 / 60 Hz, 1920 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 720 / 60 Hz, 1920 x 1080p / 60 Hz)           Monitors         4 DMI Output         2 ports (3840 x 2160 / 30 Hz, 1920 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz)           Becoding         2 ports (3840 x 2160 / 30 Hz, 1920 x 1080p / 60 Hz)         120 x 1024 x 768 / 60 Hz)           *HDMI Output         41 280 x 1024 / 60 Hz, 1280 x 720 / 60 Hz, 1024 x 768 / 60 Hz)           *HDMI Output         41 280 x 1024 / 60 Hz, 1280 x 720 / 60 Hz, 1024 x 768 / 60 Hz)           *HDMI Output         *RASA x 2160 / 30 Hz, 1290 x 1080p / 60 Hz, 1024 x 768 / 60 Hz)           *HDMI Output         *B MP: up to 30 fps/CH, 60 fps in total (6 CH max.)           *MP: up to 30 fps/CH, 400 fps in total (6 CH max.)           *MP: up to 30 fps/CH, 200 fps in total (6 CH max.)	Net Weight		5.7 kg (12.57 lb)		
Video Compression         H.264, H.265           Video Output         Ak (HDMI), 1080p (HDMI / VGA)           Audio Compression         G.711           Audio Support         Yes           Two-Way Audio         Yes           Disk Array           Array Type         RAID 0, 1, 5, 6, 10           Interface           WGA Output         1 port (1920 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 720 / 60 Hz, 1920 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 720 / 60 Hz, 1920 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 720 / 60 Hz, 1920 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 720 / 60 Hz, 1920 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 720 / 60 Hz, 1920 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 720 / 60 Hz, 1920 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1020 / 60 Hz, 1280 x 720 / 60 Hz, 1920 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1020 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1020 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1020 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1020 x 1080p / 60 Hz, 1920 x 1080p / 60 Hz, 192			FCC, CE, BSMI, RoHS compliant		
Video Stream         Dual streams from H.264, H.265           Video Output         4K (HDMI), 1080p (HDMI / VGA)           Audio Compression         G.711           Audio Compression         Yes           Two-Way Audio         Yes           Vermous Proposition of Proposition	Video and Audio				
Victor Output	Video Compressi	on	H.264, H.265		
Audio Compression         G.711           Audio Support         Yes           Two-Way Audio         Yes           Disk Array           Array Type         RAID 0, 1, 5, 6, 10           Interface           WGA Output         1 port (1920 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1200 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1200 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 720 / 60 Hz, 1280 x 720 / 60 Hz, 1024 x 768 / 60 Hz)           Decoding           12 MP: up to 30 fps/CH, 60 fps in total (2 CH max.)           8 MP: up to 30 fps/CH, 120 fps in total (4 CH max.)           8 MP: up to 30 fps/CH, 120 fps in total (4 CH max.)           5 MP: up to 30 fps/CH, 120 fps in total (4 CH max.)           4 MP: up to 30 fps/CH, 80 fps in total (16 CH max.)           4 MP: up to 30 fps/CH, 80 fps in total (16 CH max.)           4 MP: up to 30 fps/CH, 480 fps in total (16 CH max.)           4 MP: up to 30 fps/CH, 480 fps in total (16 CH max.)           9 Max. 16-ch playback           5 Max. 16-ch playback           Colspan="2">Colspan="2">5 Max. 16-ch playback           Colspan="2">Colspan="2">5 Max. 16-ch playback	Video Stream		Dual streams from H.264, H265		
Audio Support	Video Output		4K (HDMI), 1080p (HDMI / VGA)		
Two-Way Audio	Audio Compress	ion	G.711		
Disk Array         RAID 0, 1, 5, 6, 10           Interface           Monitors         UGA Output         1 port (1920 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 720 / 50 Hz, 1024 x 768 / 60 Hz)         PROBLEM TO THE WIND OUT	Audio Support		Yes		
Name	Two-Way Audio	Two-Way Audio		Yes	
Nonitors	Disk Array				
Monitors			RAID 0, 1, 5, 6, 10		
Monitors	Interface				
HDMI Output		VGA Output			
#HDMI audio output is not supported  Pecoding    12 MP: up to 30 fps/CH, 60 fps in total (2 CH max.)	Monitors		2 ports (3840 x 2160 /30 Hz, 1920 x 1080p / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60		
Prame Rate  Main		HDMI Output	Hz, 1280 x 1024 / 60 Hz, 1280 x 720 / 60 Hz, 1024 x 768 / 60 Hz)		
Frame Rate    Payback			*HDMI audio output is not supported		
Frame Rate    Main   Ma	Decoding				
Frame Rate    Main					
Frame Rate  Main					
Frame Rate    Main   Main   Main   1080P: up to 25 fps/CH, 225 fps in total (9 CH max.)   1080P: up to 30 fps/CH, 480 fps in total (16 CH max.)   960P: up to 25 fps/CH, 800 fps in total (32 CH max.)   720P: up to 30 fps/CH, 1080 fps in total (36 CH max.)   D1: up to 30 fps/CH, 1920 fps in total (64 CH max.)	Frame Rate				
Frame Rate    Main   1080P: up to 30 fps/CH, 480 fps in total (16 CH max.) 960P: up to 25 fps/CH, 800 fps in total (32 CH max.) 720P: up to 30 fps/CH, 1080 fps in total (36 CH max.) D1: up to 30 fps/CH, 1920 fps in total (64 CH max.)					
Frame Rate  960P: up to 25 fps/CH, 800 fps in total (32 CH max.) 720P: up to 30 fps/CH, 1080 fps in total (36 CH max.) D1: up to 30 fps/CH, 1920 fps in total (64 CH max.)  *When connected to more than one monitor, live view images for multiple windows will automatically be converted to sub streams.  Sub 720P: up to 30 fps/CH, 1080 fps in total (36 CH max.) *Note 1 D1: up to 30 fps/CH, 1080 fps in total (36 CH max.) *Note 1 D1: up to 30 fps/CH, 1920 fps in total (64 CH max.)  Playback Operation  Recording Bandwidth Output Max. 384 Mbps  Normal, Motion Detection, Alarm Input, Alarm Output, Manual Alarm, Audio Detection Recording, Schedule Recording, Event recording, Snapshot, Manual recording Pre Recording Pre Recording O ~ 60 sec. / Default 10 sec. Post Recording 5 ~ 600 sec. / Default 60 sec. Instant Playback 5 minutes and 30 seconds					
720P: up to 30 fps/CH, 1080 fps in total (36 CH max.) D1: up to 30 fps/CH, 1920 fps in total (64 CH max.)  *When connected to more than one monitor, live view images for multiple windows will automatically be converted to sub streams.  Sub  720P: up to 30 fps/CH, 1080 fps in total (36 CH max.) *Note 1 D1: up to 30 fps/CH, 1920 fps in total (64 CH max.)  Playback  Max. 16-ch playback  Operation  Recording Bandwidth  Output  Max. 384 Mbps  Normal, Motion Detection, Alarm Input, Alarm Output, Manual Alarm, Audio Detection Recording, Schedule Recording, Event recording, Snapshot, Manual recording  Pre Recording  O ~ 60 sec. / Default 10 sec.  Post Recording  5 ~ 600 sec. / Default 60 sec.  Instant Playback  5 minutes and 30 seconds			Main		
D1: up to 30 fps/CH, 1920 fps in total (64 CH max.)  *When connected to more than one monitor, live view images for multiple windows will automatically be converted to sub streams.  Sub 720P: up to 30 fps/CH, 1080 fps in total (36 CH max.) *Note 1 D1: up to 30 fps/CH, 1920 fps in total (64 CH max.)  Playback Max. 16-ch playback  Operation  Recording Bandwidth Output Max. 384 Mbps  Recording Mode  Recording Mode  Recording Mode  Pre Recording  Pre Recording  Pre Recording  Post Recording  S ~ 600 sec. / Default 10 sec.  Post Recording  Instant Playback  S minutes and 30 seconds					
*When connected to more than one monitor, live view images for multiple windows will automatically be converted to sub streams.  Sub 720P: up to 30 fps/CH, 1080 fps in total (36 CH max.) *Note 1 D1: up to 30 fps/CH, 1920 fps in total (64 CH max.)  Playback Max. 16-ch playback  Operation  Recording Bandwidth Output Max. 384 Mbps  Recording Mode Normal, Motion Detection, Alarm Input, Alarm Output, Manual Alarm, Audio Detection Recording, Schedule Recording, Event recording, Snapshot, Manual recording  Pre Recording O ~ 60 sec. / Default 10 sec.  Post Recording S minutes and 30 seconds					
windows will automatically be converted to sub streams.  Sub 720P: up to 30 fps/CH, 1080 fps in total (36 CH max.) *Note 1 D1: up to 30 fps/CH, 1920 fps in total (64 CH max.)  Playback Max. 16-ch playback  Operation  Recording Input Max. 384 Mbps Bandwidth Output Max. 384 Mbps  Recording Mode Normal, Motion Detection, Alarm Input, Alarm Output, Manual Alarm, Audio Detection Recording, Schedule Recording, Event recording, Snapshot, Manual recording  Pre Recording O ~ 60 sec. / Default 10 sec.  Post Recording 5 ~ 600 sec. / Default 60 sec.  Instant Playback 5 minutes and 30 seconds				D1: up to 30 fps/CH, 1920 fps in total (64 CH max.)	
Sub 720P: up to 30 fps/CH, 1080 fps in total (36 CH max.) *Note 1 D1: up to 30 fps/CH, 1920 fps in total (64 CH max.)  Playback Max. 16-ch playback  Operation  Recording Input Max. 384 Mbps  Bandwidth Output Max. 384 Mbps  Recording Mode Normal, Motion Detection, Alarm Input, Alarm Output, Manual Alarm, Audio Detection Recording, Schedule Recording, Event recording, Snapshot, Manual recording  Pre Recording O ~ 60 sec. / Default 10 sec.  Post Recording 5 ~ 600 sec. / Default 60 sec.  Instant Playback 5 minutes and 30 seconds				· · · · · · · · · · · · · · · · · · ·	
Playback  Max. 16-ch playback  Operation  Recording Bandwidth  Output  Max. 384 Mbps  Recording Mode  Recording Mode  Recording Mode  Recording Mode  Normal, Motion Detection, Alarm Input, Alarm Output, Manual Alarm, Audio Detection Recording, Schedule Recording, Event recording, Snapshot, Manual recording  Pre Recording  O ~ 60 sec. / Default 10 sec.  Post Recording  5 ~ 600 sec. / Default 60 sec.  Instant Playback  5 minutes and 30 seconds					
Playback Operation  Recording Input Max. 384 Mbps Bandwidth Output Max. 384 Mbps  Recording Mode Normal, Motion Detection, Alarm Input, Alarm Output, Manual Alarm, Audio Detection Recording, Schedule Recording, Event recording, Snapshot, Manual recording  Pre Recording 0 ~ 60 sec. / Default 10 sec.  Post Recording 5 ~ 600 sec. / Default 60 sec.  Instant Playback 5 minutes and 30 seconds			Sub		
OperationRecording BandwidthInputMax. 384 MbpsRecording ModeNormal, Motion Detection, Alarm Input, Alarm Output, Manual Alarm, Audio Detection Recording, Schedule Recording, Event recording, Snapshot, Manual recordingPre Recording0 ~ 60 sec. / Default 10 sec.Post Recording5 ~ 600 sec. / Default 60 sec.Instant Playback5 minutes and 30 seconds	Dlaubaalı		May 10 ab ala		
Recording Bandwidth Output Max. 384 Mbps  Recording Mode Recording Mode Recording Mode Pre Recording Post Recording Post Recording Post Recording Nax. 384 Mbps Normal, Motion Detection, Alarm Input, Alarm Output, Manual Alarm, Audio Detection Recording, Schedule Recording, Event recording, Snapshot, Manual recording O ~ 60 sec. / Default 10 sec.  S ~ 600 sec. / Default 60 sec. Instant Playback S minutes and 30 seconds	-		iviax. 16-ch pia	ураск	
BandwidthOutputMax. 384 MbpsRecording ModeNormal, Motion Detection, Alarm Input, Alarm Output, Manual Alarm, Audio Detection Recording, Schedule Recording, Event recording, Snapshot, Manual recordingPre Recording0 ~ 60 sec. / Default 10 sec.Post Recording5 ~ 600 sec. / Default 60 sec.Instant Playback5 minutes and 30 seconds		la a colo	N4011 204 N4b10		
Recording Mode  Normal, Motion Detection, Alarm Input, Alarm Output, Manual Alarm, Audio Detection Recording, Schedule Recording, Event recording, Snapshot, Manual recording  Pre Recording  0 ~ 60 sec. / Default 10 sec.  Post Recording  5 ~ 600 sec. / Default 60 sec.  Instant Playback  5 minutes and 30 seconds	_				
Recording Mode  Recording, Schedule Recording, Event recording, Snapshot, Manual recording  O ~ 60 sec. / Default 10 sec.  Post Recording  5 ~ 600 sec. / Default 60 sec.  Instant Playback  5 minutes and 30 seconds	Bandwidth	Output			
Post Recording 5 ~ 600 sec. / Default 60 sec.  Instant Playback 5 minutes and 30 seconds	Recording Mode		Recording, Schedule Recording, Event recording, Snapshot, Manual recording		
Instant Playback 5 minutes and 30 seconds					
•					
Packup Type  LISP flack drive of EAT22 or NTES format	Instant Playback		5 minutes and	30 seconds	
Dackup Type USB Hash Unive OF FATSZ OF INTESTORMAL	Backup Type		USB flash drive	e of FAT32 or NTFS format	

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*GV-SNVR6403* 

November 18, 2022



Playback Function		Fast forward / backward (2x, 4x, 8x, 16x)		
		Slow forward (1/2x, 1/4x, 1/8x,)		
Local	Corridor Mode	3/4/5/7/9/10/12/16/32		
Viewing	Multi-Window	4/6/8/9/16/25/36/64		
Video Analyti	ics	Defocus Detection, Scene Change Detection, Object Removed, Object Left Behind		
Al Integrated	Function			
AI Analytics		Intrusion Detection, Cross Line Detection, Enter Area, Face Detection, Leave Area (Human classification), Auto Tracking, People Flow Counting, Crowd Density Monitoring *These functions are only applicable when the NVR is connected to AI-capable IP cameras listed in <i>Compatible GV-AI Capable IP Cameras</i> below.		
Management				
Language		Czech, English, French, German, Hungarian, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Traditional Chinese		
Firmware up	grade	Upgrade through Web		
Web Browser		IE 10 or above Firefox V52 or above Google Chrome V45 or above Edge V79 or above		
Network				
Protocol		802.1x, ARP, HTTPS, DHCP, IPv4, PPPoE, DDNS, FTP, HTTP, RTSP, UPnP, SMTP, SNMP, DNS, ICMP, IGMP, NTP, QoS, RTCP, RTSP, RTP, TCP, UDP		
System Monit	oring and Recovery			
Power Restor	ration	Automatic restart after power outage		
Remote Moni	toring			
Multi-Window		1/4/6/8/9/10/13/16/25/36/64		
Monitoring E	nvironment	IE browser, non-IE bowsers (Chrome, Edge Firefox, Safari), Mobile app		
Access from \	Web Browsers	Live View, Image Snapshot, Playback, Digital PTZ, System Configurations		
Applications				
Software Supported		GV-Control Center (V4.2.0 or later), GV-Edge Recording Manager Windows Version (V2.3.0 clater), GV-ASManager (coming soon)		
Smart Device Access		GV-Eye for iOS and Android (V3.0.0 or later)		

## Note:

- 1. The default sub stream for the following models is over 720P; to show the max. 64 channels from these models, you need to lower the sub stream resolution: GV-BX2802, GV-BX4802, GV-BX12201, GV-QFER12700, GV-FER12700, UA-R560F2, UA-R580F2, UA-R500F2, and UA-R800F2.
- 2. Fisheye dewarping is only supported by GV-FER5702.
- 3. Camera connection is not supported by GV-TMEB5800.
- 4. GV-SNVR6403 only supports the following models for recording by motion and audio function:
  - GV-ABL / TBL series, GV-ADR / TDR series, GV-AVD / TVD series, GV-BLFC5800, GV-EBD Series, GV-EBFC5800, GV-PTZ5810-IR, GV-TFD Series
  - GV-SD4825-IR / 4834-IR
  - GV-PDR8800 / PBL8800
  - GV-BX2802 / 4802
  - GV-QFER12700
  - UA-IP Cameras
- 5. Product design and specifications are subject to change without notice.

# **Compatible GV-AI Capable IP Cameras**

- GV-BLFC5800, EBD4813, EBFC5800, TBL4810, TDR4803, TFD4800, TVD4810: Firmware V1.04 or later
- GV-EBD8813, EBD8800, TBL8804, TBL8810, TDR8805, TVD8810: Firmware V1.05 or later
- GV-SD4825-IR, SD4834-IR: Firmware V1.02 or later
- GV-PTZ5810-IR: Firmware V1.01 or later

GV-SNVR6403



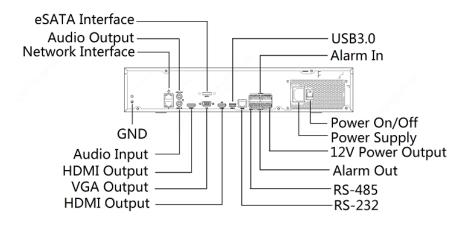
#### **Recommended Hard Disks**

GV-SNVR6403 supports 8 SATA HDD (3.5") with up to 80 TB of storage capacity. For system efficiency, it is recommended to use enterprise-level hard disk drives instead of desktop-level or green HDD.

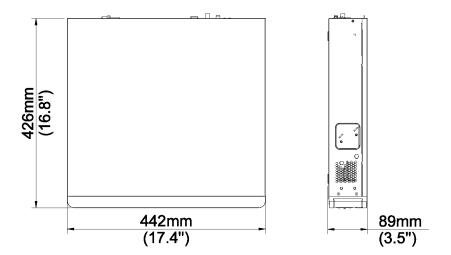
Note: GV-SNVR6403 does not support 2.5" SATA HDD.

#### **Overview**

#### **Back Panel**



### **Dimensions**



## **Packing List**

- 1. GV-SNVR6403
- 2. SATA cable x 8
- 3. USB mouse
- 4. Screw x 32 (for HDD)
- 5. AC power cord
- 6. Phoenix Terminal x 4
- 7. Rack Mounting Bracket x 2
- 8. Screw M4 (6 mm) x 4
- 9. Download Guide

## **Accessories**

**GV-POE Switch** 

GV-POE Switch is designed to provide power along with network connection for IP devices. It is available in various models with different numbers and types of ports.

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