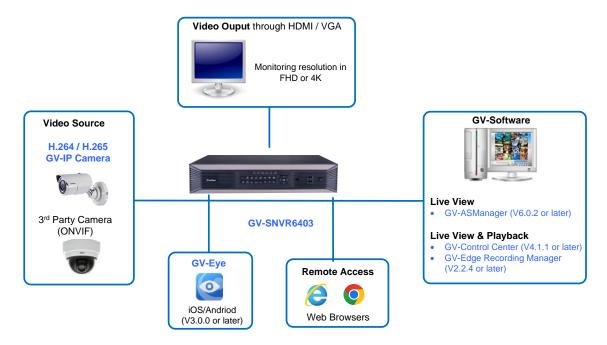


# **GV-SNVR6403**



### 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 160 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

- 1 -

February 9, 2023



# **Specifications**

No. of Drive Bay	Hardware					
No. of Drive Bay	System					
Power Source	OS		Embedded Linux			
Gigabit Ethernet   Video Output   HDMI output ports x 2, VGA output port x 1	No. of Drive Bay					
Video Output	Power Source			•		
Audio		Gigabit Ethernet	2 ports, RJ-45 10/100/1000 Mbps			
USB	Connectors	Video Output	HDMI output ports x 2, VGA output port x 1			
USB		Audio	RCA, Audio In/Out			
16 inputs, 4 outputs	Connectors	USB				
LED Indicators		RS-485	Not functional			
Operating Temperature		1/0	16 inputs, 4 outputs			
Humidity	LED Indicators		6 LEDs: RUN, NET, GUARD, HD, ALM, CLOUD (not functional)			
Dimensions (L x W x H)	Operating Temperature		-10°C ~ 55°C (14°F ~ 131°F)			
Net Weight   S.7 kg (12.57 lb)			0% ~ 90% RH (non-condensing)			
FCC, CE, BSMI, RoHS compliant   Video and Audio	Dimensions (L x	W x H)	·			
Video Compression         H. 264, H. 265           Video Compression         Dual streams from H. 264, H. 265           Video Output         4K (HDMI), 1080p (HDMI / VGA)           Audio Compression         G.711           Audio Support         Yes           Two-Way Audio         Yes           Disk Array         Francy Type         RAID 0, 1, 5, 6, 10           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)           Monitors         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 2720 / 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)           **What Indicates the Properties of the Properties	· · ·					
Video Compression         H.264, H.265           Video Output         Alk (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 / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 2024 / 60 Hz, 1280 x 2024 / 60 Hz, 1280 x 2024 / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 2024 / 60 Hz, 1280 x 2024 / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 2024 / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 2024 / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 202 / 60 Hz, 1920 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 202 fo Hz, 1290 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1200 x 1080p / 50 Hz, 1600 x 1200 / 60 Hz, 1280 x 1024 / 60 Hz, 1280 x 1024 x 768 / 60 Hz)           Decoding           Image: Second	Regulatory					
Video Stream         Dual streams from H.264, H265           Video Output         4K (HDMI), 1080p (HDMI / VGA)           Audio Compression         G.711           Audio Support         Yes           Two-Way Audio         Yes           Program of Streams of Stre						
Video Stream         Dual streams from H.264, H265           Video Output         4K (HDMI), 1080p (HDMI / VGA)           Audio Compression         G.711           Audio Support         Yes           Two-Way Audio         Yes           Program of Streams of Stre	Video Compression		H.264, H.265			
Video Output						
Audio Compression	Video Output					
Audio Support	•					
Two-Way Audio						
Disk Array           Array Type         RAID 0, 1, 5, 6, 10           Interface	* *					
Array Type	·					
Nonitors				RAID 0, 1, 5, 6, 10		
Monitors				<del></del>		
HDMI Output Hz, 1280 x 1024 / 60 Hz, 1280 x 720 / 60 Hz, 1024 x 768 / 60 Hz)  *HDMI audio output is not supported    Page		VGA Output	Hz, 1280 x 720 / 60 Hz, 1024 x 768 / 60 Hz)			
Per Recording    Page	Monitors	HDMI Output	Hz, 1280 x 1024 / 60 Hz, 1280 x 720 / 60 Hz, 1024 x 768 / 60 Hz)			
Frame Rate  Main  Main			, upivii audio (	output is not supported		
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	Frame Rate			8 MP: up to 30 fps/CH, 120 fps in total (4 CH max.) 5 MP: up to 30 fps/CH, 180 fps in total (6 CH max.) 4 MP: up to 30 fps/CH, 240 fps in total (8 CH max.) 4 MP: 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.)  *When connected to more than one monitor, live view images for multiple windows will automatically be converted to sub streams. 720P: up to 30 fps/CH, 1080 fps in total (36 CH max.) *Note 1		
OperationRecording BandwidthInput OutputMax. 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	Playback		Max 16-ch pla			
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 0 ~ 60 sec. / Default 10 sec.  Post Recording 5 ~ 600 sec. / Default 60 sec.  Instant Playback 5 minutes and 30 seconds			THAN 10 CH PIC			
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		Input	Max 384 Mhr			
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						
Post Recording 5 ~ 600 sec. / Default 60 sec. Instant Playback 5 minutes and 30 seconds	Recording Mode		· · · · · · · · · · · · · · · · · · ·			
Post Recording 5 ~ 600 sec. / Default 60 sec. Instant Playback 5 minutes and 30 seconds	Pre Recording		0 ~ 60 sec. / Default 10 sec.			
Instant Playback 5 minutes and 30 seconds	Post Recording		5 ~ 600 sec. / Default 60 sec.			
			5 minutes and 30 seconds			
			USB flash drive of FAT32 or NTFS format			

GV-SNVR6403

February 9, 2023



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 Analytics		Defocus Detection, Scene Change Detection, Object Removed, Object Left Behind		
Al Integrated Fu	nction			
Al 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 Compatible GV-AI Capable IP Cameras below.		
Management				
Language		Czech, English, French, German, Hungarian, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Traditional Chinese		
Firmware upgrade		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 Monitor	ing and Recovery			
Power Restoration		Automatic restart after power outage		
Remote Monito	ring			
Multi-Window		1/4/6/8/9/10/13/16/25/36/64		
Monitoring Env	ironment	IE browser, non-IE bowsers (Chrome, Edge Firefox, Safari), Mobile app		
Access from We	eb Browsers	Live View, Image Snapshot, Playback, Digital PTZ, System Configurations		
Applications				
SOFTWARE SUPPORTED		GV-Control Center (V4.1.1 or later), GV-Edge Recording Manager Windows Version (V2.2.4 clater), GV-ASManager (coming soon)		
	ccess	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-B580F3, 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. The maximum remote connection is subject to the total output bandwidth of GV-SNVR6403. To access the output bandwidth data, see the technical notice.
- 6. It is recommended to use the supported HDDs to ensure the compatibility. See Appendix D. in the User's Manual.\*
- 7. It is suggested to use HDDs with high capacity in low-temperature / dust-free / low-humidity environments to ensure the smooth operation.\*
- 8. Product design and specifications are subject to change without notice.

GV-SNVR6403



## **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

#### **Recommended Hard Disks**

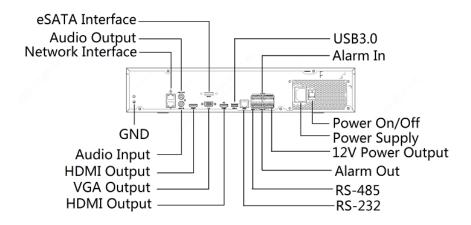
GV-SNVR6403 supports 8 SATA HDD (3.5") with up to 160 TB of storage capacity. For system efficiency, it is recommended to use enterprise-level hard disk drives instead of desktop-level or green HDD.

#### Note:

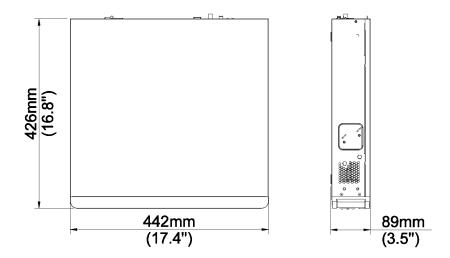
- 1. GV-SNVR6403 does not support 2.5" SATA HDD.
- 2. It is recommended to use the supported HDDs to ensure the compatibility. See Appendix D. in the User's Manual.
- 3. It is suggested to use HDDs with high capacity in low-temperature / dust-free / low-humidity environments to ensure the smooth operation.

### **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

- 4 -



## **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.

- 5 -