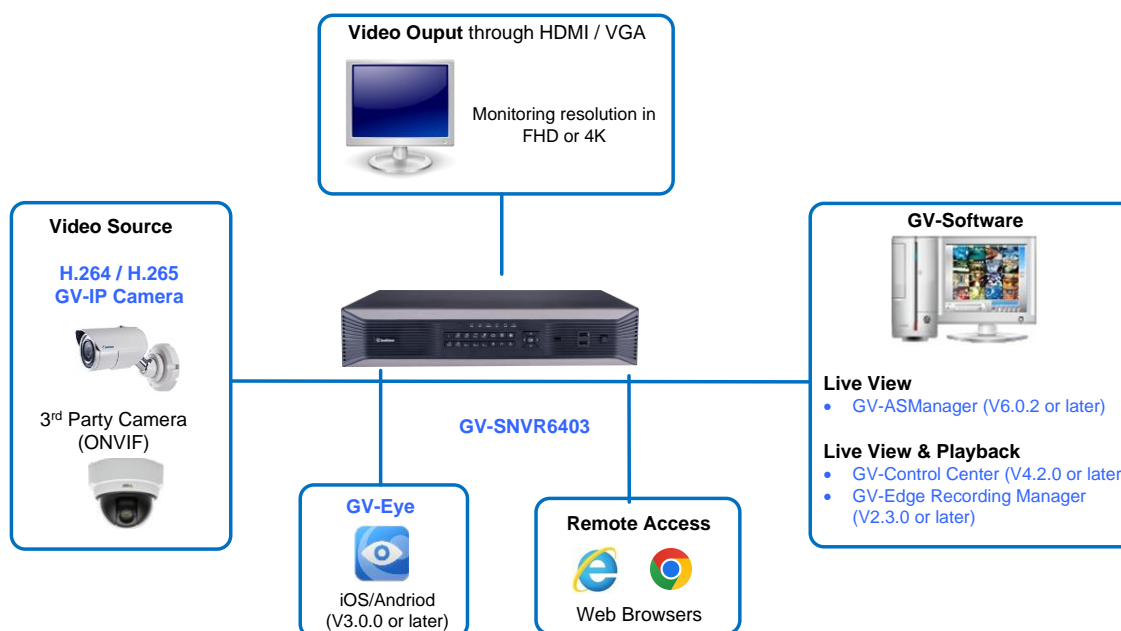# GV-SNVR6403

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

Hardware

System		
OS		Embedded Linux
No. of Drive Bay		8 (3.5" HDD), up to 80 TB
Power Source		Input: AC 100 ~ 240V, 50 ~ 60 Hz
Connectors	Gigabit Ethernet	2 ports, RJ-45 10/100/1000 Mbps
	Video Output	HDMI output ports x 2, VGA output port x 1
	Audio	RCA, Audio In/Out
	USB	Front: USB 2.0 x 2 ports, Rear: USB 3.0 x 1 port
	RS-485	Not functional
	I/O	16 inputs, 4 outputs
LED Indicators		6 LEDs: RUN, NET, GUARD, HD, ALM, CLOUD (not functional)
Operating Temperature		-10°C ~ 55°C (14°F ~ 131°F)
Humidity		0% ~ 90% RH (non-condensing)
Dimensions (L x W x H)		442 mm × 426 mm × 89 mm (17.4" × 16.8"× 3.5")
Net Weight		5.7 kg (12.57 lb)
Regulatory		FCC, CE, BSMI, RoHS compliant

Video and Audio	
Video Compression	H.264, H.265
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

Disk Array	
Array Type	RAID 0, 1, 5, 6, 10

Interface		
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 720 / 60 Hz, 1024 x 768 / 60 Hz)
	HDMI Output	2 ports (3840 x 2160 /30 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, 1024 x 768 / 60 Hz) *HDMI audio output is not supported

Decoding		
Frame Rate	Main	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.) 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.
	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	
Playback	Max. 16-ch playback

Operation		
Recording Bandwidth	Input	Max. 384 Mbps
	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
Backup Type		USB flash drive of FAT32 or NTFS format

Playback Function		Fast forward / backward (2x, 4x, 8x, 16x) Slow forward (1/2x, 1/4x, 1/8x,)
Local Viewing	Corridor Mode	3 / 4 / 5 / 7 / 9 / 10 / 12 / 16 / 32
	Multi-Window	4 / 6 / 8 / 9 / 16 / 25 / 36 / 64
Video Analytics		Defocus Detection, Scene Change Detection, Object Removed, Object Left Behind
AI 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 *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 Monitoring and Recovery		
Power Restoration		Automatic restart after power outage
Remote Monitoring		
Multi-Window		1 / 4 / 6 / 8 / 9 / 10 / 13 / 16 / 25 / 36 / 64
Monitoring Environment		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 or later), 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-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. 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
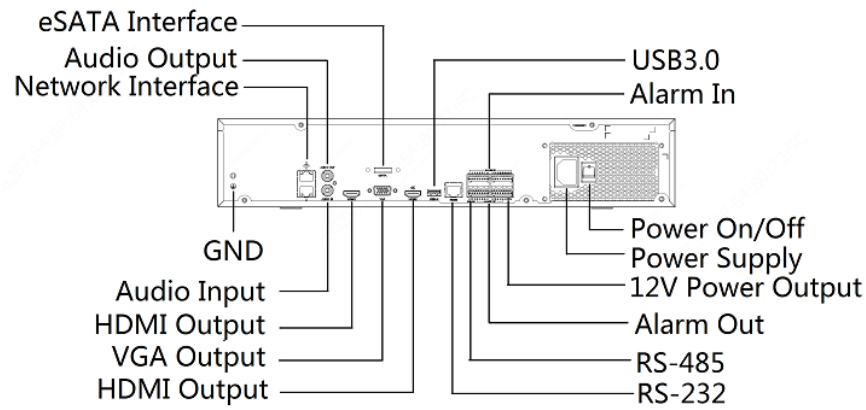- **GV-PTZ5810-IR**: Firmware V1.01 or later

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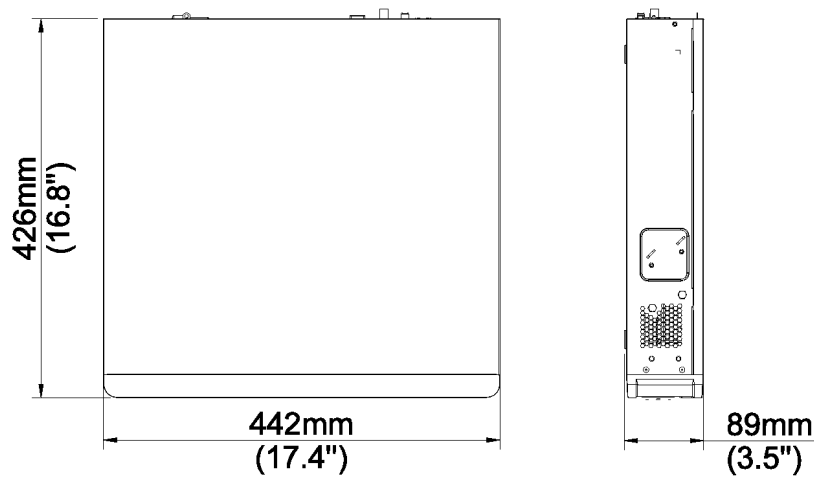
Note: GV-SNVR6403 does not support 2.5" SATA HDD.

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.