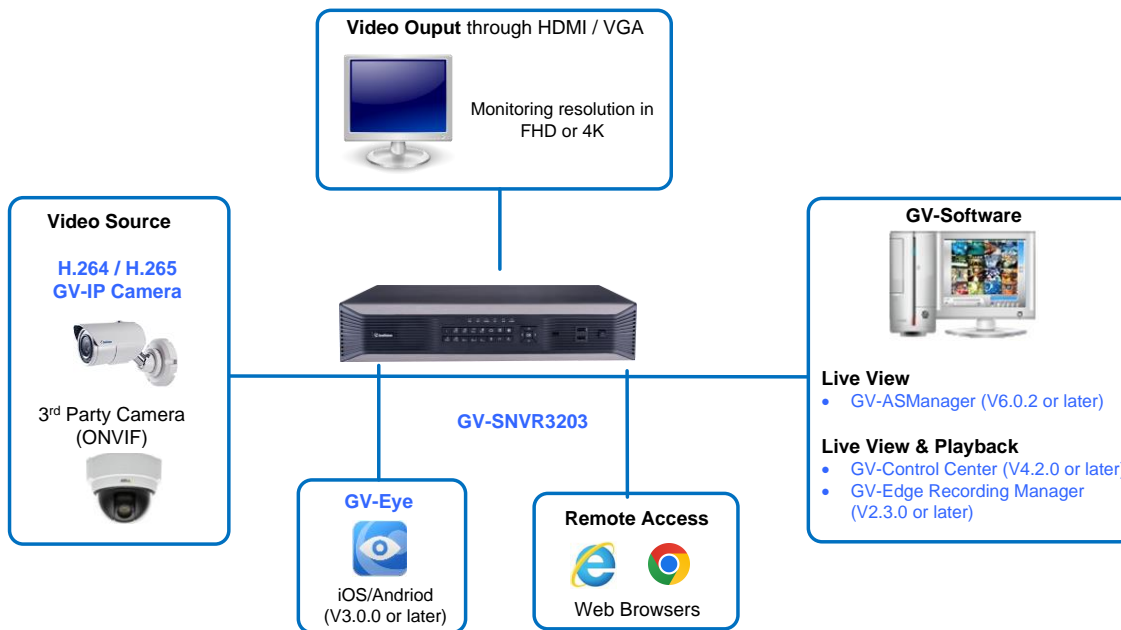# GV-SNVR3203

Introduction

GV-SNVR3203 is a standalone network video recorder with Linux embedded that records video files directly to the internal hard drive and supports up to 32 IP camera channels for video surveillance. Thanks to its up to 4K resolution video output, GV-SNVR3203 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.

Video Ouput through HDMI / VGA

Monitoring resolution in FHD or 4K

Video Source

H.264 / H.265 GV-IP Camera

3rd Party Camera (ONVIF)

GV-SNVR3203

GV-Eye

iOS/Andriod (V3.0.0 or later)

Remote Access

Web Browsers

GV-Software

Live View
- GV-ASManager (V6.0.2 or later)

Live View & Playback
- GV-Control Center (V4.2.0 or later)
- GV-Edge Recording Manager (V2.3.0 or later)

Features

- 32-channel video recording
- Up to 4000 x 3000 resolution for each channel
- Dual stream support
- Triple display from 3 video outputs: One 4K (HDMI), two 1080p (HDMI / VGA)
- 4 SATA HDD drawers (3.5") for up to 40 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 notification for recording error
- Recording export
- Remote live view through Web browser
- Smart device access (iOS and Android)
- Support for 12 languages

Specifications

Hardware

System		
OS		Embedded Linux
No. of Drive Bay		4 (3.5" HDD), up to 40 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)
Local Viewing	Corridor Mode	3 / 4 / 5 / 7 / 9 / 10 / 12 / 16 / 32
	Multi-Window	4 / 6 / 8 / 9 / 16 / 25 / 36
Audio Compression		G.711
Audio Support		Yes
Two-Way Audio		Yes
Playback		Max. 16-ch playback

Disk Array	
Array Type	RAID 1, 5

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

Operation		
Recording Bandwidth	Input	Max. 384 Mbps
	Output	Max. 384 Mbps
Live View & Playback Decoding Capability		Up to 12 MP at 30 fps x 2-ch, Up to 8 MP at 30 fps x 4-ch, Up to 5 MP at 30 fps x 6-ch, Up to 4 MP at 30 fps x 8-ch, Up to 4 MP at 25 fps x 9-ch, Up to 1080P at 30 fps x 16-ch, Up to 960P at 25 fps x 32-ch *When connected to more than one monitor, live view images for multiple windows will automatically be converted to sub streams.
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,)
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 Viewing	
Multi-Window	1 / 4 / 6 / 8 / 9 / 10 / 13 / 16 / 25 / 36
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
Application	
Software Supported	GV-Control Center (V4.2.0 or later), GV-Edge Recording Manager Windows Version (V2.3.0 or later), GV-ASManager (V.6.0.2.0 or later)
Smart Device Access	GV-Eye for iOS and Android (V3.0.0 or later)

Note:
1. Fisheye dewarping is only supported by GV-FER5702.
2. Camera connection is not supported by GV-TMEB5800.
3. Specifications are subject to change without notice.

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.

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
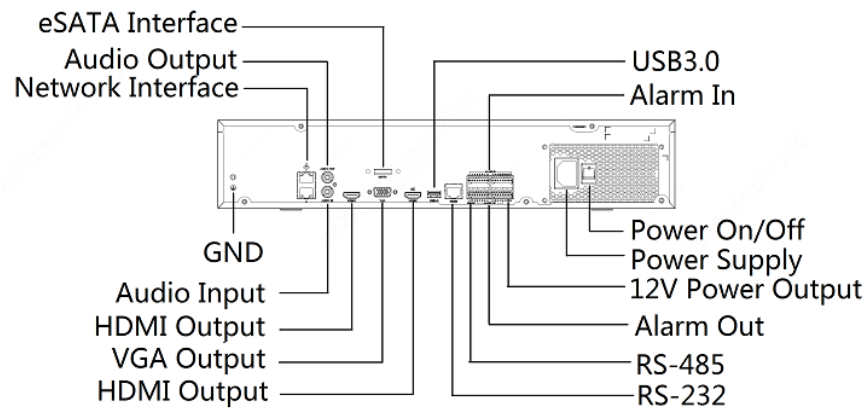- **GV-PTZ5810-IR**: Firmware V1.01 or later

Recommended Hard Disks

GV-SNVR3203 supports 4 SATA HDD (3.5") with up to 40 TB of storage capacity. For system efficiency, it is recommended to use enterprise-level hard disk drives instead of desktop-level or green HDD.
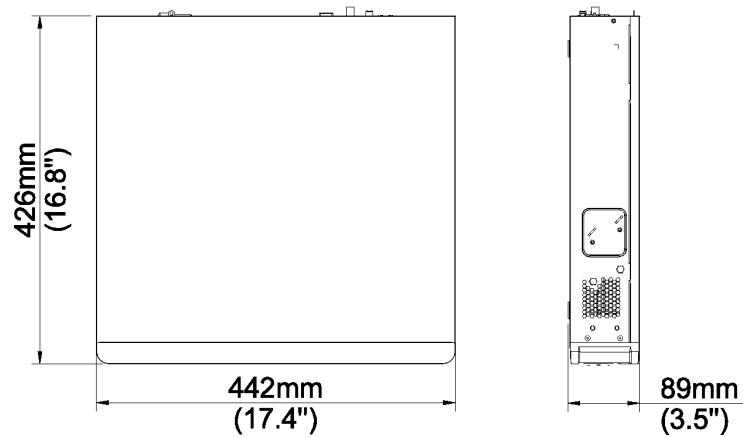
Note: GV-SNVR3203 does not support 2.5" SATA HDD.

Overview

Back Panel

Dimensions

Packing List

1. GV-SNVR3203
2. SATA cable x 4
3. USB mouse
4. Screw x 16 (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