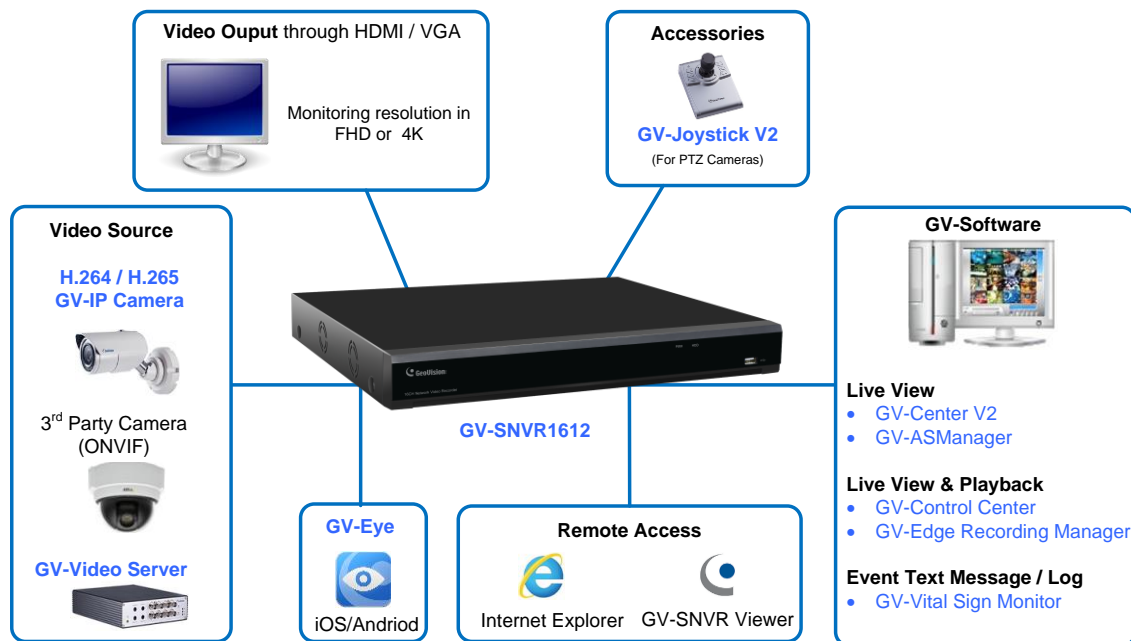


# GV-SNVR1612



## Introduction

GV-SNVR1612 is a standalone network video recorder with Linux embedded that records video files directly to the internal hard drive and supports up to 16 IP camera channels for video surveillance. GV-SNVR1612 has built in 16 PoE (IEEE 802.3af) ports that simultaneously provide network and power to IP cameras. Thanks to its up to 4K resolution video output, GV-SNVR1612 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

- 16-channel video recording
- Up to 3840 x 2160 resolution for each channel
- Dual stream support
- 16-Port PoE (IEEE 802.3af) for camera connection
- 4K HDMI / 1080p VGA video output
- 2 SATA HDD drawers (3.5") for up to 20 TB storage
- Two-way audio
- 8 sensor inputs and 1 alarm output
- 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 and password retrieval
- Recording export
- Remote live view through Web browser
- Support for GV-Video Server through RTSP protocol
- PTZ control using GV-Joystick or on-screen panel
- Smart device access (iOS and Android)
- Support for 14 languages

## Specifications

### Hardware

System		
OS	Embedded Linux	
No. of Drive Bay	2 (3.5" HDD), up to 20 TB	
Power Source	Input: AC 100 ~ 240V, 50 ~ 60 Hz Output: DC 48V, 3.75A, Max. 180W PoE: Max. 120W	
Connectors	Megabit Ethernet	1 port for WAN, RJ-45 10/100/1000 Mbps, 16 ports for LAN, RJ-45 10/100 Mbps, PoE (IEEE 802.3af)
	Video Output	HDMI / VGA
	Audio	RCA
	USB	Front: USB 2.0 x 1 Port, Rear: USB 2.0 x 1 Port
	I/O	8 Inputs, 1 Output
LED Indicator	NVR	2 LEDs: Power, HDD Fail
	PoE	N/A
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	
Humidity	0% ~ 90% RH (non-condensing)	
Dimensions (L x W x H)	380 x 340 x 50 mm (15 x 13.4 x 2")	
Net Weight	2.48 kg (5.47 lb)	
Regulatory	FCC, CE, PSE, LVD, 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)	
Display Divisions	1 / 4 / 6 / 8 / 9 / 16	
Audio Compression	G.711	
Audio Support	Yes	
Two-Way Audio	Yes	
Decoding		
Frame Rate	8 MP for 1 division, up to 20 fps/CH 2 MP for 4 divisions, up to 30 fps/CH, 120 fps in total 720P for 8 divisions, up to 30 fps/CH, 240 fps in total VGA for 16 divisions, up to 30 fps/CH, 480 fps in total	
Playback	Max. 16-ch playback	
Supported Video Resolution	Main Stream	Sub Stream
Firmware Version	V1.00	
4:3	2592 x 1944	1280 x 1200, 1024 x 768, 960 x 720, 640 x 480, 320 x 240
	2560 x 1920	
	2048 x 1536	
	1600 x 1200	
	1280 x 960	
	640 x 480	
16 : 9 (Default)	3840 x 2160	1280 x 720, 640 x 360, 448 x 256
	2592 x 1520	
	2560 x 1440	
	2304 x 1296	
	1920 x 1080	
	1280 x 720	
5:4	1280 x 1024	1280 x 1024, 640 x 512, 320 x 256
	640 x 512	
20:19 (Fisheye Camera Only) See Note 2	2896 x 2768	960 x 912, 640 x 608
	2176 x 2048	
	2048 x 1944	
	1792 x 1696	
	1440 x 1376	

Operation		
Recording Bandwidth	Max. 96 Mbps / 6 Mbps for each channel (main stream + sub stream)	
Recording Mode	Round the clock, Motion Detection, Schedule Recording, Alarm-triggered Recording	
Pre Recording	1 ~ 5 sec	
Post Recording	30 sec	
Instant Playback	3 min	
Backup Type	USB flash drive of FAT32 format	
Management		
Language	Czech, English, Finnish, French, German, Hungarian, Italian, Japanese, Portuguese, Russian, Slovakian, Slovenian, Spanish, Traditional Chinese	
Firmware upgrade	Upgrade through OSD, Web or GV-IP Device Utility	
Network		
Network Type	LAN, WAN, Internet	
Protocol	DHCP, DynDNS, HTTP, NTP, ONVIF, RTSP, TCP, UDP	
System Monitoring and Recovery		
Power Restoration	Automatic restart after power outage	
Monitoring	Software Watchdog	
Remote Monitoring		
Live View	Max. 34 channels connection	
Playback	PC-Based Software	Max. 16 channels connection
	Mobile App	Max. 1 channel connection *Up to 1 PC-based software or Mobile App can be connected to GV-SNVR for remote playback at a time.
Monitoring Environment	IE browser, SNVR Viewer for non-IE browsers, Mobile app	
Smart Device Access	GV-Eye for iOS and Android	

**Note:**

1. GV-SNVR1612 only supports PoE (IEEE 802.3af). If your camera requires power supply above 10W, be sure to power your camera with the compatible PoE switch or its power adapter.
2. Fisheye dewarping is currently not supported by GV-SNVR1612.
3. For backup efficiency, it is recommended to use external hard drive(s) to back up your recordings.
4. Product design and specifications are subject to change without notice.

## Accessories

GV-Joystick V2	GV-Joystick V2 facilitates PTZ camera controls. It can be plugged into GV-SNVR for independent use to empower the operation of PTZ cameras.
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.

## Requirements

### Supported GV-IP Cameras

- GV-Target Series IP Camera (Firmware V1.0 or later)
- GV-SD220/220-S (Firmware V1.02 or later)
- GV-UNFE2503 / UNP2500 (Firmware V2.11 or later)
- All other GV-IP Cameras EXCEPT for the models below:
  - GV-BX110
  - GV-BL110
  - GV-FE520 / 521
  - GV-FER12203 / 12700
  - GV-MFD110
  - GV-PT110
  - GV-PTZ010D
  - GV-SD010
  - GV-TMEB5800

**Note:**

1. Main Stream and Sub Stream resolutions for compatible IP cameras must both fulfill the specifications listed under Specifications.
2. GV-SNVR only supports recording frame rates of up to 30 fps.
3. GV-SNVR1612 only supports recording bandwidths of up to 96 Mbps, with each channel not exceeding 6 Mbps (main stream + sub stream).
4. Audio is not supported for GV-BX2802 / BX4802 / PBL8800 / PDR8800.

**Supported GeoVision Application**

- GV-Center V2 (V18.2 + patch or later)
- GV-Vital Sign Monitor (V16.11 or later)
- GV-Eye (V2.5.1 or later)
- GV-Cloud Center (V1.0 or later)

**Recommended Hard Disks**

GV-SNVR1612 supports 2 SATA HDD (3.5") with up to 20 TB of storage capacity. For system efficiency, it is recommended to use enterprise-level hard disk drives instead of desktop-level or green HDD. For tested hard disk drives, see Appendix in GV-SNVR User's Manual.

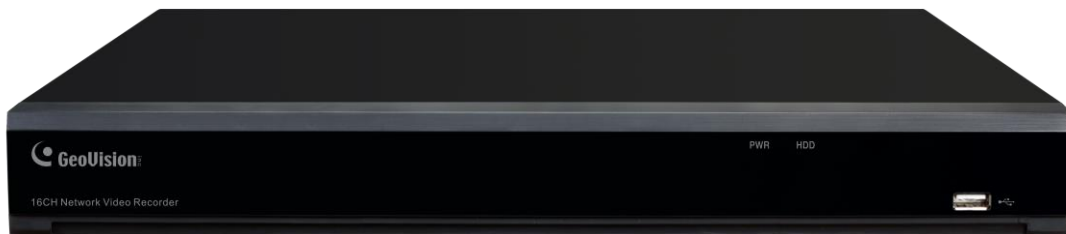
**Note:** GV-SNVR does not support 2.5" SATA HDD.

**Supported Web Browsers**

- Internet Explorer 8 or later
- Google Chrome
- Mozilla Firefox
- Safari
- Microsoft Edge

**Overview**

**Front Panel**



**Back Panel**



**Packing List**

1. GV-SNVR1612
2. Power adapter
3. AC power cord
4. SATA cable x 2
5. HDD power cable x 2
6. Screw x 8 (for HDD)
7. USB mouse
8. Foam foot
9. Download Guide