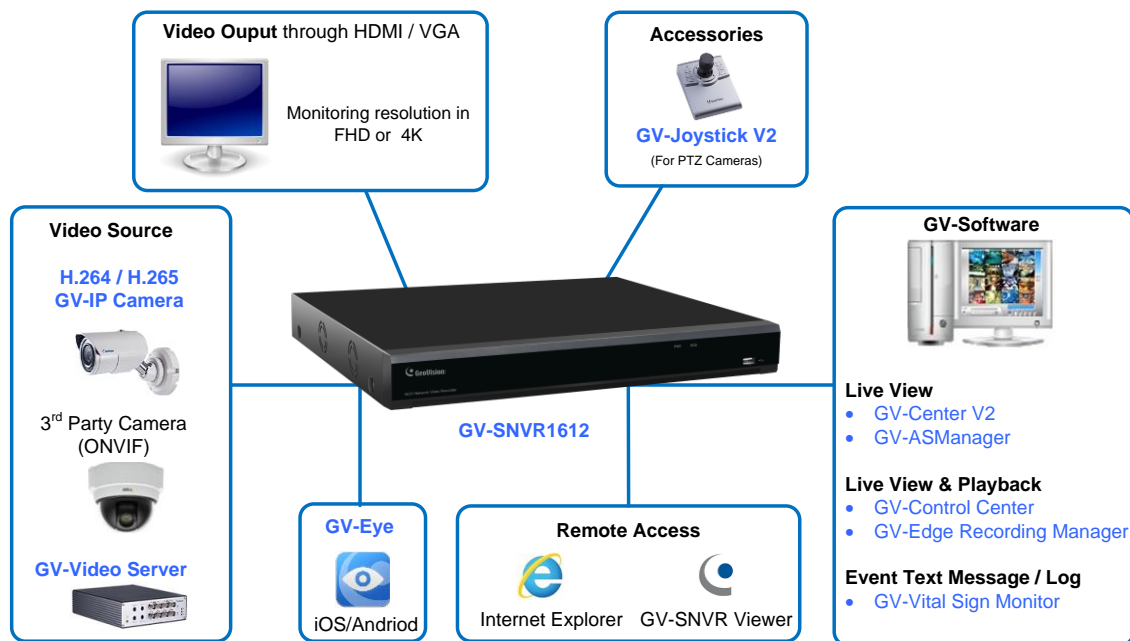


## GV-SNVR1612



### Introduction

GV-SNVR1612 is an H.264/H.265 Linux-embedded Standalone Network Video Recorder which records video files directly to the internal hard drive, supporting up to 16 channels of IP cameras for network surveillance. GV-SNVR1612 has 16-port built-in PoE (IEEE 802.3af), functioning to carry network and power to IP cameras. Featuring with up to 4K resolution video output, GV-SNVR1612 eliminates the need of a separate PC to view and play back video from the unit. Its USB ports allow you to connect a USB flash drive to import or export system settings, update firmware, save snapshot files and back up videos in AVI format.



### 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

\*The resolutions of Main Stream and Sub Stream both must meet the requirements noted under Specifications.

## 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 Division		1 / 4 / 6 / 8 / 9 / 16
Audio Compression		G.711
Audio Support		Yes
Two-Way Audio		Yes
Supported Video Resolution		Main 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	640 x 360	1280 x 1024, 640 x 512, 320 x 256
	1280 x 1024	
20:19 (Fisheye Camera Only) See Note 2	640 x 512	960 x 912, 640 x 608
	2896 x 2768	
	2176 x 2048	
	2048 x 1944	
	1792 x 1696	
		1440 x 1376

Operation	
Recording Bandwidth	Max. 96 Mbps for 16 channels
Recording Mode	Round the clock / Motion Detection / Alarm / Schedule 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 Viewing	
Live View	Max. 34 channels connection
Monitoring Environment	IE browser, SNVR Viewer for non-IE browsers, Mobile app
Smart Device Access	GV-Eye for iOS and Android
Access from IE browser	Live View, Image Snapshot, Picture in Picture, Picture and Picture, Digital PTZ

**Note:**

1. GV-SNVR1612 only supports PoE (IEEE 802.3af) for camera connection. 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

**Note:**

1. For supported IP cameras, the resolutions of Main Stream and Sub Stream both must meet the requirements noted 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.

### 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