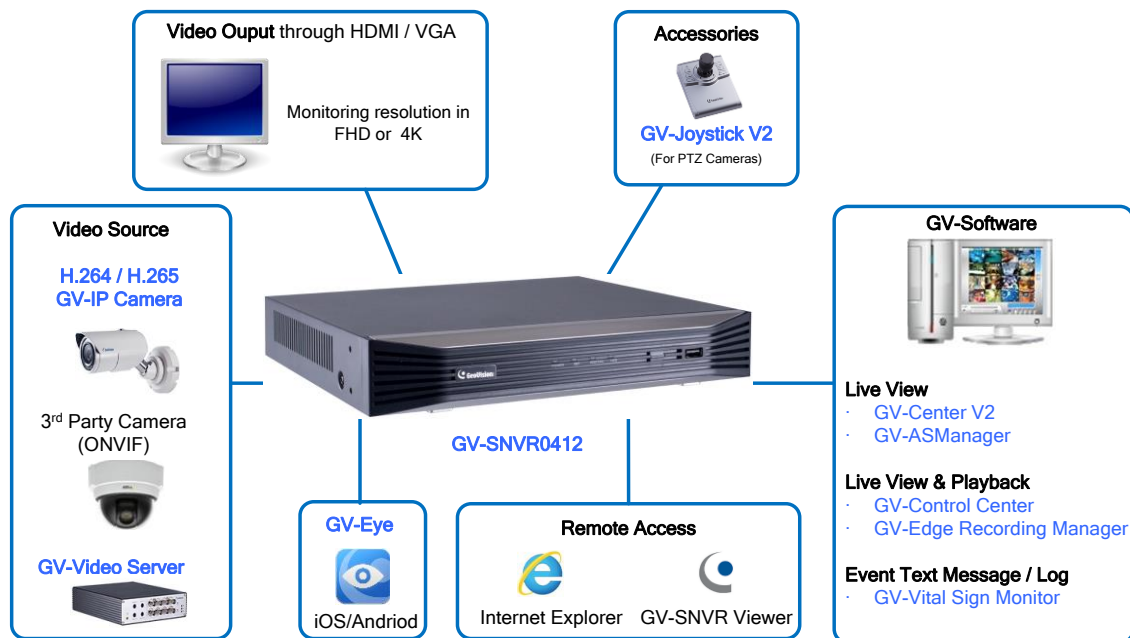


# GV-SNVR0412



## Introduction

GV-SNVR0412 is a standalone network video recorder with Linux embedded that records video files directly to the internal hard drive and supports up to 4 IP camera channels for video surveillance. GV-SNVR0412 has built in 4 PoE+ (IEEE 802.3at) ports that simultaneously provide network and power to IP cameras. Thanks to its up to 4K resolution video output, GV-SNVR0412 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

- 4-channel video recording
- Up to 3840 x 2160 resolution for each channel
- Dual stream support
- 4-Port PoE+ (IEEE 802.3at) for camera connection
- 4K (HDMI) / 1080P (HDMI/VGA) video output
- 2-way Audio
- 1 SATA HDD drawer (3.5") for up to 10 TB storage
- Automatic search and setup of IP devices
- Support for third-party IP devices through ONVIF and RTSP protocol
- Continuous, motion, scheduled and alarm-triggered recording
- Timeline playback
- Multi-channel playback
- Display of HDD status and system 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
- Fisheye dewarping (up to 2176 x 2048 for 1 channel at once)
- 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

## Overview

### Front Panel



### Back Panel



## Specifications

### Hardware

System		
OS	Embedded Linux	
No. of Drive Bay	1 (3.5" HDD) up to 10 TB	
Power Source	Input: AC 100 ~ 240 V, 50 ~ 60 Hz Output: DC 48 V, 1.35 A, Max. 65 W PoE: Max. 54 W	
Connectors	Megabit Ethernet	1 port for WAN, RJ-45 10/100 Mbps, 4 ports for LAN, RJ-45 10/100 Mbps, PoE+ (IEEE 802.3at)
	Video Output	4K (HDMI), 1080p (HDMI / VGA)
	Audio	1-Ch, RCA (2.0 Vp-p, 1 k Ω)
	USB 2.0	Front: USB 2.0 Port x 1; Rear: USB 2.0 Port x 2
LED Indicator	I/O	4 Inputs, 1 Output
	NVR	4 LEDs: Power, Network, HDD Fail, HDD Activity
	PoE	4 LEDs for each port
Operating Temperature	0 °C ~ 50 °C (32 °F ~ 122 °F)	
Humidity	0% ~ 90% RH (non-condensing)	
Dimensions (L x W x H)	260 x 240 x 44 mm (10.24 x 9.45 x 1.73")	
Net Weight	1.12 kg (2.47 lb)	
Certification	FCC, CE, BSMI, LVD, RoHS, UL compliant	

### Software

Video and Audio	
Video Compression	H.264, H.265
Video Stream	Dual streams from H.264, H265
Video Output	4K, 1080p (HDMI / VGA)
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
Playback	Max. 4-ch playback

Supported Video Resolution	Main Stream	Sub Stream
4:3	2592 x 1944	1024 x 768, 960 x 720, 640 x 480, 320 x 240
	2560 x 2048	
	2560 x 1920	
	2048 x 1536	
	2048 x 1520	
	1600 x 1200	
	1280 x 960	
	640 x 480	640 x 480, 320 x 240
16 : 9 (Default)	320 x 240	320 x 240
	3840 x 2160	1280 x 720, 640 x 360, 448 x 252
	2592 x 1520	
	2560 x 1440	
	2304 x 1296	
	1920 x 1080	
	1280 x 720	
	640 x 360	640 x 360, 448 x 252
448 x 252	448 x 252	
5:4	1280 x 1024	1280 x 1024, 640 x 512, 320 x 256
	640 x 512	640 x 512, 320 x 256
	320 x 256	320 x 256
20 : 19 (Fisheye Camera Only)	2176 x 2048	640 x 608
	2048 x 1944	
	1792 x 1696	
	1440 x 1376	
	1280 x 1200	
<b>Operation</b>		
Recording Bandwidth	Max. 24 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	
Display Divisions	1 / 4	
<b>Management</b>		
Language	Czech, English, Finnish, French, German, Hungarian, Italian, Japanese, Portuguese, Russian, Slovakian, Slovenian, Spanish, Traditional Chinese	
Firmware upgrade	Upgrade through OSD or GV-IP Device Utility	
<b>Network</b>		
Network Type	LAN, WAN, Internet	
Protocol	DHCP, DynDNS, HTTP, NTP, ONVIF, RTSP, TCP, UDP	
<b>System Monitoring and Recovery</b>		
Power Restoration	Automatic restart after power outage	
Monitoring	Software Watchdog	
<b>Remote Monitoring</b>		
Live View	Max. 10 channels connection	
Playback	PC-Based Software	Max. 8 channels connection
	Mobile App	Max. 2 channels connection
Monitoring Environment	IE browser, SNVR Viewer for non-IE browsers, Mobile app	
Smart Device Access	GV-Eye for iOS and Android	

**Note:**

1. GV-SNVR0412 only supports PoE+ (IEEE 802.3at). If your camera requires power supply above 30W, be sure to power your camera with the compatible PoE switch or its power adapter.
2. For backup efficiency, it is recommended to use external hard drive(s) to back up your recordings.
3. Product design and specifications are subject to change without notice.

## 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-BL110
  - GV-BX110
  - 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-SNVR0412 only supports recording bandwidths of up to 24 Mbps, with each channel not exceeding 6 Mbps (main stream + sub stream).
4. GV-SNVR0412 also supports EVS-ABD1300 / ABL1300 / ADR1300 and UVS-ABD1300 / ABL1300 / ADR1300.
5. Audio is not supported for GV-BX2802 / BX4802 / PBL8800 / PDR8800.

### Supported GeoVision Application

- GV-Edge Recording Manager (Windows Version V1.4.0.3 or later)
- GV-Control Center (V3.6.0 or later)
- GV-Center V2 (V17.1 or later)
- GV-Vital Sign Monitor (V17.1 or later)
- GV-Eye (for iOS / Android V2.7.2 or later)
- GV-Cloud Center (V1.0 or later) + GV-Notify (for iOS / Android V1.3.0 or later)

### Recommended Hard Disks

GV-SNVR00412 supports 1 SATA HDD (3.5") for up to 10 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 [GV-SNVR HDD Compatibility Chart](#).

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

### Supported Web Browsers

- Internet Explorer 10 or later
- Google Chrome
- Mozilla Firefox
- Safari
- Microsoft Edge

## Packing List

1. GV-SNVR0412
2. AC power cord
3. AC/DC adapter (DC 48 V, 1.35 A, 65 W)
4. SATA cable
5. HDD power cable
6. Screw x 4 (for HDD)
7. Foam foot
8. USB mouse
9. Rack mount kit (2 L-shaped brackets + 4 screws)
10. Download Guide
11. Warranty card

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