

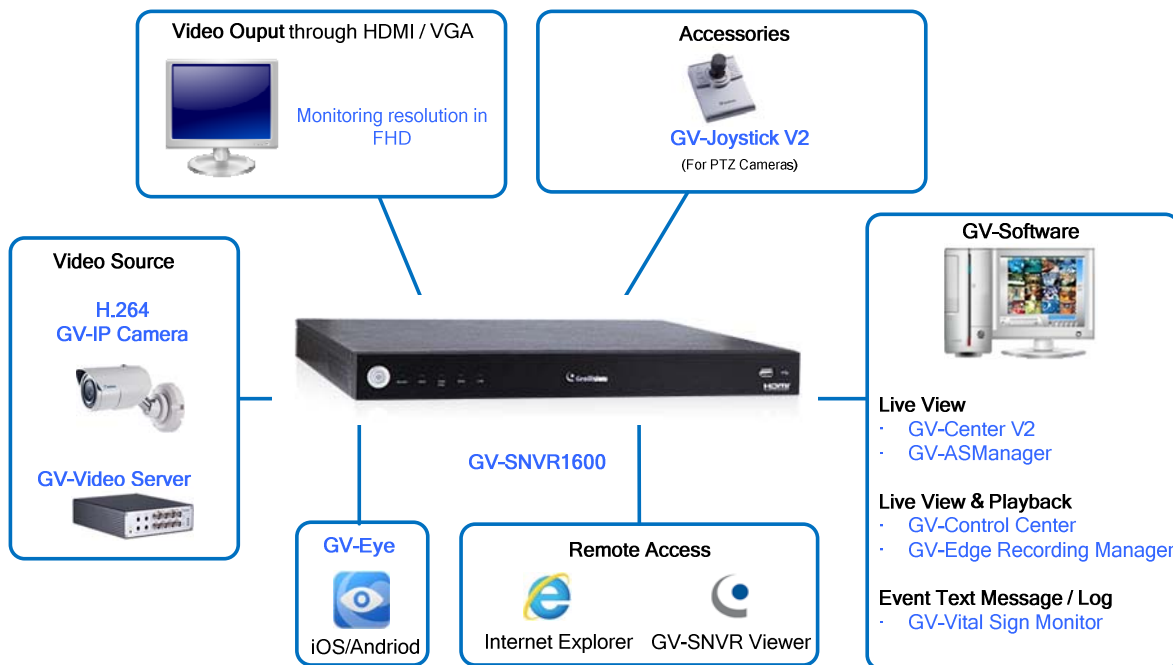
# GV-SNVR1600



## Introduction

The GV-SNVR1600 is a Linux-embedded Standalone Network Video Recorder which records video files directly to the internal hard drive, supporting up to 16 channels of GV-IP Cameras for network surveillance. With the feature of a Full HD HDMI video output, the GV-SNVR eliminates the need for a separate PC to view and play back video from the unit. Its five USB ports allow you to connect a USB flash drive to import or export system settings, update firmware, save snapshot files and back up video in AVI format.

Optionally, you can connect a GV-Joystick V2 to control PTZ cameras. Moreover, you can remotely access the live view through mobile devices or Web browsers with advanced video features.



## Features

- 16-Channel video recording
- Automatic search and set-up for IP cameras
- Up to 2560 x 1944 for the first channel
- Up to 1920 x 1080 resolution per channel \*
- Dual streams support
- Continuous, motion and scheduled recordings
- 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
- PTZ control using GV-Joystick V2 or on-screen panel
- 1080p HDMI video output
- 4 SATA HDD drawer (3.5") for up to 16 TB storage
- Smart device access (iOS and Android)
- Support for 9 languages

\*The resolutions of stream 1 and 2 both must meet the requirements noted under Specifications.

## Specifications

### Hardware

System		
OS	Embedded Linux	
No. of Drive Bay	4 (3.5" HDD)	
Power Source	Input: AC 100 ~ 230V, 50 ~ 60 Hz Output: Max. 100 W	
Connectors	Gigabit Ethernet	2 ports, RJ-45 <b>Note:</b> When 2 Ethernet ports are used together, one is LAN port and the other is WAN port.
	Video Output	HDMI and D-Sub
	Audio	2 stereo jacks for a speaker and a headphone
	USB 2.0	Front: 1 port, Rear: 4 ports
LED Indicator	5 LEDs: Power, LAN, WAN, HDD Status, HDD Error	
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F)	
Humidity	0% ~ 80% RH (non-condensing)	
Dimensions (L x W x H)	424.6 x 445 x 43.8 mm (16.72 x 17.52 x 1.72")	
Net Weight	4.1 kg (9.04 lb)	
Regulatory	FCC , CE , RCM , RoHS compliant	

### Software

Video and Audio			
Video Compression	H.264		
Video Stream	Dual streams from H.264		
Video Output	1080p (HDMI / VGA)		
Display Division	1 / 4 / 9 / 16		
Audio Compression	G.711		
Audio Support	Yes		
Two-Way Audio	N/A		
Supported Video Resolution	Main Stream	Sub Stream	
Firmware Version	V1.23		
4:3	CH1	2560 x 1920	640 x 480, 320 x 240
		2048 x 1536	
		2048 x 1520	
		1600 x 1200	
	CH2 ~ CH16	1280 x 960	320 x 240
		640 x 480	
		320 x 240	
		1600 x 1200	
16 : 9 (Default)	CH1	1280 x 960	640 x 480, 320 x 240
		640 x 480	
		320 x 240	
		2592 x 1520	
	CH2 ~ CH16	2560 x 1440	448 x 252
		2304 x 1296	
		1920 x 1080	
		1280 x 720	
CH1	640 x 360	640 x 360, 448 x 252	
	448 x 252		
	448 x 252		
	1920 x 1080		
CH2 ~ CH16	1280 x 720	448 x 252	
	640 x 360		
	640 x 360		
	448 x 252		

Supported Video Resolution		Main Stream	Sub Stream
5:4	CH1 ~ CH16	1280 x 1024	640 x 512, 320 x 256
		640 x 512	
		320 x 256	320 x 256
20 : 19 (Fisheye Camera Only)	CH1	2048 x 1944	640 x 608
		1792 x 1696	
		1440 x 1376	
		1280 x 1200	

#### Operation

Recording Bandwidth	Max. 100 Mbps for 16 channels
Recording Mode	Round the clock / Motion Detection / Schedule Recording
Pre Recording	1 ~ 10 sec.
Post Recording	30 sec.
Instant Playback	3 min.
Backup Type	USB flash drive of FAT32 format

**Note:** For backup efficiency, it is suggested to use the external hard drive to back up recordings.

#### Management

Language	English / Traditional Chinese / Spanish / Russian / Portuguese / French / German / Italian / Japanese
Firmware upgrade	Upgrade through OSD or GV-IP Device Utility

#### Network

Network Type	LAN, WAN, Internet
Protocol	DHCP, DynDNS, HTTP, NTP, 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, Chrome, Firefox and mobile devices
Smart Device Access	GV-Eye for iOS and Android
Access from Web Browser	Live View, Image Snapshot, Picture in Picture, Picture and Picture, Digital PTZ

**Note:** Product design and specifications are subject to change without notice.

### Accessories

GV-Joystick V2	The GV-Joystick V2 facilitates the PTZ camera control. It can be plugged into the GV-SNVR for independent use to empower the operation of PTZ cameras.
GV-POE Switch	The GV-POE Switch is designed to provide power along with network connection for IP devices. The GV-POE Switch is available in various models with different numbers and types of ports.
Slide Rail Kit	The Slide Rail Kit is used to mount a rail for the GV-SNVR1600 in a 19" cabinet.

## Requirements

### Supported GV-IP Cameras

- GV-Target Series IP Cameras (Firmware V1.0 or later)
- GV-SD220/220-S (Firmware V1.02 or later)
- GV-UNFE2503 / UNP2500 (Firmware V2.11 or alter)
- All other GV-IP Cameras EXCEPT for the models below:
  - GV-ABD1300
  - GV-ABL Series / ADR Series / AVD Series / EBD Series / TBL Series / TDR Series / TVD Series
  - GV-BX110 / 12201
  - GV-BL110
  - GV-EBL2101 / 2111 / 3101
  - GV-FD8700-FR
  - GV-FER12203 / 12700
  - GV-Fisheye Cameras (conditionally supported) \*
  - GV-MFD110
  - GV-PT110
  - GV-PTZ010D
  - GV-SD010 / 200 / 200-S / 2301 / 2322-IR / 2411 / 2722-IR / 3732-IR
  - GV-VD8700
  - GV-VR360

#### Note:

1. The GV-SNVR supports the recording frame rate of up to 30 fps only.
2. The GV-SNVR 1600 supports the recording bandwidth of up to 100 Mbps only.
3. GV-SNVR1600 can only connect to Fisheye Cameras, except for GV-FER12203 / 12700, via **channel 1** and does not support fisheye dewarping (\*).
4. For supported IP cameras, the resolutions of stream 1 and 2 both must meet the requirements noted under Specifications.

### Supported GeoVision Application

- GV-Edge Recording Manager (Windows Version V1.1.0.0 or later)
- GV-Control Center (V3.3.0.0 or later)
- GV-Center V2 (V15.10 or later)
- GV-Vital Sign Monitor (V15.10 or later)
- GV-Eye (V2.0 or later)

### Recommended Hard Disks

GV-SNVR1600 supports 4 SATA HDD (3.5") with total up to 16 TB capacities. For system efficiency, it is recommended to use the 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:** The GV-SNVR does not support the 2.5" SATA HDD.

### Supported Web Browsers

- Internet Explorer 8 or later
- Google Chrome 33.0 or later
- Mozilla Firefox 28.0 or later

## Overview

### Front Panel



### Back Panel



## Packing List

### GV-SNVR01600 Package

1. GV-SNVR1600
2. AC Power Cord
3. SATA Cable x 4
4. HDD Mounting Bracket Kit (4 pairs and 32 screws included)
5. Rack Mount Kit (2 L-shaped brackets and 6 screws included)
6. Rubber Foot x 4
7. USB Mouse
8. Download Guide
9. Quick Start Guide
10. Warranty Card

