

GV-Recording Server

Channel	Display Name	IP Address	Status	Video Speed	Start Time	Elapsed Time	Recording Policy	Firmware Version	GV POE Switch
001	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:01:19	Round the Clock		
002	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:01:19	Round the Clock		
003	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:01:19	Round the Clock		
004	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:01:19	Round the Clock		
005	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:01:19	Round the Clock		
006	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:01:19	Round the Clock		
007	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:01:19	Round the Clock		
008	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:01:19	Round the Clock		
009	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:01:19	Round the Clock		
010	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:01:19	Round the Clock		
011	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:01:19	Round the Clock		
012	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:01:19	Round the Clock		
013	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:01:19	Round the Clock		
014	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:01:19	Round the Clock		
015	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:01:19	Round the Clock		
016	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:01:19	Round the Clock		
017	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:03:01	Round the Clock		
018	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:03:01	Round the Clock		
019	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:03:01	Round the Clock		
020	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:03:01	Round the Clock		
021	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:03:01	Round the Clock		
022	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:03:01	Round the Clock		
023	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:03:01	Round the Clock		
024	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:03:01	Round the Clock		
025	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:03:01	Round the Clock		
026	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:03:01	Round the Clock		
027	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:03:01	Round the Clock		
028	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:03:01	Round the Clock		
029	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:03:01	Round the Clock		
030	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:03:01	Round the Clock		
031	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:03:01	Round the Clock		
032	GV-01-1210	192.168.1.112.1	Recording	645.5Mbps	2025/04/02 03:0...	00:03:01	Round the Clock		
033	GV-01-1210	192.168.1.112.1	Recording	778.2Mbps	2025/04/02 02:5...	00:04:47	Round the Clock		
034	GV-01-1210	192.168.1.112.1	Recording	778.2Mbps	2025/04/02 02:5...	00:04:47	Round the Clock		
035	GV-01-1210	192.168.1.112.1	Recording	778.2Mbps	2025/04/02 02:5...	00:04:47	Round the Clock		
036	GV-01-1210	192.168.1.112.1	Recording	778.2Mbps	2025/04/02 02:5...	00:04:47	Round the Clock		
037	GV-01-1210	192.168.1.112.1	Recording	778.2Mbps	2025/04/02 02:5...	00:04:47	Round the Clock		
038	GV-01-1210	192.168.1.112.1	Recording	778.2Mbps	2025/04/02 02:5...	00:04:47	Round the Clock		

INTRODUCTION

GV-Recording Server is a video streaming solution for large-scale surveillance, supporting up to 256 recording channels from various IP sources. Each IP camera can be set to record continuously, on motion detection, upon I/O trigger, or on a schedule through an intuitive web interface.

Additionally, it can distribute up to 600 channels to GeoVision software, including GV-NVR, GV-VMS, GV-Control Center, and GV-Edge Recording Manager. By leveraging GV-Recording Server, users can maintain optimal frame rates while significantly reducing CPU load and bandwidth usage of IP video devices.



Live View



Any PC to view the images and search the event log



GV-Control Center



GV-Cloud Center



GV-DVR / NVR / VMS



GV-Edge Recording Manager



GV-Vital Sign Monitor



GV-Mobile Server



GV-Eye for iOS / Android

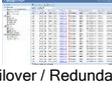


GV-GIS



3rd party SW (RTSP)

Backup & Failover



GV-Failover / Redundant Server

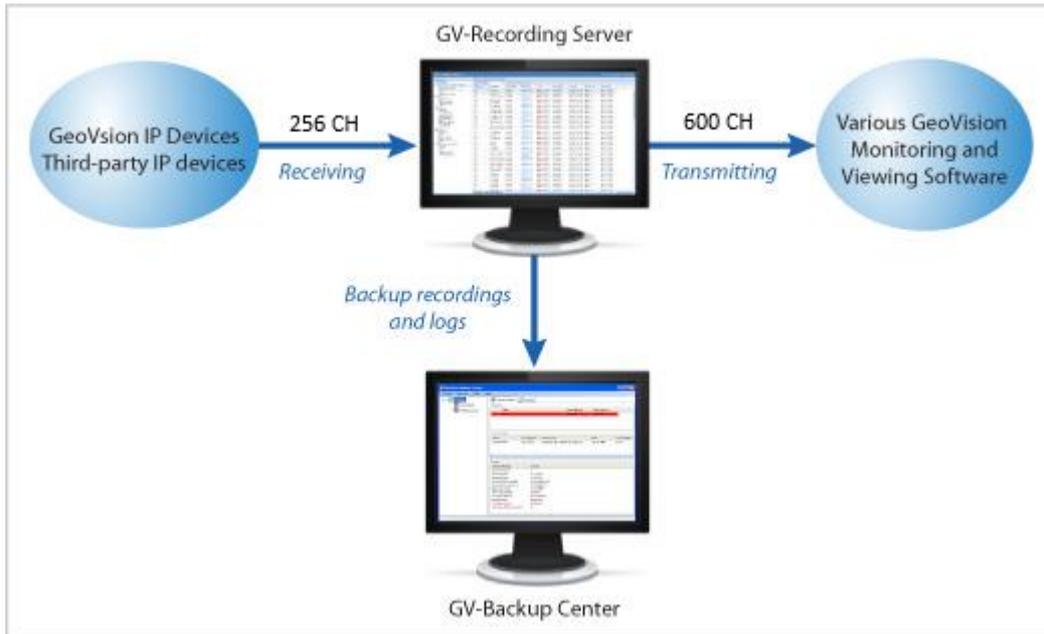


GV-Backup Center

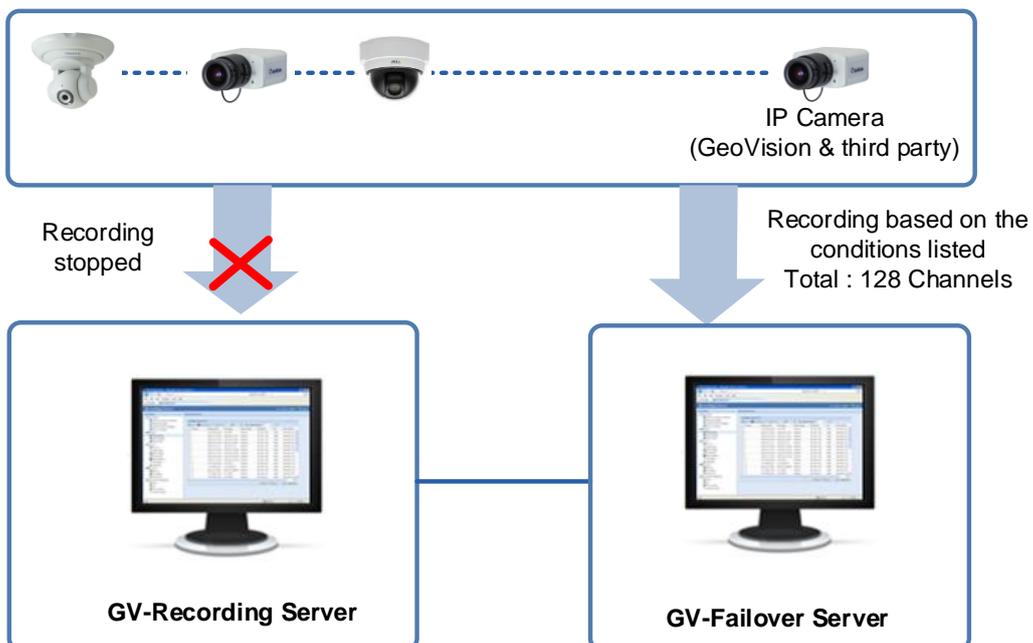
In some locations, you may need to install a 3G wireless Internet module (e.g., GPRS/UMTS) on GV-Video Server or GV-Compact DVR but face difficulties obtaining a public IP address from your ISP. GV-Recording Server's Passive Connection feature resolves this by accepting connection requests from these devices and distributing video streams to clients.

For a secure and cost-effective remote backup solution, GV-Recording Server integrates with GV-Backup Center, GV-Failover Server, and GV-Redundant Server:

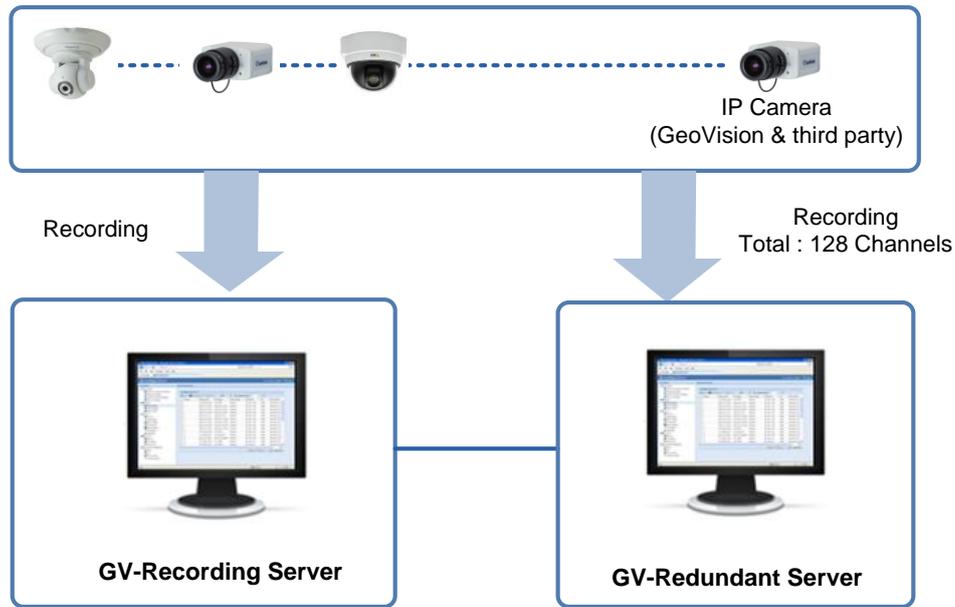
- **GV-Backup Center** automatically saves copies of recordings to an offsite location, ensuring data protection in case of system failure or disasters.



- **GV-Failover Server** is a video backup server that records up to 128 IP streams from GV-Recording Server when any of the following conditions occurs: (1) GV-Recording Server starts up without recording; (2) the file recycling fails; (3) the hard disk fails; (4) the connection between GV-Recording Server and IP cameras fails; (5) GV-Recording Server fails to function properly.



- **GV-Redundant Server**, similar to GV-Failover Server, functions as a video backup server. However, its key difference is that it maintains an additional copy of recordings from up to 128 IP channels connected to GV-Recording Server.



Note:

1. Passive connection only for up to 128 channels and is currently not supported for GV-IP devices to GV-Failover Server / Redundant Server.
2. GV-Failover Server and GV-Failover Serve currently do not support CH129~256 of GV-Recording Server.

Features

- Up to 256 IP channels recording and up to 600 IP channels distributing
- Video gateway between IP devices and receiving clients (GV-VMS, GV-NVR, GV-Control Center, GV-Edge Recording Manager, GV-Eye and others))
- Support for third-party IP video devices (Sony, Axis, VIVOTEK, Panasonic, HikVision, Arecont Vision), and ONVIF, PSIA and RTSP protocols
- Different recording policies for each channel to record continuously, upon motion detection, upon I/O trigger or by schedule (recording upon I/O trigger is only for GV-IP devices)
- Video playback using Remote ViewLog
- Web interface to remotely configure and monitor GV-Recording Server using Internet Explorer, Firefox, Google Chrome and Safari
- Passive and active connection methods with IP video devices (Passive connection only for up to 128 channels and only supported by GV-IP devices)
- Solution for Mobile DVR (GV-Video Server, GV-Compact DVR) to obtain a public IP address
- Bandwidth monitoring
- Two-way audio communication (only for GV-IP devices through active connection)
- Remote event monitoring through [GV-Vital Sign Monitor](#)
- Remote backup through [GV-Backup Center](#), [GV-Failover Server](#) or [GV-Redundant Server](#)
- IP device monitoring, event search and remote playback through [GV-Cloud Center](#)
- Smart streaming
- Live streaming of GV-IP cameras on YouTube
- Support for 31 languages

Minimum System Requirements

OS	64-bit	Windows 10 / 11 / Server 2008 R2 / Server 2012 R2 / Server 2019
CPU		Core i7 8700, 3.2 GHz
Memory	Up to 128 Channels	16 GB Dual Channel
	129 to 256 Channels	32 GB Dual Channel
Hard Disk	Installation	1 GB
	OS	128 GB
Browser		<ul style="list-style-type: none"> ● Internet Explorer 8 to 11 ● Firefox 26.0 ● Google Chrome 31.0.1650.63 ● Safari 5.1.7
LAN		Gigabit Ethernet X 1~6
Software		.Net Framework 3.5
Hardware		Internal or External GV-USB Dongle

Software License

Free License	N/A
Maximum License	256 channels
Increment for Each License	<p>1. GV-IP video devices only: 8, 16, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76, 80, 84, 88, 92, 96, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144, 148, 152, 156, 160, 164, 168, 172, 176, 180, 184, 188, 192, 196, 200, 204, 208, 212, 216, 220, 224, 228, 232, 236, 240, 244, 248, 252, 256 IP channels.</p> <p>2. Third-party IP devices (Includes GV-IP video devices): 8, 16, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76, 80, 84, 88, 92, 96, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144, 148, 152, 156, 160, 164, 168, 172, 176, 180, 184, 188, 192, 196, 200, 204, 208, 212, 216, 220, 224, 228, 232, 236, 240, 244, 248, 252, 256 IP channels.</p> <p>3. Third-party or HD DVR license for UA-IP devices: In increments of 1 channel</p>
Optional Combinations	N/A
Dongle Type	Internal or External

Note:

1. To receive 256 channels and transmit up to 600 channels, refer to *Recommended Network Requirements*.
2. The **HD DVR** license is only supported by GV-Recording Server V2.1.0 or later.
3. The **HD DVR** license is required for connecting UA-HD DVR (only **analog** channels supported).
4. The **third-party** license is required for connecting UA-IP cameras.

Compatible GV-Software

- **GV-Backup Center:** version 1.1.2 or later
- **GV-Cloud Center:** version 1.0 or later
- **GV-Control Center:** version 3.7.0 or later (V3.6.0 or earlier only support 128 CH)
- **GV-DVR / NVR, Multi View, Multicast:** version 8.5.6 or later (for 64 CH)
- **GV-Edge Recording Manager for Windows:** version 2.0 (V1.0.0 or earlier only support 128 CH)
- **GV-Edge Recording Manager for Mac:** version 1.2.0 (V1.0.0 or earlier only support 128 CH)
- **GV-Eye:** version 2.7.4 or later (V2.7.3 or earlier only support 128 CH)
- **GV-GIS:** version 3.1.1 or later
- **GV-Mobile Server:** version 1.3 or later (for 64 CH)
- **GV-Redundant Server & Failover Server:** version 2.0 [coming soon] (V1.1.0.0 or earlier only support 128 CH)
- **GV-Vital Sign Monitor:** version 8.5.9 or later (for 128 CH)
- **GV-VMS:** version 14.10 or later (for 64 CH)

Compatible USAVision Products

- **UA-HD DVR:** UA-XVL810, UA-XVL1610, UA-XVR810, UA-XVR1620
- **UA-IP Camera:** UA-B580F3, UA-R500F2, UA-R560F2, UA-R580F2, UA-R800F2

Recommended Hard Disk Requirements

The recommended hard disk requirements for 24 hours of recording are listed as below.

Resolution	Bitrate	Frame rate	Codec	Max. channel per HDD and required HDD size	Required HDD size (recording 256 CH, 24 hrs)	Recommended HDD Requirements
1.3 MP	0.83 Mbps	30 fps	H.265	32 CH / 280 GB	2.3 TB	1 TB 7200 RPM HDD x 8
2 MP	1.6 Mbps			32 CH / 540 GB	4.4 TB	
3 MP	2 Mbps			32 CH / 693 GB	5.6 TB	
4 MP	2.21 Mbps			22 CH / 747 GB	9 TB	
5 MP	2.41 Mbps	20 fps		22 CH / 814 GB	9.8 TB	1 TB 7200 RPM HDD x 12
8 MP	3.5 Mbps			22 CH / 1190 GB	14.3 TB	

Note:

1. The number of hard drives required varies depending on the write speed of the hard drive and the hard disk size required varies depending on the recorded file size. The recommended hard disk requirement is just for your reference.
2. For system efficiency, we recommend the **enterprise-level** hard disk drives with **7200 RPM** at least and average R/W speed above **110 MB/s**. Avoid using desktop-level hard disks which may affect system efficiency.
3. The hard disk requirements above are applicable to GV-DVR / NVR / VMS and GV-IP Devices only.

Recommended Network Requirements

The server's transmitting capacity varies depending on the number of Gigabit connections. The number of Gigabit network cards required to receive 256 channels and transmit 600 channels are listed below according to the resolution of the source video.

Resolution	Bitrate	Frame rate	Codec	Gigabit Network Cards Required	
				Receiving 256 CH	Transmitting 600 CH
1.3 MP	0.83 Mbps	30 fps	H.265	Gigabit network card x 1 (up to 256 CH per card)	Gigabit network card x 1 (up to 600 CH per card)
2 MP	1.6 Mbps				Gigabit network card x 2 (up to 300 CH per card)
3 MP	2 Mbps			Gigabit network card x 2 (up to 128 CH per card)	Gigabit network card x 3 (up to 200 CH per card)
4 MP	2.21 Mbps				
5 MP	2.41 Mbps				
8 MP	3.5 Mbps	20 fps			

The deployment of Gigabit connections for transmitting and receiving is suggested as illustrated below. Ensure to run every Gigabit connection on a different network in order to reduce the lag on any network connection.

2 / 3 / 4 MP Source Video

