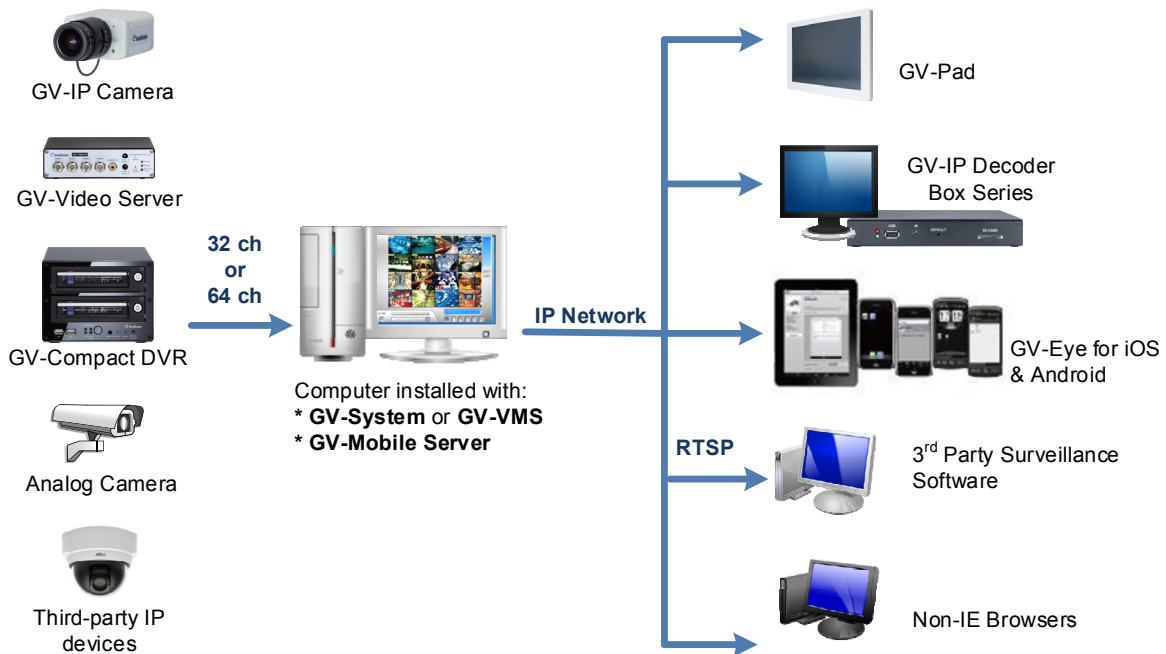# GV-Mobile Server

INTRODUCTION

GV-Mobile Server compresses IP videos to D1 or VGA, or keeps the original resolution, and sends them to multiple clients for live viewing, reducing the CPU loading and bandwidth usage of IP video devices. GV-Mobile Server can receive up to 64 channels of live view from hosts including GV-IP devices, 3rd party IP devices, GV-VMS / DVR / NVR, GV-Recording Server, and GV-Video Gateway. Users can establish up to 4 matrix channels on GV-Mobile Server, each consisting of 36 cameras. Clients can access the live view from GV-Mobile Server using GV-Pad, GV-IP Decoder Box Series, GV-Eye for iOS and Android, 3rd party surveillance software through RTSP protocol or Non-IE browsers.
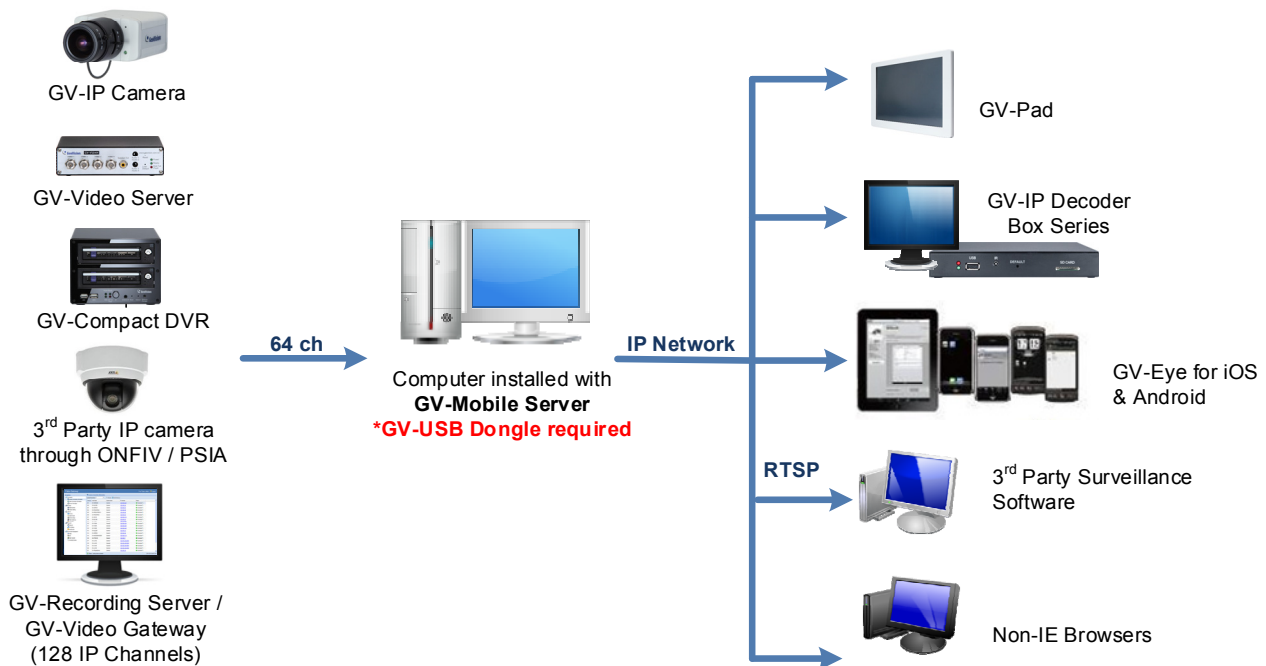
- To encode channels from GV-DVR / NVR / VMS, install GV-Mobile Server on the same computer as GV-DVR / NVR / VMS.

Note:

1. GV-DVR / NVR only supports up to 32 channels.
2. GV-VMS and GV-NVR do not support analog cameras.

- With a GV-USB Dongle, the GV-Mobile Server can be installed in any remote server. It can directly encode IP channels from GeoVision and third-party IP devices through ONVIF and PSIA protocols, as well as those from GV-Recording Server / GV-Video Gateway.

Features

- Supports up to 64 channels
- Live view access of analog cameras (connected to GV-DVR)
- Live view access of up to 4 user-selectable matrix channels
- Supports motion pop-up for matrix view
- Provides for dual streams
- Supports fisheye dewarping
- Significantly reduces CPU loading and bandwidth usage of IP video devices
- User-configurable frame rate, quality, codec type and resolution for each camera stream
- Remote access to live view using non-IE browsers

Minimum System Requirements

Depending on the resolution, video compression format and the number of connected channels, **Standard Requirements** or **Advanced Requirements** shall be met. The **GV-USB Dongle** is only required for connection with GV-Recording Server / GV-Video Gateway, third-party (ONVIF & PSIA) IP devices and GV-IP devices directly.

Standard Requirements

OS	32-bit	Windows 7 / 8 / 8.1 / 10 / Server 2008
	64-bit	Windows 7 / 8 / 8.1 / 10 / Server 2008 R2 / Server 2012 R2
CPU		Intel Core i5 6600K, 3.50 GHz
Memory		8 GB x 2
Hard Disk		1 GB or more for installation
Graphic Card		AGP or PCI-Express, 1024 x 768, 32-bit color
DirectX		9.0c
LAN		Gigabit Ethernet X 1
Hardware		Internal or external GV-USB Dongle

Note: It is recommended to use the internal GV-USB Dongle to have the Hardware Watchdog function which restarts the PC when Windows crashes or freezes.

Advanced Requirements

OS	64-bit	Windows 7 / 8 / 8.1 / 10 / Server 2008 R2 / Server 2012 R2
CPU		Core i7 6700 Processor, 3.40 GHz
Memory		8 GB x 2
Hard Disk		1 GB or more for installation
Graphic Card		AGP or PCI-Express, 1024 x 768, 32-bit color
DirectX		9.0c
LAN		Gigabit Ethernet X 2
Hardware		Internal or external GV-USB Dongle

Note:
1. The memory required may vary depending on the number of channels and resolution of videos received.
2. It is recommended to use the internal GV-USB Dongle to have the Hardware Watchdog function which restarts the PC when Windows crashes or freezes.

When you want to connect the number of channels listed below to the GV-Mobile Server, the advanced system requirements need to be met.

Resolution	Codec	Bitrate	No. of Connected Channels (without Matrix Views)	No. of Connected Channels (with Matrix Views)
CIF	H.264	1.21 Mbit/s	＞41	＞50
	H.265	-	-	-
VGA	H.264	2.81 Mbit/s	＞15	＞22
	H.265	1.19 Mbit/s	＞9	＞10
D1	H.264	4.5 Mbit/s	＞6	＞6
	H.265	-	-	-
1 MP	H.264	5.3 Mbit/s	＞8	＞7
	H.265	2.74 Mbit/s	＞3	＞3
2 MP	H.264	7.01 Mbit/s	＞10	＞11
	H.265	4.5 Mbit/s	＞1	＞2
3 MP	H.264	9.27 Mbit/s	＞9	＞11
	H.265	5.92 Mbit/s	＞1	＞1
4 MP	H.264	12.1 Mbit/s	＞13	＞14
	H.265	8.03 Mbit/s	＞1	＞1
5 MP	H.264	17.1 Mbit/s	＞14	＞14
	H.265	10.4 Mbit/s	＞1	＞1
8 MP	H.264	17.35 Mbit/s	＞5	＞5
	H.265	-	-	-
12 MP	H.264	14.59 Mbit/s	＞8	＞8
	H.265	-	-	-

Note:
1. These data may vary in different scenes (different data bitrates).
2. The test with matrix is conducted using two matrix views.

Specifications

Video		
Single Channel		
Max No. of Channels		64
Resolution		Dual streams, Bypass streams
Dual Streams	Main Stream	Up to 704 x 480
	Sub Stream	Up to 704 x 480
Supported Codec		MJPEG, MPEG4, H.264, H.265 (Bypass only)
Adjustable Video Settings		Frame rates, Quality, Codec, Resolution
Fisheye Dewarping Support		Yes
Wide Angles Lens Dewarping Support		Yes
Matrix View		
Max No. of Matrix Views		4 Views, each with up to 64 channels
Resolution		Up to 1280 x 1024 for one Matrix View
Motion Popup Support		Yes (in Matrix View 4)
Supported Codec		MJPEG, MPEG4, H.264, H.265
Live View Access		
From GeoVision IP devices		Yes (GV-IP Decoder Box Series and GV-Pad)
From third-party surveillance software		Yes (through RTSP)
From mobile devices	Application	Yes (GV-Eye for iOS and Android)
	Browser	Yes (http live streaming for iOS)
Using non-IE browsers		Yes (in MJPEG format)
General		
Language		Arabic / Bulgarian / Czech / Danish / Dutch / English / Finnish / French / German / Greek / Hebrew / Hungarian / Indonesian / Italian /Japanese / Lithuanian / Norwegian / Persian / Polish / Portuguese / Romanian / Russian / Serbian / Simplified Chinese / Slovakian / Slovenian / Spanish / Swedish / Thai / Traditional Chinese / Turkish

Note: Specifications are subject to change without notice.

Software License

Free License	When installed and executed on the same server with GV-DVR, GV-NVR or GV-VMS
Maximum License	64 channels, 4 Matrix views
Increment for Each License	N/A
Optional Combinations	N/A
Dongle Type	Internal or external

Note:
1. The Maximum License is a paid service.
2. GV-DVR and GV-NVR only support up to 32 channels.

Compatible Devices

The following software versions have been tested for compatibility with GV-Mobile Server:

- **GV-IP Camera:** V1.09 or later
- **GV-IP Decoder Box:** V1.07 or later
- **GV-IP Decoder Box Plus:** V1.01 or later
- **GV-Pad:** V1.07 or later
- **GV-Video Server VS02A / VS04A / VS04H / VS12:** V1.05 or later
- **GV-Video Server VS11:** V1.0 or later
- **GV-Video Server VS2400:** V1.01 or later
  - **VS2420:** V1.00 or later
- **GV-Compact DV0R V2:** V1.07 or later
- **GV-Compact DVR V3 (4-Channel):** V1.01 or later
- **GV-Compact DVR V3 (8-Channel):** V1.00 or later

- **GV-DVR / NVR:** V8.5.3 or later
- **GV-Eye:** V2.0 or later
- **GV-Recording Server / GV-Video Gateway:** V1.1.0.0 or later
- **GV-VMS:** V14.10 or later

Compatible Standard and Protocol

GV-Mobile Server also allows for integration with third-party IP video devices that are compatible with ONVIF (V2.0) and PSIA (V1.1) standards.

ONVIF	PSIA	RTSP	

Options

Optional Devices	Description
Internal USB Dongle	The USB dongle can provide the Hardware Watchdog function to the GV-Mobile Server by restarting the computer when Windows crashes. You need to connect the dongle internally on the motherboard.