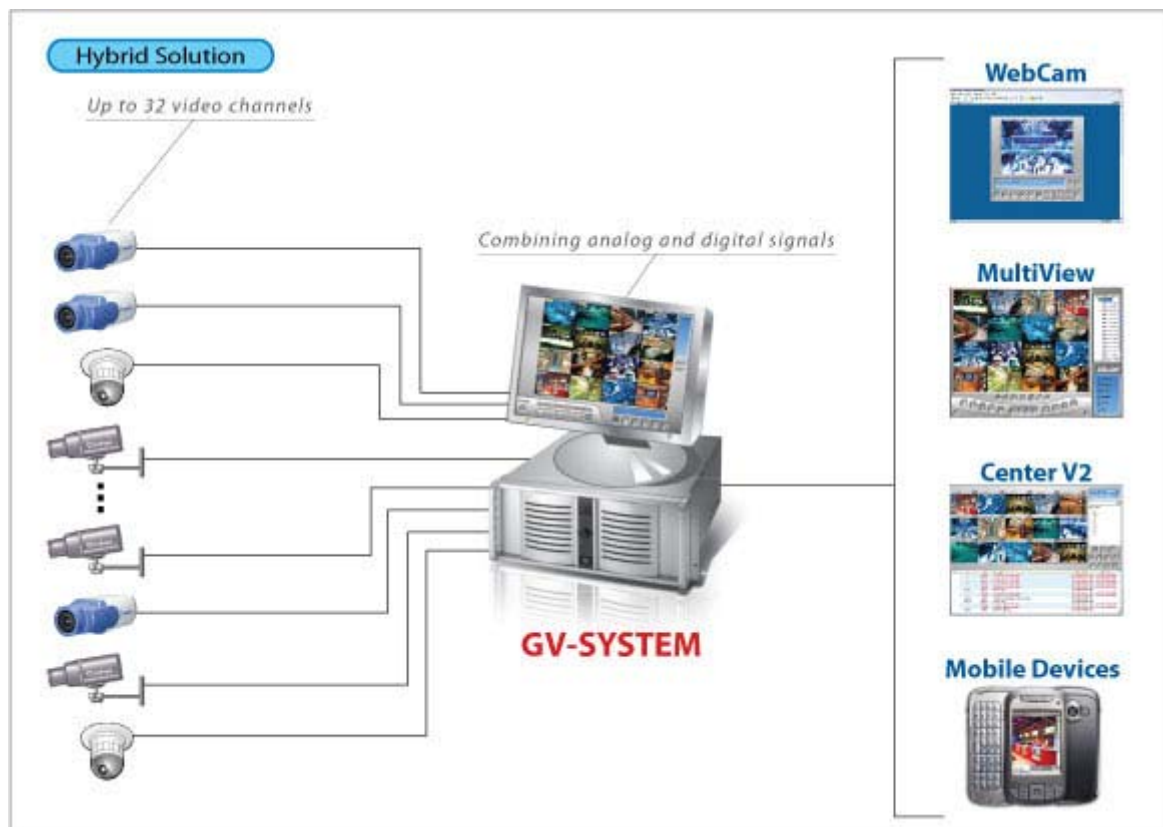


INTRODUCTION

Thanks to the scalability of GV-Series, you can easily integrate surveillance system and IP cameras, and load analog and digital video data into the same interface to become a comprehensive hybrid solution. The GV-Series Surveillance System V8.3 is able to process video signals from IP cameras over TCP/IP network. Combining the best of both the analog and digital worlds, the GV-Hybrid DVR is a versatile video management platform. It answers needs for a transition from a legacy analog infrastructure towards a pure IP surveillance environment.

In the version 8.3, the GV-Hybrid DVR comes with a rich panel of features to streamline surveillance operations and enhance management capabilities. Remote surveillance is implemented via 3GPP, IE browser and GeoVision GV-MultiView. For the purpose of central monitoring, the GV-Hybrid DVR offers an extensible solution for multi-site surveillance and control to manage numerous cameras from subscribers.



Built upon comprehensive and easy-to-integrate hardware and supporting technologies, the GV-Surveillance and Video Management Platform is the core system platform that provides performance-optimized video monitoring and various advanced video analytics/control features to support many of enterprise's management functions. It is a scalable, extensible platform that can be customized and seamlessly integrated with other security system applications, such as:

1. POS/ ATM/ EAS for loss prevention
2. Access Control for building automation
3. License Plate Recognition system for law enforcement, entrance control and revenue collection
4. Megapixel IP devices for critical area and mobile object monitoring
5. Central Monitoring stations for high profile security areas in commercial, industrial and residential markets

In addition the remote management WebCam and versatile storage system framework offer high scalability and extensibility for future integration with other functions or systems at remote sites.

VERSION 8.3 KEY FEATURES

- Support for 32 channels in GV-System and CMS applications
 - Support for two GV Video Capture Cards in GV-System
 - New features to Main System:
 - Digital Matrix
 - Automatic adjustment for DST (Daylight Saving Time)
 - Lost signal alarm
 - Talkback support when IP cameras provide 2-way audio
 - Windows-based direct POS integration (POS Text Sender)
 - Crowd Detection (**)
 - Advanced Scene Change Detection (**)
 - Advanced Unattended Object Detection (**)
 - Advanced Missing Object Detection (**)
 - Single Camera Tracking
 - Turbo Mode for GV-Combo A Cards (GV-1480A, 1240A, 1120A) to record at high speed
 - Iris button added to the PTZ control panel
 - Colorful Mode to enhance video color
 - Support for new PTZ cameras: COP 15-CD53W (Pelco D), Elmo PTC-200C, Elmo PTC-400C, Elmo PTC-1000, Eyeview T-Power (T2-SA27), JVC TK-C686E, Lilin PIH-820, Nang Wang WVD 2300PNT (firmware version 4.1), StorVision and 360 Vision ViD-18COP04 (Pelco P)
 - Support for new 3rd-party IP cameras:
 - Arecont AV-3130, AV-8360
 - 209FD, 209FD-R, 209MFD, 209MFD-R, 211M, 211W, 215, 216MFD, 216MFD-V, 241Q, 241S, P3301, Q7401
 - Axis
 - Cannon VB-C50i, VB-C300
 - IQEye IQEye 703, IQEye 705, IQEye 752, IQEye 753, IQEye 755
 - JVC VN-V25U, VN-V26U, VN-V686U
 - Mobotix M12D Web, M12D IT-DNIGHT, M12D Sec
 - Panasonic WV-NS202A, WV-NW484, WV-NW964
 - Pelco IP110, IP3701
 - SNC-CM120, SNC-CS20, SNC-DM110, SNC-DM160, SNC-DS10, SNC-DS60, SNC-RX530N, SNC-RX530P, SNC-RX570N, SNC-RX570P
 - SONY
- Note:** The feature with (**) mark needs to work with an AVP dongle which you need to purchase additionally.
-
- New features to ViewLog
 - Support for Daylight Saving Time (DST)
 - Playback of GPS tracks from GV-Compact DVR and GV-Video Server
 - Colorful Mode to enhance video color for playback
-
- New features to Webcam
 - Multicast
 - Audio Broadcast
 - POS/Wiegand Live View option added to Single View
 - New GUI for Remote Playback (RPB)
 - Support for BlackBerry phones
-
- New features to SMS Server
 - Unlimited log retention time
 - Support for new alert events, including Crowd Detection, Advanced Scene Change Detection, Advanced Unattended Detection and Advanced Missing Object Detection
 - Support for Wavecom GPRS Modem
-
- New features to Center V2:
 - Remote control of I/O devices from GV IP devices
 - Unlimited log retention time
 - Colorful Mode to enhance video color
 - Assigning a DVR client to another Center V2
-
- New features to VSM:
 - Remote control of I/O devices from GV IP devices
 - Unlimited log retention time
 - Automatic insertion of ID and Name to SMS messages
 - Support for new alert events, including Crowd Detection, Advanced Scene Change Detection, Advanced Unattended Detection and Advanced Missing Object Detection
-
- New features to Dispatch Server:
 - Unlimited log retention time
 - Colorful Mode to enhance video color

- New features to Control Center:
 - Support for new event settings in VMD, including Crowd Detection, Advanced Scene Change Detection, Advanced Unattended Detection and Advanced Missing Object Detection
 - Colorful Mode to enhance video color
 - GV-Keyboard support in Matrix
 - QView in Matrix for channel display on another monitor
 - Remote control of I/O devices from GV IP devices
 - Pop-up live view upon input triggers in I/O Central Panel

- New applications:
 - GV-GIS (Geographic Information System)
 - Multicast
 - Audio Broadcast

- New devices:
 - GV-I/O Box 4 Ports
 - GV-I/O Box 8 Ports
 - GV-I/O Box 16 Ports

FULL FEATURE LIST

▶ Monitoring

- Support for 32 channels in GV-System and CMS applications
- Support for two GV Video Capture Cards in GV-System (*)
- Digital Matrix, support maximum 8 monitors display
- Hybrid Solution integrating analog videos with digital videos from GV-IP video products and third-party IP cameras (*)
- Codecs: Geo H264, Geo MPEG4 ASP, Geo H264 V2 (*)
- Multithreading Encoding (*)
- Higher Screen Resolutions (1920 x 1200, 1680 x 1050, 1600 x 1200, 1280 x 800, 1440 x 900 and 1920 x 1080)
- Noise Tolerance for Motion Detection
- Noise Detection to Reduce File Size (*)
- Noise Filter to Filter Out Video and Audio Noise (*)
- Report Generator
- Support for Cardholder data from GV-Video Server
- Touch Screen Support
- Full screen view
- Dual display operation for live monitoring and ViewLog playback on two monitors
- Screen pop-ups on motion or alarm activation
- Advanced Motion Detection
- Digital watermark
- Video lost detection
- On screen video loss message
- Video de-interlace filter
- E-map
- Windows lockup
- Image size indicator
- Synchronized video and audio
- Backlight compensation
- Video auto gain controller (*)
- Video scaling filter
- AVI repair utility
- System log
- Support 1,000 accounts for logins and passwords
- Multi level passwords protection
- Use Microsoft Remote Desktop to control another GV-System
- Twin DVR
- Embedded I/O devices control
- Embedded PTZ control panel
- Support dynamic IP address
- Password Expiration Management
- System Idle Protection
- Spot Monitor Controller
- POS Live Viewer
- Photo-ID Integration (GV-WT)
- Hard Disk Calculator (*)
- Authentication Server
- Colorful Mode to enhance video color

▶ Intelligent Recording & Playback

- Choice of recording at 30, 60, 120, 240, 480 and 960 fps (*)
- Recording trigger by round-the-clock, motion detection, alarm and schedule
- Adjustable recording quality and frame rate for each camera
- Pre-motion and post-motion recording
- Supports Windows XP / Server 2003 burning software
- Pre-Recording Using HDD (*)
- Advanced Round-The-Clock Recording (*)
- Instant Playback
- Time Merge From Different Clips
- Splitting Files for Backup onto Multiple Discs
- Extracting Frames from a Video Clip During Playback
- Support for Daylight Saving Time (DST)
- Playback of GPS tracks from GV-Compact DVR and GV-Video Server

▶ Audio

- 32 channels of live audio streaming and recording

▶ Video Analytics

- Enhanced Object Counting
- People Counting
- Intrusion Alarm
- Face Detection
- Privacy Mask
- Unattended and Missing Object Detection
- Scene Change Detection
- Advanced Scene Change Detection(**)

- Advanced Unattended Object Detection(**)
- Advanced Missing Object Detection (**)
- Panorama View(**)
- Video Stabilization(**)
- Defog Function(**)
- Crowd Detection(**)
- Object tracking and zooming by PTZ domes (*)
- Single PTZ Tracking (*)

Note: The feature with (**) mark needs to work with an AVP dongle which you need to purchase additionally.

▶ Smart Search & Ease Playback

- Timeline Search
- Face Detection for Object Index
- Object search
- Index search
- Object Index
- Thumbnail browse for ease of search for specific frames within video footage
- Export a video footage within a specified time range
- Synchronized audio and video for both live and playback modes

- Continues playback of set frames A to B
- EXE format export, playable with any third-party players
- AVI format export in multiple screens mode
- DVD format export for Hybrid Card format files
- Option for recycling the input-triggered events (Never recycle function)
- Backup, save AVI and BMP functions accessible in LAN ViewLog
- Automatic refresh of the video event list in LAN ViewLog

▶ Notification

- E-mail notification with attached video images on motion and alarm activation
- E-mail or telephone notification on video lost or I/O error
- Directs PTZ dome to a preset location on motion and alarm activation

- SMS alerts available in Main System, Center V2 and Vital Sign Monitor
- Alarms on objects that pass between predefined regions

▶ WebCam - Remote Surveillance

- POS Live View via IE Browser
- 3G Mobile Phone Support (3GPP)
- SSL Encrypt Connection Support
- UPnP™ Support
- Control Panel on Single View to Provide Instant Information and Operation
- Support PIP, PAP, Defogging Live Videos, and Video Stabilizer in Single View
- Restricting Power User and User to Access WebCam Server at Specified Time Length

- Event List Query
- Download Center
- Drag-and-Drop Support for Camera, PTZ and I/O Icons on the 2 Windows of MPEG4 Encoder Viewer
- Remote E-Map
- Pop-up Live Images upon Input Trigger in Remote E-Map
- Multicast
- Audio Broadcast

▶ Advanced I/O Control

- Visual Automation
- Virtual I/O Control
- One-Click I/O Status Control

- Multiple I/O Types Selection
- Latch Trigger Feature

▶ Mobile Phone Application

- Support 4, 9, and 16 screen divisions
- PTZ control via directional buttons

- Channel switch via middle button
- Support for Nokia S60 3rd Edition

▶ Profile Management

- Selectable GUI Skin
- Custom Start-Up Splash Screen, Non-Active Video & Video Lost Screen
- Customizing System Features

- Easy Configuration Backup & Restore
- Custom DVR Setting's Template

▶ **Remote Monitoring Software**

- WebCam
- Remote Playback System
- G-View for WinCE PDA
- I-Mode
- BlackBerry phones

▶ **IT Technology**

- RSA Network Security
- Authentication Server: central control of password settings in local GV-DVRs

▶ **Central Monitoring Station (CMS)**

- Center V2
- Vital Sign Monitor
- Dispatch Server
- Control Center
- GV-GIS (Geographic Information System)

▶ **Integration Solution**

- Point-Of-Sale
- EAS Integration
- Access Control
- Megapixel Integration
- Licence Plate Recognition
- Central Monitoring Station

(*) **Note:** Not supported by GV-NVR

VERSION 8.3 GV-Hybrid DVR Specifications

DVR (Supports 2 cards up to 32 channels)									
Model	GV-600	GV-650	GV-800	GV-1120A	GV-1240A	GV-1480A	GV-2008		
Video Input	4,6,8,10,12,14,16	4,8,12,16	4,8,12,16	8,12,16	8,16	16	8		
Audio Input	1	2	4	8,12,16	8,16	16	8		
TV Ooutput	No	No	No	1	1	1	1		
Recording Rate	CIF	NTSC	30 fps	60 fps	120 fps	120 fps	240 fps	480 fps	-
		PAL	25 fps	50 fps	100 fps	100 fps	200 fps	400 fps	-
	D1	NTSC	15 fps	30 fps	60 fps	80 fps	120 fps	240 fps	240 fps
		PAL	12.5 fps	25 fps	50 fps	72 fps	100 fps	200 fps	200 fps
Display Rate	CIF	NTSC	30 fps	60 fps	120 fps	480 fps	480 fps	480 fps	-
		PAL	25 fps	50 fps	100 fps	400 fps	400 fps	400 fps	-
	D1	NTSC	15 fps	30 fps	60 fps	480 fps	480 fps	480 fps	240 fps
		PAL	12.5 fps	25 fps	50 fps	400 fps	400 fps	400 fps	200 fps
Input Type	BNC : BNC x 4 D-Type : DB15 x 2			DB15 x 2 (Video) DB9 x 2 (Audio)			DB15 x 2 (Video & Audio)		
Dimension (W X H)	144x89(mm) / 5.67x3.5(in)	144x98(mm) / 5.67x3.86(in)	BNC: 152x94(mm)/ 5.98x3.7(in) D-Type: 174x98(mm)/ 6.85x3.86(in)	187.7 x 117.1 (mm) / 7.38 x 4.61 (in)		240x102 (mm) / 9.45x4.02 (in)			
Video Compression	Geo MPEG4, Geo MPEG4 (ASP), Geo H264, Geo H264 V2							HW MPEG4	
Compression Rate	Variable, 300: 1 Maximum								
Video Resolution	D1, Half D1, CIF Resolution								
Video Signal Type	NTSC, PAL								
PTZ Control Protocol Support	• Ademco (Juptier) • Bosch (TC 700 / TC 8560)		• Mintron (54G2AHN / P) • MZC (IR6018DN)						

- Canon (VC-C3 / VC-C4)
- CBC GANZ (ZC-S120 Series)
- Chiper (V9KRV)
- D-Max
- DiGi Dome (DOH-240)
- Direct Perception (PTU-D46)
- DynaColor (D-7720 / D-7722)
- Elitar (EL-PT830)
- Elbex (Matrix / 1000)
- EverFocus (EPTZ 1000 / 500)
- GKB (SPD-221)
- Hi-Sharp (HS-CC600 / HS-CC610)
- JEC (ETXK8000)
- JVC (TK-S576B / S655)
- Kalatel Cyber Dome with KTD-312
- Kampro 230X CCD Zoom Camera (GE Security)
- Kampro Technology (K-ZC23)
- Kenko (DMP23-H1)
- Lilin PIH-7000 (17X) / PIH-7600 (22X) / PIH-7625 / PIH-7600PL / PIH-7625 (25X) / PIH-820
- LG (LPT-OS553HQ)
- Minking Messoa (SDS600 Series / D-700 series)
- NanWang (NVD 2300PNT) / V4.1 (NVD 2300PNT)
- Panasonic (WV-CS850 / CS854)
- Pelco (P / D / Spectra III / Spetra Mini Dome SD4-WO)
- Pishion (22X / VCC5i)
- PTZ in I/O
- SAE (DR-E588)
- Samsung (SPD-1600 / SPD-3300 / SCC-641 / SCC-643 / SPD-33000)
- Sensormatic (Ultra IV)
- Sony (EVI-D100 / D100T)
- TOA (CC551)
- VIDO (Dome / G65)
- YAAN
- YOKO (YK-2E00)
- 360 Vision(Vid-18COP04) Pelco D
- COP 15-CD53W (Pelco D)
- Elmo PTC-200C, Elmo PTC-400C, Elmo PTC-1000,
- Eyeview T-Power (T2-SA27)
- JVC TK-C686E
- StorVision

NVR

Model	GV-NVR (GV)	GV-NVR
Video Input	4, 8, 12, 16, 20, 24, 28, 32	1, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32
Audio Input	4, 8, 12, 16, 20, 24, 28, 32	1, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32
Video Compression	MJPEG, MPEG4, H.264	
Video Resolution	From CIF to 5 Mega pixel	
IP Camera	GeoVision GV-IPCAM 1.3M, GV-Video Server, GV-Compact DVR	Arecont Vision AV1300, AV2100, AV3100, AV3130, AV5100, AV5105, AV8360
		AXIS AXIS 206, AXIS 207, AXIS 207W, AXIS 207MW, AXIS 209FD, AXIS 209FDR, AXIS 209MFD, AXIS 209MFD-R, AXIS 210, AXIS 210A, AXIS 211, AXIS 211A, AXIS 211M, AXIS 211W, *AXIS 212 PTZ, *AXIS 213 PTZ, *AXIS 214 PTZ, AXIS 215, AXIS 216FD, AXIS 216FD-V, AXIS 216MFD, AXIS 216MFD-V, AXIS 221, AXIS 223M, AXIS 225FD, AXIS 231D, AXIS 232D, AXIS 233D, AXIS 241Q, AXIS 241S, AXIS P3301, AXIS Q7401
		Canon *VB-C300, *VB-C50i
		GeoVision GV-IPCAM 1.3M, GV-Video Server, GV-Compact DVR
		IQinvision IQeye301, IQeye302, *IQeye510, *IQeye511, IQeye701, IQeye702, IQeye703, IQeye705, IQeye752, IQeye753, IQeye755
		JVC VN-C20U, VN-C205U, VN-C215U, *VN-C625U, *VN-C655U, NV-25, VN-V26, *VN-V686
		Mobotix M12D_Sec_DNIGHT, M12D_Web, M12D_IT_DNIGHT, M12D_Sec, M12D_Sec_R8
		Panasonic BB-HCM110, *BB-HCM311, *BB-HCM331, BB-HCM371, *BB-HCM381, *BB-HCM403, *BB-HCE481A, BL-C10, BL-C30, *WV-NS202A, WV-NW484, *WV-NW964
		Pelco IP110, IP3701
		SONY SNC-CS10, SNC-CS11, SNC-CS20, SNC-CS50N, SNC-CS50P, SNC-CM120, SNC-DF40N, SNC-DF40P, SNC-DF50N, SNC-DF50P, SNC-DF70N, SNC-DF70P, SNC-DF80N, SNC-DF80P, SNC-DM110,

		SNC-DM160, SNC-DS10, SNC-DS60, SNC-P1, *SNC-P5, *SNC-RX530N, *SNC-RX530P, *SNC-RX550N, *SNC-RX550P, *SNC-RX570N, *SNC-RX570P, *SNC-RZ25N, *SNC-RZ25P, *SNC-RZ50N, *SNC-RZ50P * IP Cam with PTZ control
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Common Specification				
Networking	TCP / IP, LAN, WAN, Internet, Modem Dial-up, Modem-to-Modem, ISDN			
Backup Device	HDD, NAS, CD-R / R-W, DVD+R / +RW, DVD+R (DL), ZIP, JAZ, Blu-ray			
Language	Czech / Danish / English / French / German / Hebrew / Hungarian / Italian / Japanese / Polish / Portuguese / Russian / Serbian / Simplified Chinese / Spanish / Traditional Chinese			
Minimum System Requirements				
	Up to 4 IP Channels	Up to 8 IP Channels	Up to 16 IP Channels	Up to 32 IP Channels
OS	Windows 2000 / Windows XP / Windows Server 2003 / Windows Vista (Not support 64-bit version of Windows)			
CPU	Core 2 Duo, 2.4 GHz	Core 2 Quad, 2.4 GHz		
RAM	2 X 1 GB Dual Channels			
HDD	1	2	4	
VGA	ATI X 700 256 MB			
<p>Important : For GV-System with 32 channels of megapixel IP video sources, the size of transmitted data may be quite large and reach beyond the processing speed limit of hard drive. For smooth processing, it is highly recommended to use 4 hard drives of Seagate SV35.3 Series (certified by GeoVision) or other brands. And assign the maximum of 8 IP camera recordings to a single hard drive.</p>				

GV-DONGLE POLICY

Dongle Type

An appropriate USB dongle is required for the computer to run the Hybrid and NVR solutions. There are three types of USB dongles available for both Hybrid and NVR solutions.

1. **NVR (GV) Dongle:** This is used only for GeoVision IP video devices, including GV-IP Camera, GV-Compact DVR and GV-Video Server.
 - The dongle options include: 4, 8, 12, 16, 20, 24, 28, 32 IP channels.
2. **NVR Dongle:** This is used for third-party IP devices.
 - The dongle options include: 1, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32 IP channels.
3. **Combo Dongle:** This is used for a mix of GeoVision and third-party IP video devices.

It is required to install drivers from the software CD for above three dongles to work.

The three dongles can be upgraded to include the AVP (Advanced Video Process) functions.

Hybrid Solution Description

1. **Specifications of the Hybrid solution.** The Hybrid solution provides you 8 free IP channels for GeoVision IP video devices, with the limit of 32 channels in total.

For example:

Number of analog channels + 8 free GV IP channels + Number of channels in USB dongle (NVR(GV), NVR or Combo Dongle) <= 32 channels.

2. **Connection of GeoVision IP devices to GV-System.** To receive the video streaming of 8 channels or less from GeoVision IP video devices, there is no need to use an extra USB dongle. If more than 8 GV IP channels are required, you need a NVR (GV) Dongle.

- The dongle options include: 4, 8, 12, 16, 20, 24 IP channels.

In this case, the total number of channels for your Hybrid system is: Number of analog channels + 8 free GV IP channels + Number of channels in your NVR (GV) Dongle <= 32 channels.

3. **Connection of third-party IP devices to GV-System.** To implement the Hybrid solution with third-party IP video devices, you need a **NVR Dongle**.
 - The dongle options include: 1, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32 IP channel(s).In this case, the total number of channels for your Hybrid system is: Number of analog channels (+ 8 free GV IP channels) + Number of channels in your **NVR Dongle** \leq 32 channels.
4. **Connection of both GV and third-party IP devices to GV-System.** To implement the Hybrid solution with a mix of GeoVision and third-party IP video devices, you need a **Combo Dongle**.
 - The dongle options are the combined options of **NVR (GV) Dongle** and **NVR Dongle**. Inform your sales representative the exact number of third-party IP channels and additional GV IP channels you need, so the **Combo Dongle** can be delivered upon your requirements.For example, you need 8 third-party IP channels plus 8 additional GV IP channels, so the number of channels in the requested Combo Dongle is 16. The total number of channels for your Hybrid system will be: Number of analog channels + 8 free GV IP channels + Number of channels in your **Combo Dongle** (e.g. 16) \leq 32 channels.

NVR Solution Description

1. **Specifications of the NVR solution:** When an appropriate USB dongle is attached to GV-NVR System, it can support up to 32 IP video channels.
2. **Connection of Geovision IP devices to GV-NVR.** To implement the GV-NVR solution with GeoVision IP video devices, you need a **NVR (GV) Dongle**.
 - Dongle options include: 4, 8, 12, 16, 20, 24, 28, 32 IP channels.
3. **Connection of third-party IP devices to GV-NVR.** To implement the GV-NVR solution with third-party IP video devices, you need a **NVR Dongle**.
 - Dongle options include: 1, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32 IP channel(s).
4. **Connection of both GV and third-party IP devices to GV-System.** To implement the NVR solution with a mix of GeoVision and third-party IP video devices, you need a **Combo Dongle**.
 - The dongle options are the combined options of **NVR (GV) Dongle** and **NVR Dongle**. Inform your sales representative of the exact number of GV IP channels and third-party IP channels you need, so the **Combo Dongle** can be delivered upon your requirements.For example, you need 12 GV IP channels plus 8 third-party IP channels. Therefore, the number of channels in the requested Combo Dongle is 20, and the total number of channels for your NVR system is 20.