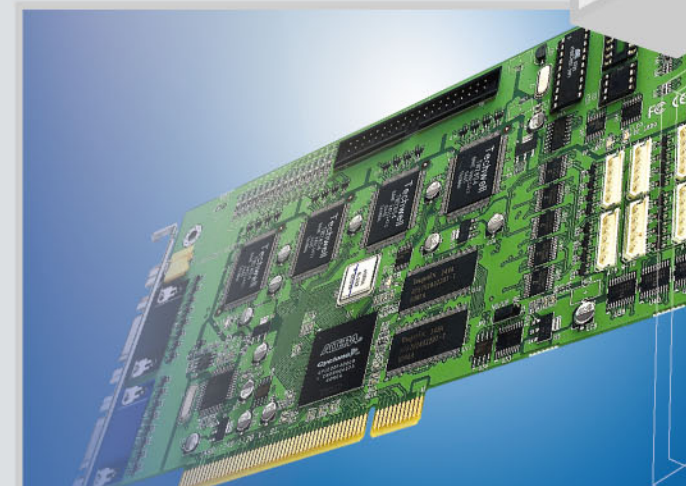


## 2006 Product Booklet Better Digital Surveillance System



### Headquarters

9F, No. 246, Sec. 1, Neihu Rd., Neihu District, Taipei, Taiwan 114, R.O.C.  
Tel: +886-2-8797-8377  
Fax: +886-2-8797-8335  
Email: sales@geovision.com.tw

### USA Vision Systems, Inc.

13766 Alton Parkway Suite 143, Irvine, CA 92618 USA  
Tel: +1-949-583-1519  
Fax: +1-949-583-1522  
Email: sales@usavisionsys.com

### GeoVision Japan Inc.

Tomoecho Annex 2 5F 3-8-27 Toranomom Minatoku, Tokyo 105-0001 Japan  
Tel: +81-3-5777-5268  
Fax: +81-3-5777-5269  
Email: sales@geovision.co.jp

[Http://www.geovision.com.tw](http://www.geovision.com.tw)

All specifications may change without prior notification  
© 2006 GeoVision Inc. All Rights Reserved  
All GeoVision Products Made in Taiwan



# Company Profile

## Company Profile

GeoVision started in 1998 as a video surveillance system developer, with the aim to become a leading total solution provider at digital surveillance field. Up to date, GV-series digital surveillance systems are selling to over 100 countries under GeoVision brand name. With our advantages in digital surveillance techniques, we are forging ahead to new fields of network DVR, network storage, and even video security service.

## Product Coverage

GeoVision digital surveillance system holds technical edges in networking accessibility, image processing, and hardware enhancements. We have developed sector-specific products with a wide interoperability into various fields including point-of-sales systems, license plate recognition systems, centralized monitoring systems, video servers, and access control-DVR systems.

## Product Roadmap

GeoVision futuristic plan will focus on two new but challenging categories in the security industry, one is network DVR development and the other is video security service.

Network DVR covers an extension of centralized monitoring services of no boundaries, enabling video, audio and data transmission over the Internet to GeoVision's Central Monitoring Station, I/O Central Panel, and 3G handheld devices. A well-designed network storage algorithm will enable a large scale of data storage over the Internet, improving the data storage quality on all GV-systems.

Video Security Service is a revolutionary business model for security centers and home care centers. The GeoVision Security Service utilizes Ethernet transmission techniques, wireless sensor devices and GV-Video Servers to extensively lower operation cost and raise security efficiency. It will open a new market for commercial and residential uses.

## Our Patents and Awards Gallery

### Patents

**Oct. 2001 Taiwan Patent, No. 135537**

Security system activated and deactivated by image variation.

**Nov. 2002 USA Patent, No. 6477314-B1**

Method of recording image data, and computer system capable of recording image data.



## Combo Card

Model	GV - 1120	GV - 1240	GV - 1480
Recording Rate	120 FPS (NTSC), 100 FPS (PAL)	240 FPS (NTSC), 200 FPS (PAL)	480 FPS (NTSC), 400 FPS (PAL)
Display Rate	480 FPS (NTSC), 400 FPS (PAL)		
Video Input(s)	8, 12, 16	8, 16	16
Audio Input(s)	8, 12, 16	8, 16	16
TV Output	RCA Connector x 1		
Input Type	• DVI • D - Type		
Compression Format	Wavelet, MPEG-4, Geo MPEG-4, Geo MPEG-4 ASP, Geo H264		
Video Resolution	D1, Half D1, CIF		



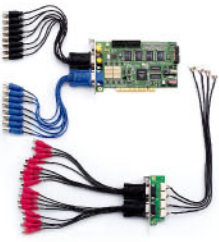
PCI Express Dsub - Type  
212 (W) x 99 (H) mm



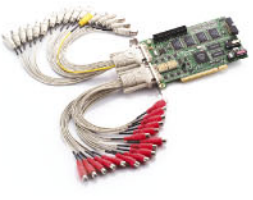
PCI Dsub - Type  
170 (W) x 95 (H) mm



PCI DVI - Type  
165 (W) x 95 (H) mm



Dsub - Type



DVI - Type





## Hardware Compression Card



### GV - 2004

#### New



<b>Recording Rate</b>	D1@120 FPS (NTSC), D1@100 FPS (PAL)
<b>Display Rate</b>	120 FPS (NTSC), 100 FPS (PAL)
<b>Input Type</b>	DB15 (for Video & Audio)
<b>Video Input(s)</b>	4 Cams
<b>Audio Input(s)</b>	4 Channels
<b>TV Output</b>	RCA Connector x 1
<b>Compression Format</b>	S/W : Geo MPEG4, Geo MPEG4 (ASP) Geo H264
<b>Video Resolution</b>	H/W : MPEG-2 / MPEG-4 D1, Half D1, CIF
<b>Dimensions</b>	195 (W) x 102 (H) mm

### GV - 2008

#### New



<b>Recording Rate</b>	D1@240 FPS (NTSC), D1@200 FPS (PAL)
<b>Display Rate</b>	240 FPS (NTSC), 200 FPS (PAL)
<b>Input Type</b>	DB15 x 2 (for Video & Audio)
<b>Video Input(s)</b>	8 Cams
<b>Audio Input(s)</b>	8 Channels
<b>TV Output</b>	RCA Connector x 1
<b>Compression Format</b>	S/W : Geo MPEG4, Geo MPEG4 (ASP) Geo H264
<b>Video Resolution</b>	H/W : MPEG-2 / MPEG-4 D1, Half D1, CIF
<b>Dimensions</b>	240 (W) x 102 (H) mm

## Capture Card



### GV - 800



<b>Recording Rate</b>	120 FPS (NTSC), 100 FPS (PAL)
<b>Display Rate</b>	120 FPS (NTSC), 100 FPS (PAL)
<b>Input Type</b>	BNC: BNC X 4 / D-Type: DB15 X 2
<b>Video Input(s)</b>	4, 8, 12, 16 Cams
<b>Audio Input(s)</b>	4 Channels
<b>Compression Format</b>	Wavelet, MPEG-4, Geo MPEG-4, Geo MPEG-4 ASP, Geo H264
<b>Video Resolution</b>	D1, Half D1, CIF
<b>Dimensions</b>	175 (W) x 98 (H) mm

### GV - 650



<b>Recording Rate</b>	60 FPS (NTSC), 50 FPS (PAL)
<b>Display Rate</b>	60 FPS (NTSC), 50 FPS (PAL)
<b>Input Type</b>	BNC X 4 / D-Type: DB15 X 2
<b>Video Input(s)</b>	4, 8, 12, 16 Cams
<b>Audio Input(s)</b>	2 Channels
<b>Compression Format</b>	Wavelet, MPEG-4, Geo MPEG-4, Geo MPEG-4 ASP, Geo H264
<b>Video Resolution</b>	D1, Half D1, CIF
<b>Dimensions</b>	175 (W) x 98 (H) mm

### GV - 600



<b>Recording Rate</b>	30 FPS (NTSC), 25 FPS (PAL)
<b>Display Rate</b>	30 FPS (NTSC), 25 FPS (PAL)
<b>Input Type</b>	BNC: BNC X 4 / D-Type: DB15 X 2
<b>Video Input(s)</b>	4, 6, 8, 10, 12, 14, 16 Cams
<b>Audio Input(s)</b>	1 Channel
<b>Compression Format</b>	Wavelet, MPEG-4, Geo MPEG-4, Geo MPEG-4 ASP, Geo H264
<b>Video Resolution</b>	D1, Half D1, CIF
<b>Dimensions</b>	145 (W) x 97 (H) mm

### GV - 250



<b>Recording Rate</b>	15 FPS (NTSC), 12 FPS (PAL)
<b>Display Rate</b>	15 FPS (NTSC), 12 FPS (PAL)
<b>Input Type</b>	BNC: BNC X 4 / D-Type: DB15 X 2
<b>Video Input(s)</b>	1, 2, 4, 6, 8, 12, 16 Cams
<b>Audio Input(s)</b>	1 Channel
<b>Compression Format</b>	Wavelet, MPEG-4, Geo MPEG-4, Geo MPEG-4 ASP, Geo H264
<b>Video Resolution</b>	D1, Half D1, CIF
<b>Dimensions</b>	BNC: 120 (W) x 95 (H) mm D-Type: 120 (W) x 87 (H) mm



Accessory  
(Card)



GV - NET CARD



**Introduction**  
RS-232 to PC  
RS-485 (+/-)

**Dimensions**

RS-232 to RS-485 Signal Converter  
RJ-11 to DB9 Female Cable  
Connect to GV-IO/PT-811 RS-485+  
Dome Camera RS-485(+/-)  
88 (W) x 99 (H) mm

GV - NET / IO CARD



**Introduction**  
RS-232 to PC  
RS-485 (+/-)

**Input**  
**Relay Output**  
**Relay Capacitance**  
**Dimensions**

RS-232 to RS-485 Signal Converter  
RJ-11 to DB9 Female Cable  
Connect to GV-IO/PT-811 RS-485+  
Dome Camera RS-485(+/-)  
4 (Dry Contact / TTL)  
4 (Normal Open)  
2A / 30V DC; 0.25A / (250V) AC  
88 (W) x 99 (H) mm

GV - IO 12-IN CARD



**Introduction**

**Input**  
**Dimensions**

GV-NET I/O CARD with 12 Points  
Digital Input Interface  
12 (Dry Contact / TTL)  
64 (W) x 99 (H) mm

GV - IO 12-OUT CARD



**Introduction**

**Relay Output**  
**Relay Capacitance**  
**Dimensions**

GV-NET I/O CARD with 12 Points  
Relay Output Interface  
12 (Normal Open)  
2A / 30V DC; 0.25A / 250AC  
107 (W) x 99 (H) mm

Accessory  
(Card)



GV - LOOP THROUGH CARD



**Introduction**

**Interface**  
**Output Interface**

**Input Signal**  
**Dimensions**

Without internal processing, video signals  
can be taken directly from GV-Series  
Capture Card and split into 16 channels  
while maintaining video quality.  
2 x 40-Pin Connector  
2 x 15-Pin D-type  
1 x 40-Pin Connector  
16 Channels  
130 (W) x 98 (H) mm

GV - MULTI QUAD

New



**Introduction**

**Interface for GV-Video**  
**Capture Card**

**TV Output**

**Input Signal**

**TV Monitor Layout**

**Compatible Model**

**Dimensions**

Design to alert through 5 additional TV  
screens. One is the main monitors and  
the other 4 are call monitors.  
40-Pin Connector  
DB15 to 5 BNC Connectors with 5 RCA  
video connector  
16 Channels  
Port 1: 1/4/6/8/10/12/16 screen division  
with scan and call function  
Port 2 ~ Port 5: Quad display or single  
channel selection with  
scan and call function  
GV-250, GV-600, GV-650, GV-800, GV-900,  
GV-11120, GV-1240 , GV-1480, GV2004, GV2008  
178 (W) x 104 (H) mm

## Accessory (Box)

### GV - I/O



**Introduction**  
**RS-485 (+/-)**  
**Input**  
**Relay Output**  
**Output Circuit**  
**Dimensions**

Provides 8 digital inputs and 16 digital outputs  
Connect to GV-NET RS-485 ( $\pm$ )  
8 (Dry Contact)  
16 Connection Points (For 2 x GV-Relay)  
TTL Open Collect  
202 (W) x 39 (H) x 166 (D) mm

### GV - RELAY



**Introduction**  
**Relay Output**  
**Relay Control Source**  
**Relay Status**  
**Relay Capacitance**  
**Dimensions**

Provides 8 digital relays outputs, controls alarms or PTZ cameras and connects to the control source of GV-I/O output  
RL1~RL8  
+5V, D01~D08 Connection Output of GV-I/O  
Normal Open  
6A / 250V AC; 10A / 125V AC; 5A / 28V DC  
202 (W) x 39 (H) x 166 (D) mm

### GV - COM

**New**



**Introduction**  
**Dimensions**

Adds 1 RS-232/ RS-485 serial ports to PC's USB port, suits for instrumentation and POS applications  
103 (W) x 32 (H) x 64 (D) mm

### GV - HUB



**Introduction**  
**Dimensions**

Adds 4 RS-232 / 4 RS-485 serial ports to PC's USB port, suits for instrumentation and POS applications  
103 (W) x 309 (H) x 125 (D) mm

### GV - Keyboard



**Introduction**  
**Output**  
**Dimensions**

Used to program, operate, and control up to 16 GV-Systems through RS-485  
RS-232 DB9 Female, USB1.1, RS-485 ( $\pm$ )  
300 (W) x 45 (H) x 161 (D) mm

### GV - IR Remote Control



**Introduction**  
**Dimensions**

Controls GV-Systems  
53 (W) x 28 (H) x 185 (D) mm



## Accessory (Box)

### GV - DATA CAPTURE V3E



**Introduction**

The GV-Data Capture V3E is the integration of POS systems and GV-System through Ethernet

**Input**

**Connector**  
DB9 Female  
DB25 Male/Parallel Port

**Function**  
RS-232 from POS  
RS-232 from POS/  
Parallel Port from POS

**Output**

DB9 Male  
DB25 Female /Parallel Port  
DB9 Female  
RJ-45  
RS-485+  
RS-485-

RS-232 to Printer  
RS-232 to Printer /  
Parallel Port to Printer  
RS-232 to DVR  
RJ-45 to DVR  
Connect to GV-NET /  
GV-Hub/GV-Com RS-485+  
Connect to GV-NET /  
GV-Hub/GV-Com RS-485-

**DC IN**

Power Adapter DC5V, 2A Inner Positive

**Dimensions**

161 (W) x 34 (H) x 123 (D) mm



### GV-WIEGAND CAPTURE



**Introduction**

The GV-Wiegand Capture is the integration of Access Control System to GV-System

**Communication**

RS-232  
RS-485

DB9 Female  
Terminal Block

**Input**

Input  
Input Signal  
High State  
Low State

2  
12V Voltage input / dry-  
connect input  
9~12V / close  
0V / open

**Output**

Relay  
Relay Status  
Relay Capacitance  
Relay ON Time  
Relay OFF Time

Output 2  
Normal Open  
3A / VAC125V, 1.5A / VAC250V  
4ms  
4ms

**Wiegand**

Input Connector  
Output Connector  
Format

12V, D0, D1, GND  
12V, D0, D1, GND  
Wiegand 26 Bits~40 Bits

**DC IN**

DC 12V, 1A

**Dimensions**

120 (W) x 68 (H) x 26 (D) mm



# GV - Series

## Digital Video Surveillance System

GV-Series Surveillance System is designed to process video, audio, and data from local and remote networked surveillance environment. It utilizes the most advanced digital video compression and processing technologies to generate superior video quality. Since GV-Series solution is PC-based, users can customize their systems for different surveillance needs. The TCP / IP networking capability enables video / audio data to be tranferred over the Internet to WebCam, 3G mobile phone, PDA, or GeoVision's remote monitoring applications.



### Monitor Viewing

- Wavelet, MPEG-4, Geo MPEG-4, Geo MPEG-4 ASP, Geo H264
- Motion detection & Advanced motion detection
- Full screen view
- Object counting / Object tracking
- Video mask protection / Privacy mask
- Scene change detection
- Video de-interlace filter
- Synchronized 16 channels of video and audio
- Supports multi level passwords protection
- Customizes system features (Group function)
- Embedded I/O devices control
- Embedded PTZ control panel
- Supports dynamic IP address
- Swap HDD utility
- Spot monitor
- Latch trigger
- System idle protection
- I/O configuration / Advanced I/O panel
- Selectable interface
- Settings backup and restoration
- Supports 3GPP for 3G mobile
- Digital watermark
- E-map

### Smart Search & Easy Playback

- Full screen view / Instant playback
- Object search & Index search (with Audio)
- Thumbnail browsing
- Time merge / Exporting privacy mask
- Synchronized audio and video
- Playback through Network
- Save Preview

### IT Technology

- RSA Network Security
- Authentication Server
- SSL Network Security

### Recording

- Real-time recording
- Recording runs on round-the-clock, motion detection, alarm and schedule
- Adjustable recording quality and frame rate
- Pre-motion and post-motion recording
- Supports Windows XP / Server 2003 burning software
- HDD Calculator
- Pre-recording using HDD

### Notification

- E-mail or telephone alerts
- Video lost or I/O error alerts
- SMS alerts / Directs PTZ dome to a preset location

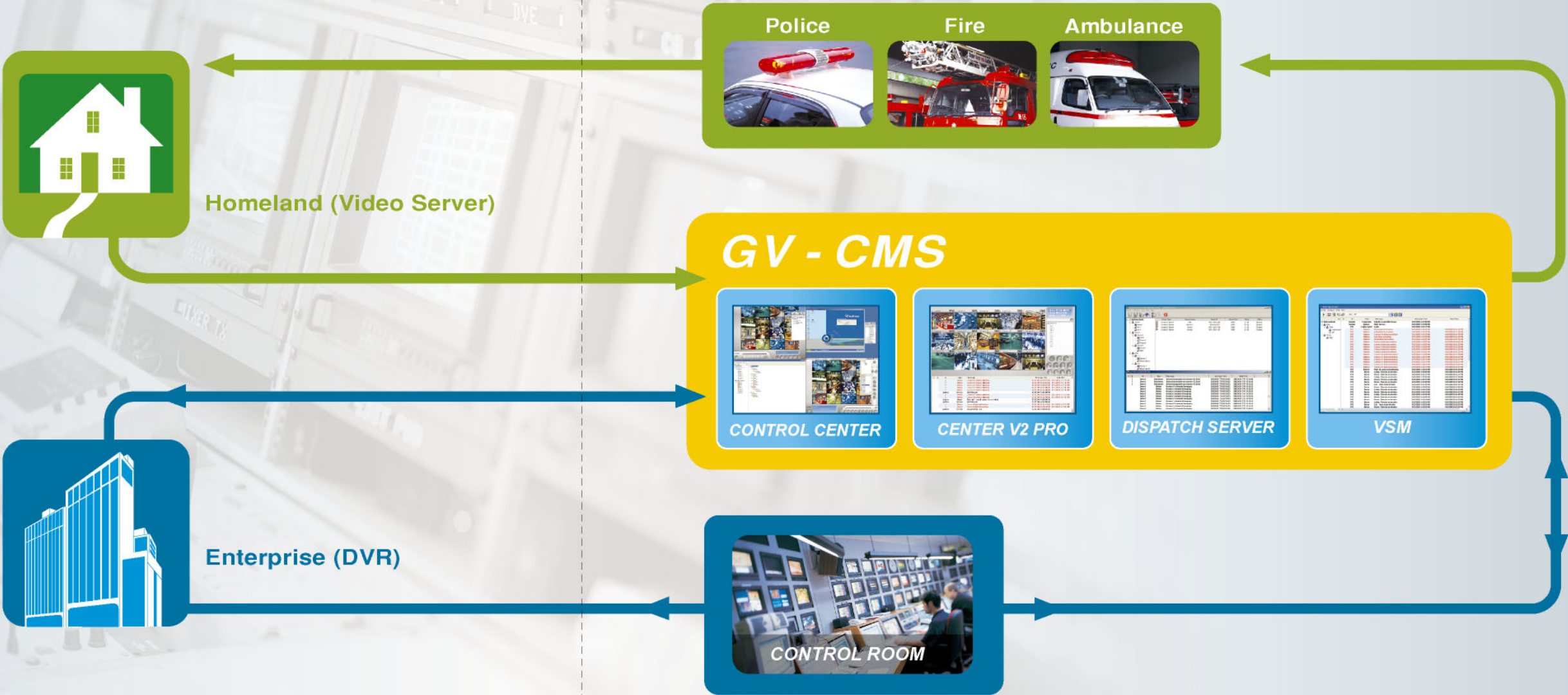
### WebCam & Remote Playback

- Single view & multi view
- User-definable bandwidth control
- Remote control of PTZ domes and I/O devices
- Two-way audio communication
- Remote access to video and audio files
- UPnP compatible
- 32 channels of remote playback
- Address book
- Video archive by Date / Time / Cameras
- Advanced search function



GV - CMS

The GeoVision Central Monitoring Station program provides an overall central monitoring solution for high-profile security areas in commercial, industrial and residential use markets. The Center V2 Pro, VSM, Dispatch Server, and Control Center modules combined with the GV-System create an extremely powerful and cost effective Central Monitoring Station. These modules efficiently manage multiple GV-System subscribers, receive and record video images for evidence, reduce false alarms, instantly output alarms to alert authorities, and maintain full event list for retrievals, all from one point of control.



Center V2 Pro

- Provides 5 subscribers version for FREE
- Increases up to 500 subscribers with the Professional version
- Receives real-time videos & events notification from subscriber (DVRs)
- Events are sorted into 21 notification types
- Remote control I/O status (Activation/Trigger)
- SMS, Email notification
- Subscriber's activities report for analysis

Control Center

- Remote DVR
- Remote Desktop
- Remote ViewLog
- Matrix (Remote Live View of 256 cameras)
- I/O Central Panel (Remote I/O configuration)

Vital Sign Monitor (VSM)

- Servers up to 1,000 Subscribers
- Receives real-time events notification from subscriber (DVRs)
- Events are sorted into 21 notification types.
- Remote control I/O status (Activation/Trigger)
- SMS, Email notification
- Subscriber's activities report for analysis

Dispatch Server

- Distributes network load among Center V2s
- Supports up to 25,000 subscribers
- Streamlines Networking Processes



## GV - System

### GV - System



<b>GV-1480S</b>	16 Cams	900GB / 1200GB / 1600GB
<b>GV-1240S</b>	16 Cams	600GB / 1200GB / 1600GB
	8 Cams	600GB / 1200GB / 1600GB
<b>GV-1120S</b>	16 Cams	300GB / 600GB / 1200GB

- Operates on Windows XP Professional (Embedded System)

**Dimensions (W x H x D)** 483 x 178 x 528 (mm)

### GV-System (Hot-Swap)

### New



<b>GV-1480H</b>	16 Cams	4 Bays / 8 Bays
<b>GV-1240H</b>	16 Cams	4 Bays / 8 Bays
	8 Cams	4 Bays / 8 Bays
<b>GV-1120H</b>	16 Cams	4 Bays / 8 Bays

- Maximum Storage Capacity of more than 4 Terabytes
- Operates on Windows XP Professional (Embedded System)

**Dimensions (W x H x D)** 483 x 178 x 528 (mm)

### GV-Mini DVR System

### New



<b>GV-1240M</b>	16 Cams	Compact size of 60% less than a traditional 4U rackmount DVR
<b>GV-1120M</b>	16 Cams	Dual gigabit LAN

**Dimensions (W x H x D)** 360 x 78 x 285 (mm)

### GV-NVR System

### New



- Built-in 8 Hot-Swap Trays
- Choose from RAID 0,1,10,5,50 Configurations
- Maximum Storage Capacity of 3.5 Terabytes with 500G HDD RAID5, External HDD Accessible
- Automatic Detection of Failed Hard Drives
- Dual Gigabit LAN
- Monitoring HDD Recording Health Status (SMART)

**Dimensions (W x H x D)** 483 x 178 x 528 (mm)

### GV-Standalone DVR

### New



Dual Stream, Adjustable Bandwidth Control  
Supports 3GPP & PTZ Domes and Cameras  
External Storage  
Wireless Support 802.11 b/g

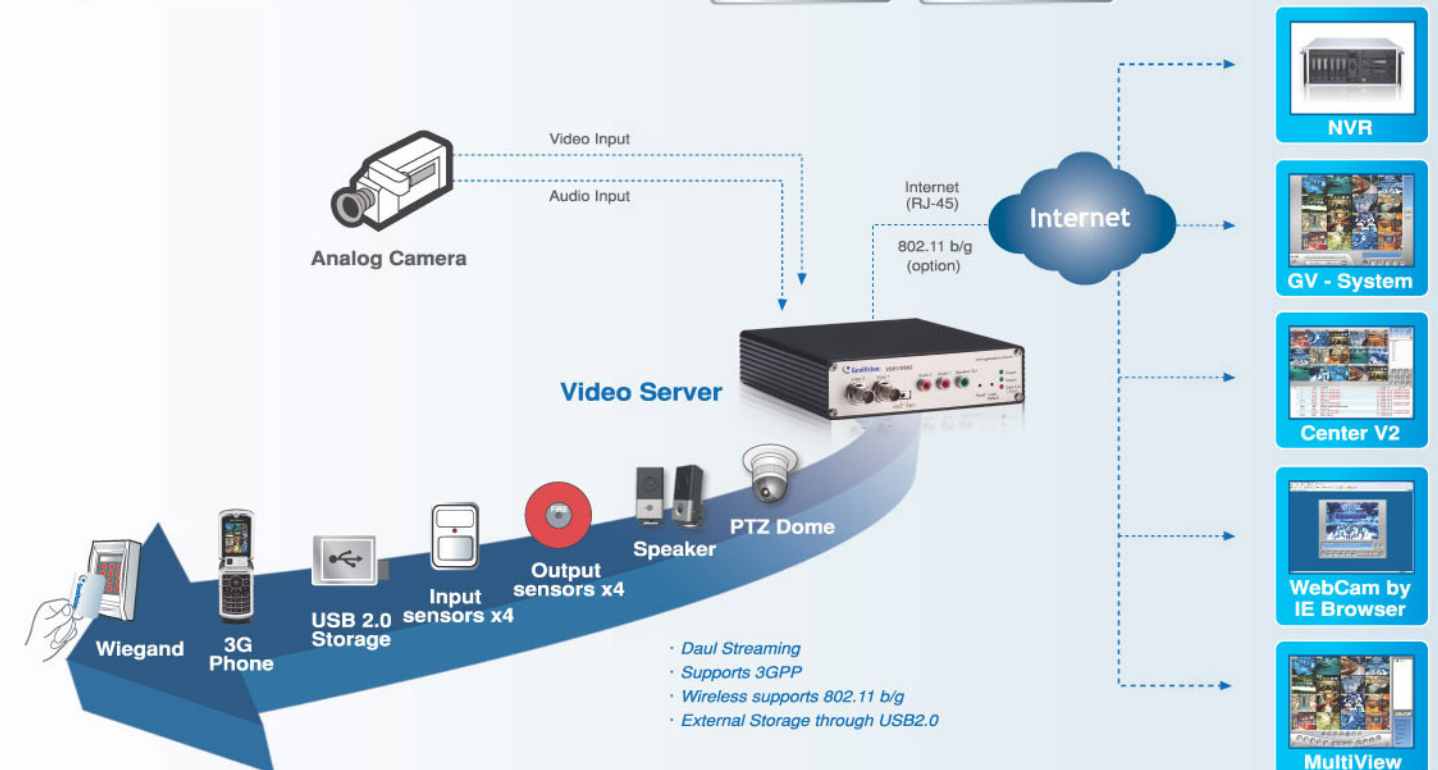
**Dimensions (W x H x D)** 430 x 80 x 320 (mm)

## GV - Video Server



GV-Video Servers is a simple video converter for existing analog CCTV system into advanced IP surveillance system. Each video server digitizes one or two analog video signals and compresses them into MPEG4 ASP and sends these crisp clear full D1 streams using small bandwidth over an IP network. These streams will be captured, analyzed and processed by GV-Multicam and distributed to a centralized security center like GV-Center V2 with VSM. Thanks to built-in DUAL Streaming Engine you can remotely access on the road at anytime and anywhere using a 3G/UMTS Mobile Phone and save the video streams simultaneously to a NVR.

### Connection Diagram

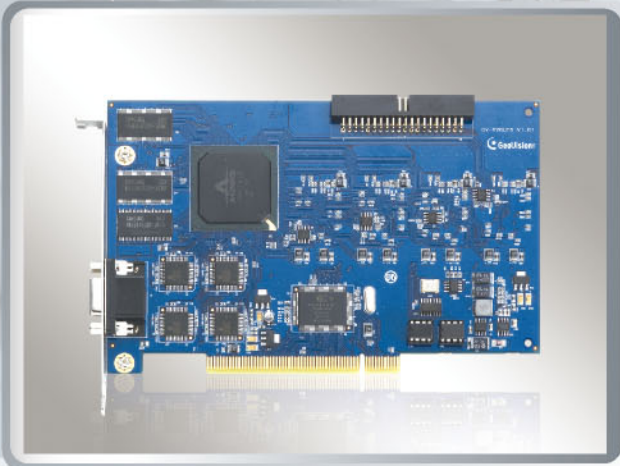


### Applications

- Home
- Retail
- Enterprise
- Industry
- Utility
- Stadium
- Education
- Healthcare



# GV - Multi Quad Solution



GV-Multi Quad is designed to alert security personal visually through 5 additional TV screens. The primary screen also known as Main Monitor can be configured into Single or up to 16 Screen Division. The secondary screen(s) also known as Call monitor (up to four TVs) display in Single or Quad division. These Call monitors are mainly used for Visual Alert upon Motion Detection or Digital I/O trigger and switch to Full Screen of the happening scene immediately.

## Connection Diagram



Call Monitor 1



Call Monitor 3



Main Monitor

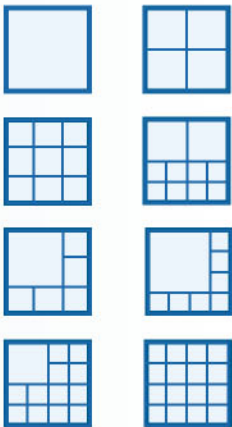


Call Monitor 2



Call Monitor 4

\* Main Monitor  
8 Display style



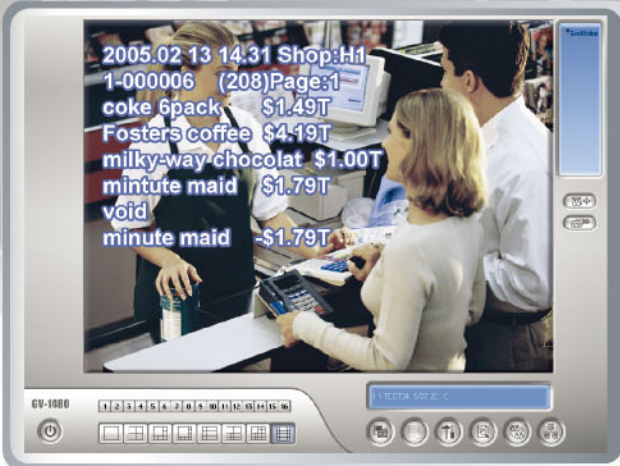
\* Call Monitor  
2 Display style



## Applications

- Central Monitoring Station
- Traffic Control
- Tunnel
- Casio
- Shopping Mall
- Border Control
- Resort
- Stadium

# GV - POS DVR Integration Solution



GV POS-DVR solution provides a number of video monitoring solutions with visual contextual awareness that can help business owners protect their business as well as reduce shrinkage. In addition to cash registers and POS systems, GV POS-DVR system provides a flexibility to integrate with many machines or equipments that provide context information.



Quick Search    Advanced Search    POS Live View    Object Search

## Connection Diagram

### Cashier Area

POS SYSTEM

Printer



GV-SYSTEM

Internet

E-mail

SMS

### Remote Monitoring Site

PDA Live Monitoring

Mobile Live Monitoring

GV-WebCam

Live Video /Audio Monitoring

Store Owner

## Applications

- Convenience Stores
- Retail Stores
- Restaurants
- Gas Stations
- Grocery Stores
- Parking Lot Toll Booths
- Banks
- Kiosks

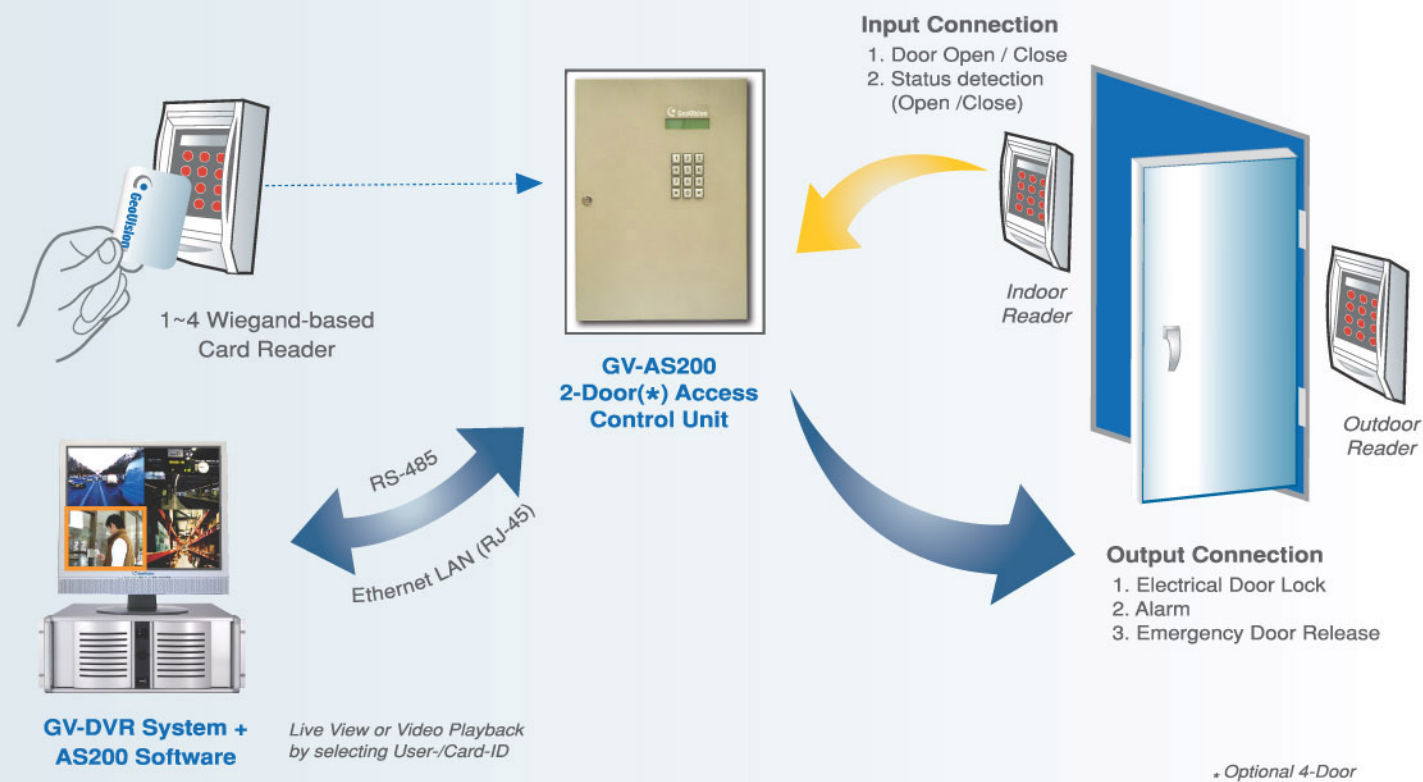


## GV - Access Control Solution



GV-AS200 features a 2-door powerful access control and maximum security management solutions for organizations requiring up to 10,000 card holders. Each door can be configured with a unique access right to prevent external breach penetration. To assure the reliability of information, GV-AS200 implements FeRAM for data storage.

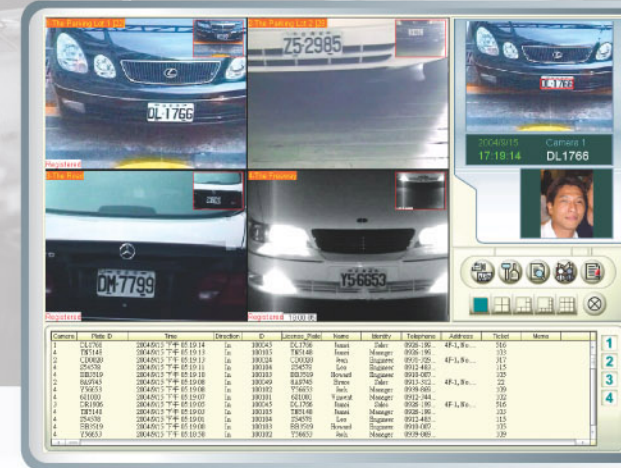
### Connection Diagram



### Key Features

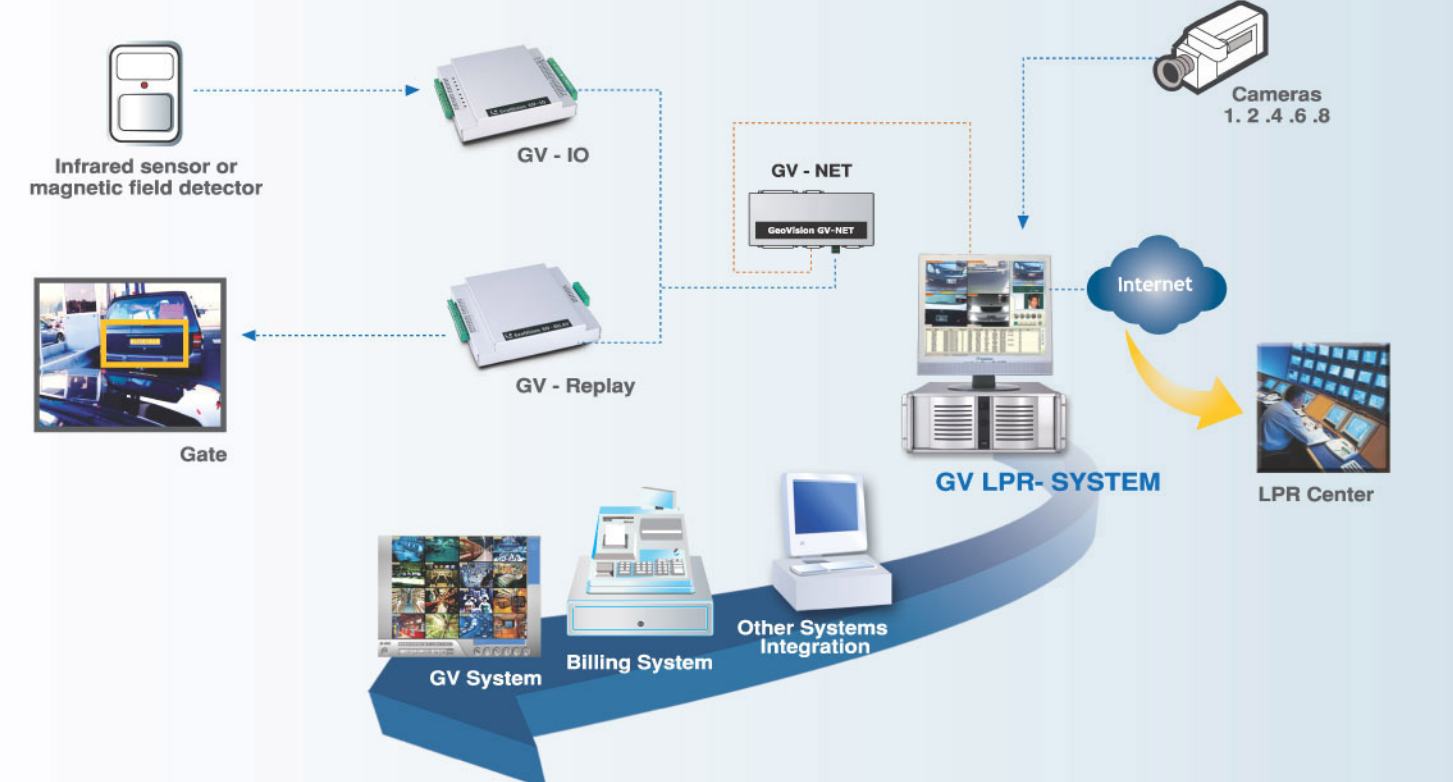
- Seamless integration with GV-DVR System
- Video overlay with card-ID, name of card holder and related information
- Smart search
- 2-door access control system (upgradeable to 4-door)
- Six advanced working scenarios
- Easy connectivity to Wiegand interface card readers
- Ethernet / LAN / Internet Support
- Supports Web base interface

## GV - LPR License Plate Recognition



GV-LPR is a digital license plate recognition system that utilizes Neural Network Technology of artificial intelligence to identify vehicle license plates. It comprises a video capture card to acquire images, a software-based engine to recognize characters, a set of I/O modules to integrate with alarm and sensors, and a database to store images for event retrieval or analysis. 1,2,4,6 and 8-lane real-time recognition are available.

### Connection Diagram



### Applications

- Parking lot management
- Enterprise entrance management
- Automatic toll collection enforcement
- Traffic enforcement statistics
- Border surveillance
- Stolen vehicle search