

GV-LPR

Licence Plate Recognition



INTRODUCTION

The GV-LPR solution is an effective video security and parking monitoring solution that can enforce parking lot security. Many parking lots security are rated high risk due to their poor response to crimes and the common nature of parking lot incidents. Isolated corners or levels of a large lot make it difficult for security officers to patrol and monitor. To provide security and assurance to customers and employees, parking lots need high efficiency digital surveillance systems that provide live monitoring and continuous recording to enhance lots security and surveillance efficiency.

The GV-LPR system provides high-resolution video monitoring and recording at good quality. When emergency intercoms are activated or panic buttons pushed, the parking attendants can judge the situation from the live view and respond correctly. The GV-LPR is a reliable security surveillance system that is high on recording performance and low on maintenance.

RECOGNITION

GV-LPR activates recognition process in two ways. One is by software video motion detection, which detects vehicles passing through the camera and illuminator zone. Second is by I/O activation, which the action triggers recognition and recording on I/O activation. The system supports two view modes including Camera Overview and Picture-in-Picture with ease of monitoring.

BENEFITS

Unlike conventional surveillance systems which simply act as a security monitoring tool, the GV-LPR system incorporates several intelligent features for customer service and lots marketing tools. For example, parking managers can utilize database function of the GV-LPR to acquire analysis of lot utilization rate, such as vehicule counting, monthly parking frequency, or average parking time during holiday/weekday or at daytime/nighttime. The database function is an ideal tool for parking lot managers because it facilitates effective utilization of parking space.

By integrating with POS system, the GV-LPR will associate videos with data including license plate numbers, car entry/exit time, parking fee, and capture the driver's face, car type and the lot toll booth's cash register area as well. In case of fraud ticket or cash shrinkage investigation, parking managers can search for videos by any data available to expedite dispute settlement and increase the toll income.

The GV-LPR provides multiple I/O connections to external devices such as gate controller, loop detector, or TITO system, as well as integrations to GV-Series DVR. Parking lot managers can use flexible integration according to their specific needs in parking management. When the TITO system is used and the CCTV cameras are installed in each area and floor of the parking lot, the GV-LPR provides a very useful function that helps drivers find their parking location. The entry/exit time, parking fee, license numbers, parking locale will be printed on the parking receipt. When the driver is ready to take his car and leave, he can refer to the ticket to remember where he parked his car.

KEY FEATURES

- ▶ High recognition rate: 99% (at best performance)
- ▶ High recognition speed: < 0.2 second
- ▶ Support up to 8 I/O Trigger or 4 Motion Detection lanes
- ▶ Support Hardware Watchdog
- ▶ Support image up to 720 x 480 (NTSC) / 720 x 576 (PAL) providing higher accuracy
- ▶ Integrate with GV-series DVR to retrieve video footage by license plate number
- ▶ Vehicle counter feature tracks number of vehicles remaining in the parking lot by counting vehicles entering and exiting the gate
- ▶ Camera overview brings focuses on either the vehicle or the driver
- ▶ License plate recognition database are processed and stored in Microsoft Access Database for easy and multiple applications
- ▶ Multiple recognition technology is applied until a recognition result is reached
- ▶ Alarm will be triggered when an unauthorized or unrecognizable vehicle is spotted
- ▶ Picture-in-Picture window provides camera overview and the last recognized image
- ▶ Video or AVI file is used as recognition input source
- ▶ Digital watermark technology is applied to verify authenticity of video clips
- ▶ Text overlay displays license plate numbers on recorded video image
- ▶ Activate recognition by sensor triggers, video motion detection or Hot Key
- ▶ Recognition result triggers I/O Relay or user-defined application
- ▶ Recognize and display license plate image registered in database
- ▶ Retrievable vehicle entry and exit records by license plate number
- ▶ JPEG format support allows approximately 2 million JPEG images to be saved in a 160 GB HDD
- ▶ Auto recycle for image storage and database backup

SPECIFICATIONS

Models	GV-LPR-1	GV-LPR-2	GV-LPR-4	GV-LPR-6	GV-LPR-8
Number of Lanes	1	2	4	6	8
Total FPS	30 FPS	60 FPS	120 FPS	240 FPS	240 FPS
FPS / Camera	30 FPS				
Image Format	JPEG				
CPU	Core2 Duo E6300 / 1.86 GHz	Intel Core2 Duo E6600 / 2.4 GHz	Intel Core2 Duo E6600 / 2.4 GHz	Intel i7920 2.67 GHz	Intel i7920 2.67 GHz
OS Supported	Windows 2000 / Windows XP / Windows Server 2003 / Windows Vista (Not support 64-bit version of Windows)				
HDD	250 GB	250 GB	250 GB	250 GB	250 GB
RAM	DDR2 1GB	DDR2 2GB	DDR2 2GB	DDR3 1333 2GB	DDR3 1333 2GB

Note: Video Motion Detection mode only supports up to 4 lanes. Each lane needs 30 FPS. Minimum requirement for I/O Trigger Mode is 15 FPS each lane.

CAMERA REQUIREMENTS

Illumination	0.05 LUX or lower
Minimum Resolution	480 Horizontal Line
Auto Electronic Shutter	1 / 60 ~ 1 / 100,000 sec
Auto White Balance Compensation	Required
Backlight Compensation	Required

ACCESSORY



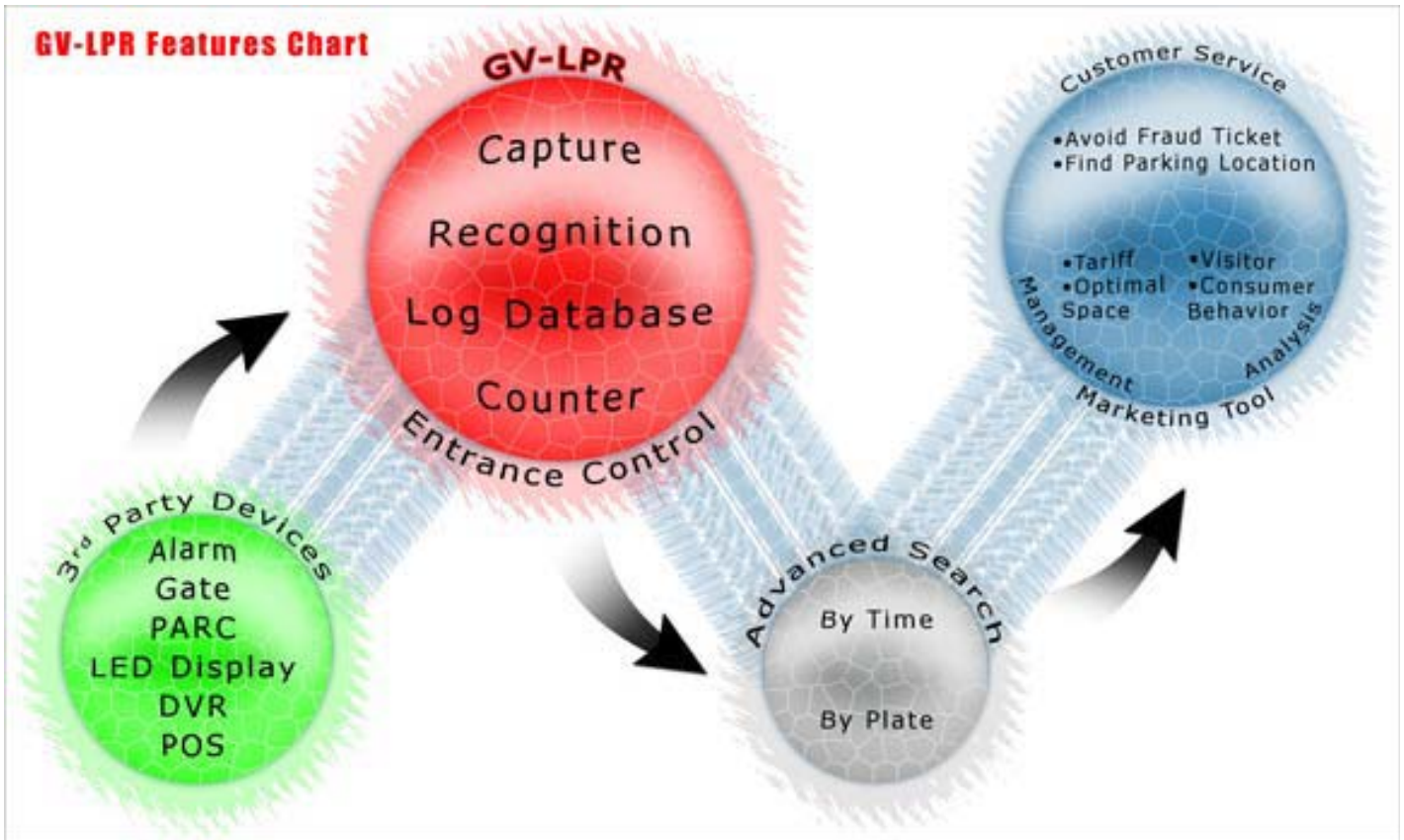
GV-NET Card V3.1



GV-IO Box 4/8/16 ports



GV-IRCAM10/20



GV-LPR is composed of:

- **GV-LPR** application for 1 to 8 cameras
- **GV-DSP LPR** for mobile recognition
- **GV-LPR Center** to manage multiple GV-LPR or GV-DSP LPR clients

All of the above GV-LPR applications compose a comprehensive and sophisticated solution.

AVAILABLE VERSION (Analog Camera)

Australia	Austria	Belgium	Brazil	Canada	Chile
China	Columbia	Croatia	Cyprus	Czech Republic	France
Germany	Guernsey	Hong Kong	Hungary	Ireland	Israel
Italy	Malaysia	Mexico	Norway	Poland	Portugal
Saudi Arabia	Serbia	Slovenia	South Africa	Spain	Taiwan
Thailand	Turkey	UAE	UK	USA	

Supported IP Camera Recognition

Australia	Brazil	Chile	China	Czech	HongKong
Israel	Italy	Mexico	Portugal	SouthAfrica	Spain.
Taiwan	UK	USA			

GV-LPR Solution

