



GV-LPR

LICENSE PLATE RECOGNITION

Technology

The GV-LPR system is a digital license plate recognition system that utilizes Neural Network Technology of artificial intelligence to identify license plate numbers on vehicles. The GV-LPR captures the license plate images, locates the numbers and characters on images and then utilizes optical character recognition (OCR) to translate pictures of numbers and characters into electronic text.

The GV-LPR system performs license plate recognition by approaches of software motion detection and I/O activation. Systems with one to four cameras installed can utilize the software motion detection mode to constantly monitor vehicles. When a moving vehicle is captured, the associated camera is automatically triggered to start the recognition process. Systems with up to eight cameras installed can use I/O activation mode to trigger recognition and recording when the monitored vehicles are passing through magnetic loop detectors, overhead laser scanners or infrared sensors.

Recognition

The GV-LPR system can reach a 99% recognition rate, without making distinction in the environment conditions or in the state of conservation of the plates. The GV-LPR system can recognize license plates of more than 20 countries.

Applications

GV-LPR system can easily capture passing license plate numbers on any vehicle and check against the database. Any matches are automatically displayed on the monitor and notification alarms are sent with the matches. The superiority in the database matches and integration empowers the GV-LPR to be implemented in many applications, which differ widely in the way they use the recognized plate numbers.

- Vehicle theft control
- Vehicle security & anti-terrorism
- Vehicle recognition database
- Vehicle access control
- Traffic management & control
- Toll collection enforcement
- Stolen vehicle search & tracking
- Parking lot management
- Office building security
- Marketing tools
- Logistics management operation
- Entrance control
- Drive-off prevention
- Database with average speed & journey time
- Customer relationship management
- Congestion charge scheme
- Border surveillance

Integration

Thanks to the software capabilities and hardware support from GeoVision, the GV-LPR provides seamless integration of 3rd party equipment and simplifies complicated tasks.

- Integrate with GeoVision DVR
- Integrate with GeoVision POS DVR
- Integrate with GeoVision Central Monitoring Software
- Integrate with CCTV
- Integrate with Ticket System
- Integrate with Access Control System

Solution

The use of GeoVision license plate recognition solutions has expanded impressively into several areas, generating superior recognition results with satisfactory operation performance. The comprehensive LPR solutions are ranged from PC based to Embedded LPR systems, and include specialized equipment and central management.

GV-LPR PC Based Solution



GV-LPR PC based solution creates a scalable and customized solution for business, government sites and car park management. The PC Windows-based solution is composed of a video capture card and LPR software. The solution features user friendly GUI, speedy recognition time, high accuracy rate, and flexible hard disk storage capacity. The system allows license plate recognition results to be exported through file, or RS232 interface, while being accessed simultaneously through the built-in database with backup images being output using JPEG. A variety of camera channel-number options of 1, 2, 4, 6, 8 are available for various installation requirements.

GV-LPR Center Management



GV-LPR Center Management is a centralized GV-LPR management for up to 4,080 lanes. In addition to receiving images from the LPR clients into the central interface, the GV-LPR Center Management receives recognition result and the same monitoring live view as the LPR clients. To convenience the operators to track events, the GV-LPR Center Management provides a full event list and a web-based central recognition database for detailed search. The database interface facilitates search criteria editing and the database updates can be simultaneously distributed to LPR clients. This tool is best for 365/24/7 live monitoring, remote operation, and remote control of multiple GV-LPR sites.

GV-LPR Embedded Solution



The GV-LPR embedded solution offers a compact alternative to the PC based GV-LPR. It supports up to 2 lanes for recognition, monitoring, and recording. The embedded GV-LPR can export the captured images and the recognition results to the GV-LPR Center for central management. The data can be transmitted via LAN or WAN via an RJ45 connector. It has a web-based interface and 3G monitoring support that can facilitate operation.

GV-LPR Camera & Illuminators



GV-LPR camera is a specialized illuminator camera that is designed to offer easy installation and high performance for license plate images capture and lighting control in any environment. The camera is contained with a robust waterproof housing that is built with blower and includes a 360-degree swivel bracket. Additional features include low power consumption, uniquely high-power LED Epi Wafer, 25,000 (NTBF) hours of LED life, 80-degree wide-angle lens, and IR wavelengths of 850 nm.

