

ParkHelper® PARKING MANAGEMENT SERVER

DUAL VEHICLES RECOGNITION AND DUAL PARKING SPACES DETECTION ADVANCED SYSTEM



ParkerGuide® Parking Guidance System

Let Your Parking Simpler, Smarter and Safer.

ParkHelp® parking management server utilizes advanced technology to make parking more accessible and efficient. It integrates license plate recognition (LPR + ETC), parking space detection (LPR+Ultrasonic), automatic payment, parking guidance, and parking space management. The system uses video to recognize license plates and vehicles. Suppose there is a problem with identifying the weather or the license plate itself. In that case, the system will automatically use the electronic tag (eTag) identification method to control and extract the advantages of each to achieve complete parking lot gate control. The server also offers PGS (Parking Guidance System) function. The management of parking spaces combines image analysis and ultrasound detection, two current mainstream parking space detection methods. The system uses license plate recognition to check parked vehicles to prevent specific parking spaces (such as EV parking spaces) from being maliciously occupied by people. When image recognition cannot be used due to insufficient lighting due to the power-saving design of the parking lot, ultrasonic detection of parking space status is used instead. To make up for the shortcomings of each other's detection methods to meet the needs of various parking lots.

The ParkHelp® parking management server relies on the core value of an innovative business. The system can collect statistics on car owners' parking behavior, preferences, and usage patterns and use this information for commercial promotions to improve operational efficiency, profits, revenue, and return on investment while improving parking safety and efficient parking management.

Features

- Support license plate, ETC dual recognition methods to take advantage of their respective advantages to achieve a nearly 100% correct recognition rate.
- Combining video and ultrasonic dual detection methods to get the status of parking space occupancy can compensate for the lack of mutual detection and meet the needs of various parking lots.
- Display the number of empty parking spaces in real-time while supporting the automatic correction via the schedule—no need for manual verification.
- Through fuzzy comparison, even if the license plate number is incomplete, the system will display possible parking locations for you.
- To monitor all equipment in real-time, auto-notify when devices fail.
- Limit the parking time of a specific parking space (e.g., EV parking space) to avoid being occupied for a long time.
- To send an alarm notification immediately when others occupy the VIP parking space.
- Average save more than 80% of parking time through the parking guidance system during peak parking hours.
- Quickly find parking spaces to reduce exhaust emissions and improve the air quality of the parking lot.
- Based on advanced video algorithms, parking space detection accuracy exceeds 99%.
- Preventing an inside job or using fake cards are common loopholes in manually managed parking lots. We can solve these management pain points.
- Provide intuitive report analysis of parking statistics, popular periods, and traffic flow statistics.
- Fully protect your car through video surveillance during parking to avoid unknown damage.
- Eliminate the pressure of finding a parking space when parking, provide customers with a good parking experience, and enhance the corporate image.
- Provide SDK for the third party to integrate the POS system to provide customized services of discounting parking fees for consumption.



Auto managing and recording vehicles in the parking lot.



Automatic recognition



Automatically open



Empty parking space detection and guidance

Application Filed



City Hall

Hotel

Community

Air Port

Factory

Mall



i-View Communication Inc.

Website: www.i-view.com.tw | Email: support@i-view.com.tw

ParkHelper® Specification

Hardware	
Platform	Embedded Windows O.S. on SSD. Supports Raid 1 Dual Embedded O.S. ensures auto take over when the SSD has defected. (Option)
Storage	4 HDDs up to 40TB; (4x10TB) capacity Hot-Swap Bays & Hardware Raid card supports RAID 0, 1, 5 functions. (Option)
System Control	Built-in Hardware & Software Watchdog timer support auto-reboot and auto-recovery. Temperature controller and cooling fans x3 keep inside temperature stable.
I/O Port	3 displays (DVI, HDMI, Display port) up to 4K resolution USB x4 Audio in/out (jack)
Network	10/100/1000Mbps LAN x2 x4 (Base Model Number)
Dimension /Weight	88(H) x483(W)x 660(L) mm 2U Rackmount Chassis 12Kg (Without HDD)
Software	
Connected Devices	1~16 LPR cameras 1~16 UHF readers 8~1024 Parking cameras 32~5120 Ultrasonic detectors (optional)
Setup List	Allow the blacklist/VIP/allowlist/reserved list batches setup. Automatically matching the ETC number with the existing license plate.
LPR Parameters	To allow the setup of the detection area, direction, pixel, threshold, characters number, and other LPR parameters.
Event Log	The event data includes the vehicles of entry and exit time, license plate number, photos, videos, passing status, and healthy devices.
Parking Information	To show the license plate number, each area, each floor, total empty parking spaces, and parking guidance information on the display in real-time.
Empty Parking Space	Supports counting of empty parking spaces and schedules to auto-correct automatically.
Event Search	Events can search according to parameters such as name, license plate, location, period, Etag, passing status, etc. Click on the event list to play the video directly.
Gate Control	The gate automatically opens when the recognition results match the list while supporting remote opening and closing of the gate manually.
Automatic Takeover	Support the failover function; when the server is damaged, the failover server can start the takeover automatically. (optional)
Time Synchronization	Time Synchronization with the NTP server automatically.
Permission Setup	Set up multiple users with individual authority right, and the number of authorized users is unlimited.
HDD failure warning	Support hard disk S.M.A.R.T. function. There are two warning levels, and the alarm will notify by email directly.
Technical	
Server	Pre-installed Operation System and Parking Guidance Management software, and a USB Dongle protector is attached.
System Integration	Can integrate the third-party software with our API and SDK easily.
Character Pixel & Angle	License plate (Horizontal width) > 80 pixels Vertical max. 30° Horizontal: max. 30° The maximum bevel angle of the lower edge of the license plate frame relative to the road is 10°.
Order Info	AnyNet-xxxy(L)(U)(S) Lite: xx: Camera no yy: HDD no (L): LPR no (U): UHF Reader no (S): Ultronic detector no Space: Raid Example, AnyNet-12804(2)(2):2Ch LPR+126Ch Parking cameras Hot-Swap HDD x4 2Ch UHF Reader Raid 5/6 HDD storage.

System Architecture

