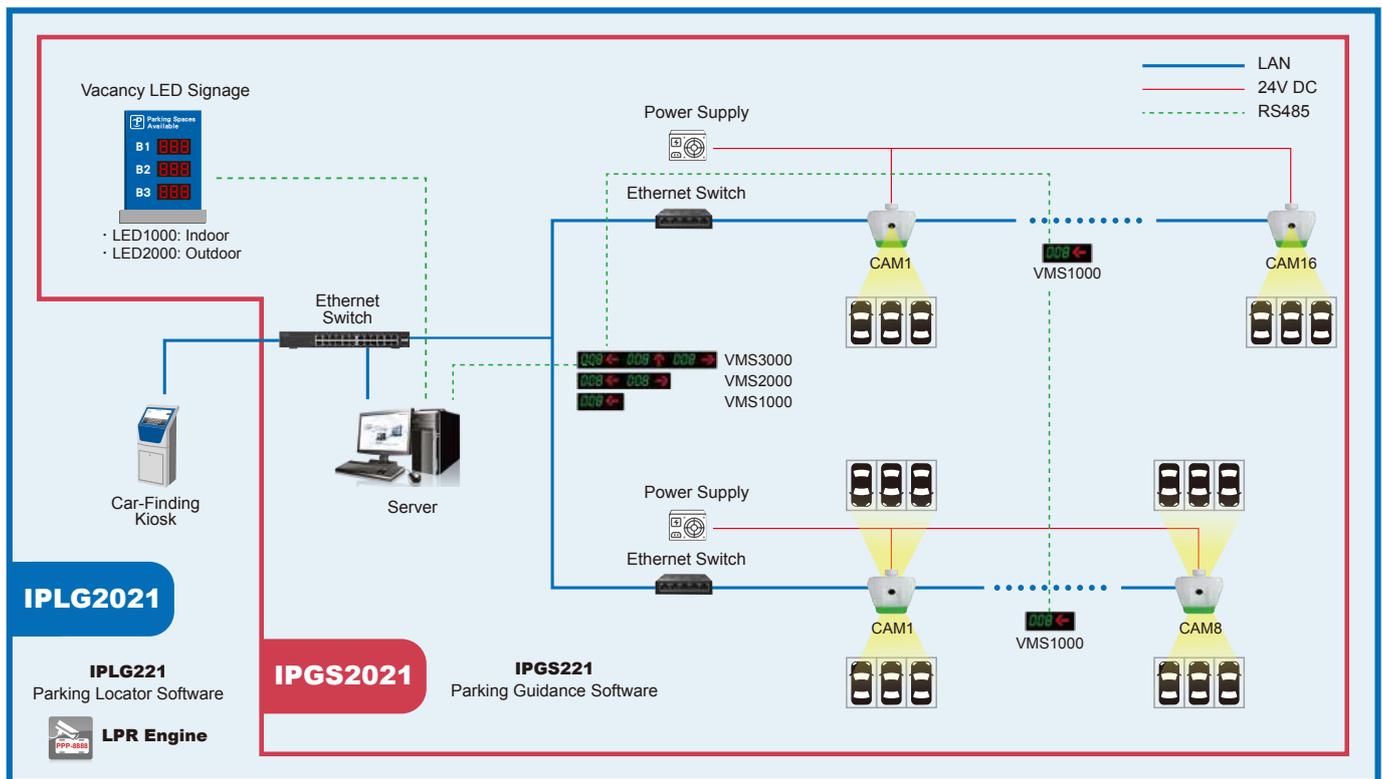


Intelligent Parking Guidance System and Intelligent Parking Locator & Guidance System **IPLG2021**

Quantity of vehicles is blooming every day in modern societies. In order to save drivers' time to find a space in car parks, the Intelligent Parking Guidance System can lead drivers to a space clearly by indicating the number of spaces and direction on vacancy LED signage. In addition, to assist people searching their cars easier, our Intelligent Parking Locator & Guidance System guides users to their vehicles by simply entering the car plate number on the car-finding kiosk, and direction will be displayed on the map. The two efficient systems not only save drivers' time but also increase the turnover rate of parking spaces, which result a win-win situation for all parties.

IPLG2021 is a system based on image analysis technology which is built on parking guidance and parking locator & guidance system. It consists of video detectors, indoor/outdoor vacancy LED signage, car-finding kiosk etc. The architecture of the system is as follows:



Benefits and Advantages

- Saving time to look for a parking space and lowering air pollution
- Finding your car easily
- Increasing revenue of car parks
- Reducing manpower of monitoring
- Promoting customer satisfaction by automatic service



1. Central Management System of Intelligent Parking Guidance and Intelligent Parking Locator & Guidance IPGS221/ ILMS221

This is the main software of the system. It controls the whole system, interface and generates reports.



Features

- Central management system.
- Real time vacancy status showing on floor plan.
- Managing the display on indoor/outdoor LED signage.

2. LPR Engine

Core software of LPR, it adopts various forms of car plates from different countries.

Features

- Smart licensed plate recognition system which identifies over 95% accuracy rate in most of the countries.
- One LPR engine supports up to 1,000 spaces recognition under normal situation.

3. Video Detector PGS-F2D1/F2S1/F2S2

This camera can detect the space which is occupied or not, and turn to proper lamp color. Drivers only glance the light of detectors and know the space availability immediately.



Features

- Lamp color turns quickly when parking condition is change.
- Pixel: 3 million; 1/2.8" CMOS sensor; Maximum resolution: 2304 x 1296.
- Up to 7 colors for lamp indication.
- Two types of cameras: single/dual lens in one camera. Single type camera is suitable to install on sides of the driveway, which can recognize up to 3 spaces depending on focus 2.8mm/4.0mm. Dual type camera is normally located in the middle of driveway which can detect up to 6 spaces on both sides.
- The wiring/cabling cost is largely saved by serial (hand-in-hand) method. For dual type camera, each loop can connect up to 8 cameras; for single one, each loop can link 16 cameras maximum.
- Detector light indicator is standalone workable when offline from the server.
- Following TCP/IP requirement. If large quantity of detector/parking space applicable, please consult technicians if necessary.



4. Indoor Vacancy LED Signage

Indoor Vacancy LED Signage is an information board which is suitable to arrange in the carpark. It can reveal numbers and characteristics like welcome message, advertisement and number of vacancies to public.

Features

- Flexible choices with/without case of LED1000 module upon to your request. This signage can be used solely (VMS1000), or in combination with 2 pcs (VMS2000) and 3 pcs (VMS3000).
- Various and multiple configurations provide dynamic, static, colorful and rolling functions.
- Panel size: 304 x 152 mm.
- Maximum showing 4 digits including figures and arrow.
- Basic color: red/green/blue, up to 7 choices.
- Luminance: $\geq 2,000$ CD/m²
- Best sighting distance: 4-16 meters; best viewing angle: 160°(V), 120°(H).



5. Outdoor Vacancy LED Signage (High-Brightness Type)

When the high-brightness type outdoor vacancy LED signage module receives the vacant figures from the central management system, it displays the real time vacant quantities to drivers. It also can deliver other necessary information.

Features

- Various and multiple configurations provide dynamic, static, colorful and rolling functions.
- Module design can let you frame according to on-site situation. Panel size: 512 x 256 mm.
- Maximum showing 4 digits including figures and arrow.
- Color: red and green.
- Luminance: $\geq 10,000$ CD/m²
- Best sighting distance: 22-55 meters; best viewing angle: 60°(V), 110°(H).
- Ideal for outdoor use. Operating temperature: -20°C ~ +70°C

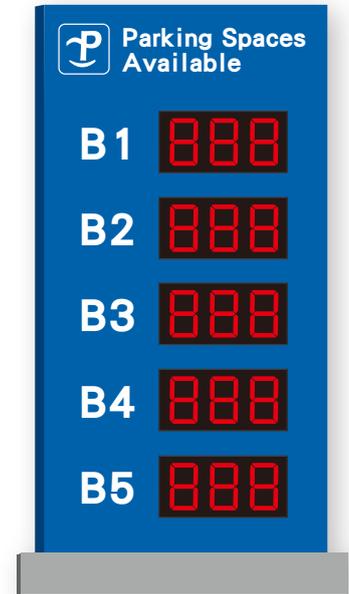


6. Outdoor Vacancy LED Signage (Standard-Brightness Type)

When the standard-brightness type of outdoor vacancy LED signage module receives the vacant figures from the central management system, it displays the real time vacant quantities to drivers. It also can deliver other necessary information.

Features

- Modular design makes more flexible for planning in different way of appearance by LED1000.
- Various and multiple configurations provide dynamic, static, colorful and rolling functions.
- Panel size: 304 x 152 mm.
- Maximum showing 4 digits including figures and arrow.
- Basic color: red/green/blue, up to 7 choices.
- Luminance: $\geq 2,000$ CD/m²
- Best sighting distance: 4-16 meters; best viewing angle: 160°(V), 120°(H).



※ Modules only. Photo is for reference.

7. Car-Finding Kiosk

Car-Finding Kiosk helps people to find their cars easily. Users find the car location by entering their car plate number, and the kiosk will guide drivers to the correct space on its map. It saves not only the manpower of on-site staff, but the time of customers.

Features

- 21.5" large capacitive touch screen for easy operation.
- Supporting blur car plate number search.
- Friendly UI and clearly electronic guiding map.
- IPC-level hardware which recovers and rescues by itself once shutting down.

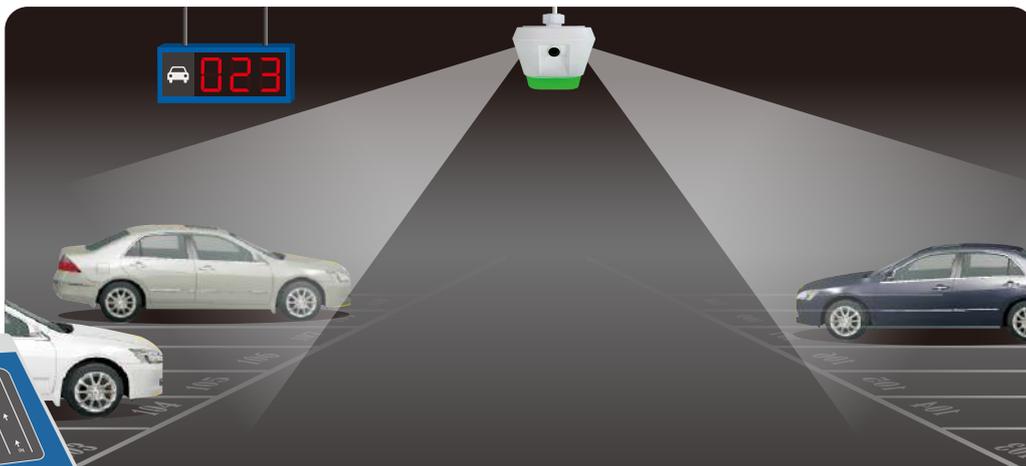




1 Entrance – Entering carpark after plate number recognized.



2 Parked – After vehicle parked at a parking space, video image (including plate number recognition) will be sent to server for record.



Car-Finding Kiosk

3 Car finding – The kiosk will show the direction on its monitor when receiving the car plate number entered by driver.

4 Exit – Leaving carpark after plate number recognized.

