

BEST NEVER REST

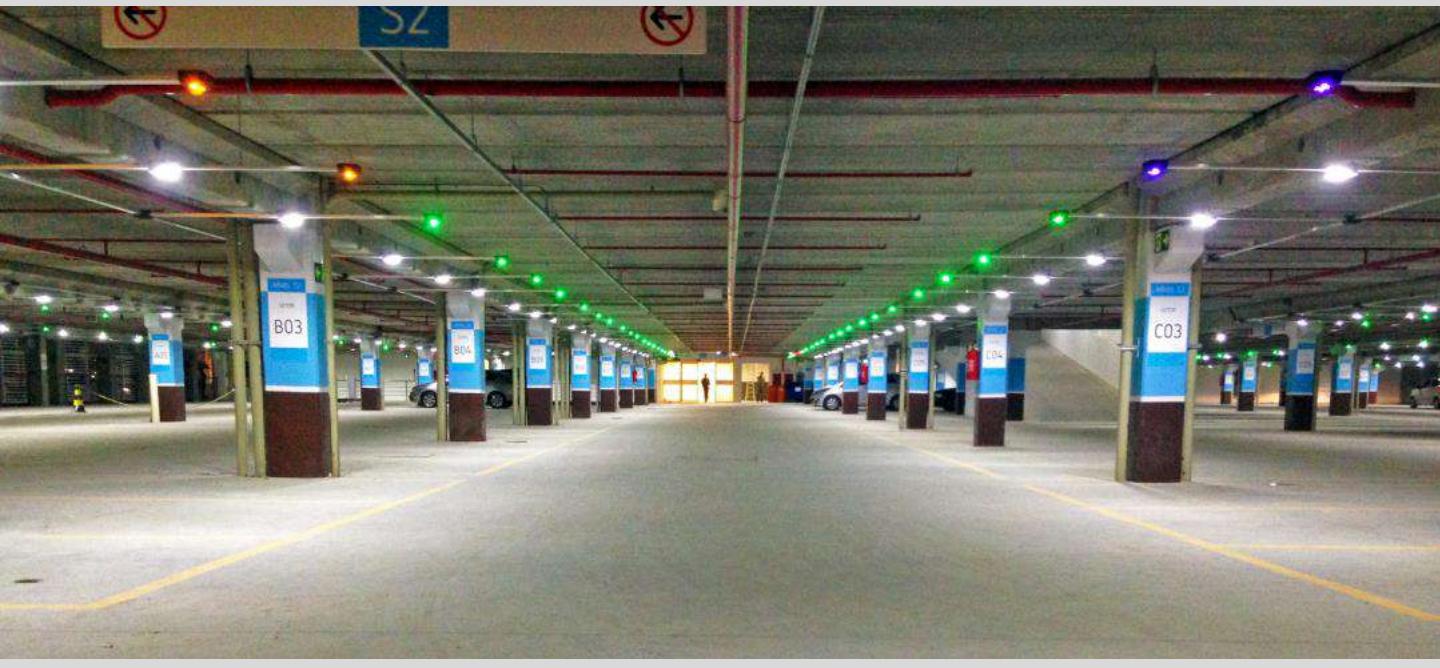
RE21 IMACK KEOI

**PAK GERMAN
ENGINEERS**

Your best partner of parking guidance system 



COMFORTABLE ACCESSING
КОМФОРТНАЯ АССЕССИНГ



Parking Guidance System combine traffic monitoring, communication, processing and information dissemination technologies to give drivers dynamic, real-time information about parking availability within controlled areas, based on Ultrasonic detection and RS485 communication technology. The concept of the system is to help the driver to find the nearest bay in short time.

Modern parking lots utilize a variety of technologies to help motorists find unoccupied parking spaces, car location when returning to the vehicle and improve their experience. This includes adaptive lighting sensors and parking space indicators (red for occupied, green for available and blue is reserved for the disabled; above every parking space),

Working Principle >>>

Ultrasonic Sensor and **Bay Indicator** are installed to each and every parking space to monitor and indicate their occupancy status; when the sensor detects no car, the related indicator illuminates Green/Blue color; when the sensor detects a car, the related indicator illuminates Red color.

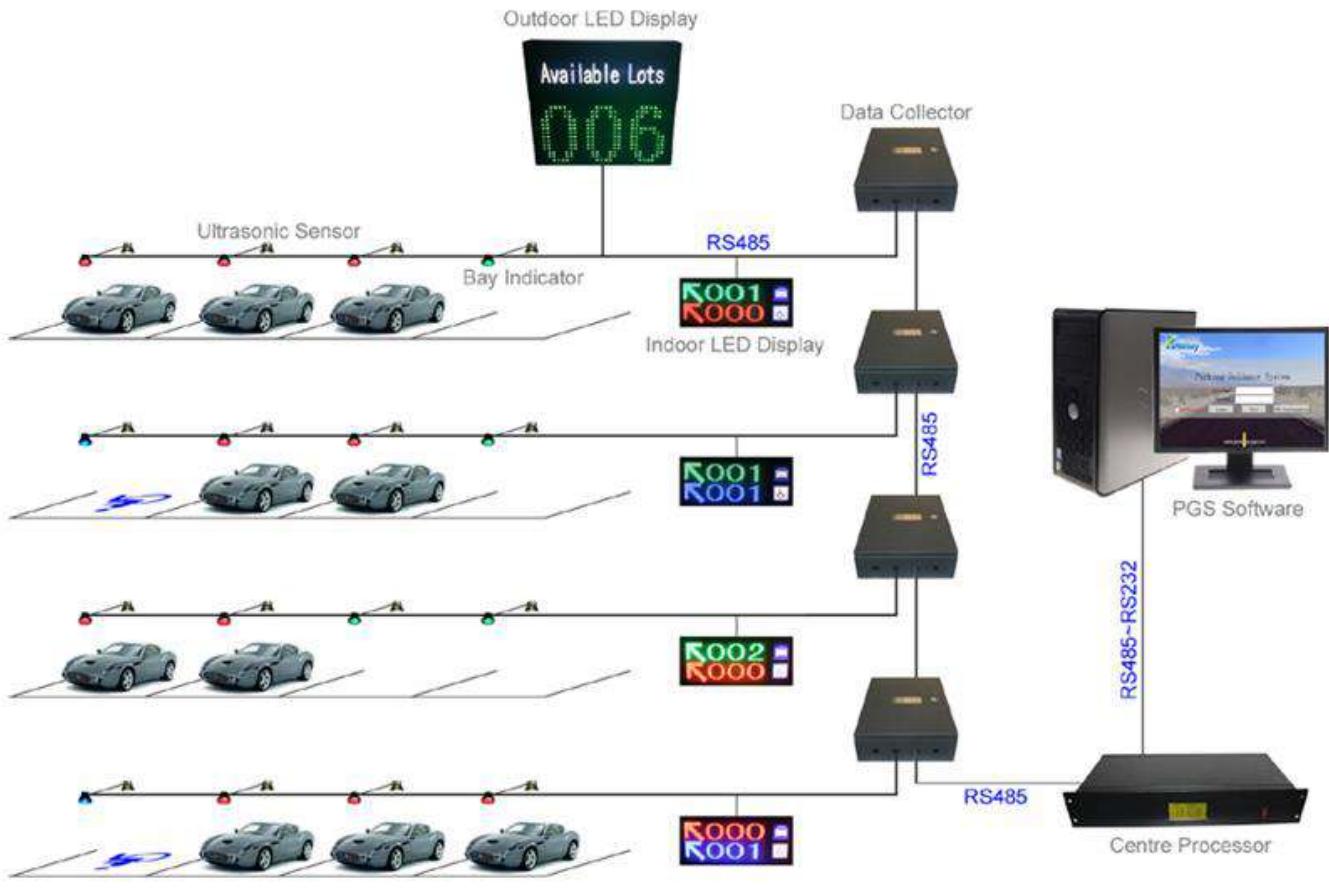
Data Collector manages sensors in group and collect information for calculation at **Centre Processor**; the availability information is then released to **LED Display** which will be installed to each and every entrances and intersections of the parking.

Parking guidance systems (PGS) have different elements:

- ★ Detectors
- ★ Indicators
- ★ Zone Controller
- ★ Central Controller
- ★ LED display

System Diagram >>>

By telling drivers how many parking spaces are available before their entry to the parking and which direction to take in order to find one afterwards, we make parking a very simple and comfortable experience for them.



PGS System Diagram

In a parking equipped with PGS, drivers can find a space within the shortest time; even if there's only one last parking space available, they will be guided there fast and effortlessly.

High brightness LED lights installed to the front upper position of the parking spaces to intuitively tell Drivers the occupancy status of each parking space. Bay Indicator has several color options.

To differentiate space types, most popularly RED/GREEN (5 Red LED & 5 Green LED) are used for Standard space and RED/BLUE (5 Red LED & 10 Blue LED) for disabled spaces.

Ultrasonic Sensor >>>

Ultrasonic detection technology based unit installed right over middle of the parking spaces (either on the ceiling or on the cable tray) to monitor presence of vehicle and provides real-time information for the PGS system.



Specification

Working Voltage:	DC24V
Peak Current:	35mA
Data Communication:	RS485
Data Interface:	RG45
Frequency:	4800Mps
Detection Range:	30cm~400cm
Detection Angle:	30 degree
Transmission Distance:	1km Maximum
Working Temperature:	-25~70°C
Dimensions:	13cm(D)*6cm(H)
Weight:	0.15kg

LED Indicator >>>



High brightness LED indicator controlled by Ultrasonic Sensor to tell occupancy status of a parking space by different color illumination. Normally red color indicates space being occupied; green, blue and yellow indicates space available and to differentiate parking types such as Standard, Handicap, Pregnant and Electric.



Specification

Working Voltage:	DC24V
Peak Current:	30mA
Data Communication:	RS485
Data Interface:	RG45
LED Quantity:	5 Red/5 Green; 5 Red/10 Blue
Working Temperature:	-25~70°C
Dimensions:	13cm(D)*6cm(H)
Weight:	0.15kg

Zone Controller >>>



Zone controller serves as a bridge connecting Central Controller to Ultrasonic Sensors & LED Display. It picks up sensor information, transfers to Central Controller, and also helps to release availability information from Central Controller to LED Displays; Central Controller is the core of PGS system deals with data processing, information storage and release.



Specification

Working Voltage:	DC24V
Peak Current:	45mA
Data Communication:	RS485
Data Interface:	RG45
Communication Distance:	1km Max.
60 slaves	60 slaves
Working Temperature:	-25~70°C
Dimensions:	43cm*34cm*12cm
Weight:	8.75kg

D-Pass
Security



Zone Controller >>>

A central controller manages 60 zone controller and a zone controller manages 60 sensors & 20 LED Display; therefore, a basic PGS system can manage 3,600 sensors/parking spaces.



Specification

Working Voltage:	DC24V
Peak Current:	35mA
Data Communication:	RS485
Data Interface:	RG45
Communication Distance:	1km Max.
60 slaves	60 slaves
Working Temperature:	-25~70°C
Dimensions:	43cm*20cm*8.6cm
Weight:	3.7kg

D-Pass
Security



Your best partner of parking guidance system >>>

Indoor & Outdoor Led Display >>>



First component greeting drivers at a car park equipped with PGS. Outdoor LED Display at entrances tells how many spaces are available in each floor while Indoor LED Display at corners & intersection tells which direction to take in order to find one. Color module such as red, green & blue are used to differentiate parking types & lead drivers to right place.



Specification

Working Voltage:	DC5V
Frequency:	50–60Hz
Communication Mode:	RS485
Data Interface:	RG45
Transmission Distance:	<1000m
Working Temperature:	-25~50°C

Your best partner of parking guidance system >>>

Management Software >>>



Multi-language, graphical application developed based on Window 7 OS & SQL database to display the occupancy status of parking spaces in real-time basis and provide various statistic reports for the management.

Note: PGS is a standalone system workable without management software!



PGS benefits drivers, parking manager as well as the society, the ROI mainly includes the following:

1. Minimize driving time while looking for space
2. Improve parking experience/customer satisfaction
3. Maximize usage rate of parking space/profitability
4. Improve public image of parking facility
5. Reduce energy waste & toxic emission
6. Reduce management costs