



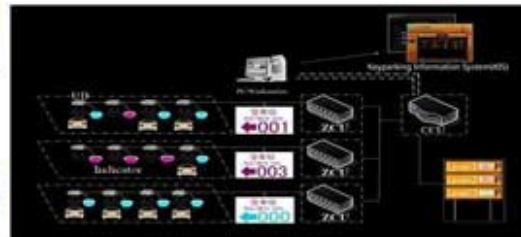
HI-TECH INSTRUMENTS INC.
Your Ultimate Strategic Partner

Parking Guidance System (PGS)



Manage System >>>>

<<<< Single Space



<<<< Lot Finding



Way Finding >>>>



As one of the best parking guidance system supplier, Xiamen Keytop has the most successful cases which are from different parts of the world than other China suppliers.

The main function of our parking guidance system (PGS) is to help the driver find free parking space on different layers and sectors quickly. Using LED display and LED indicator to show the real-time parking information (free/occupied parking space) to the vehicle owners. Moreover, the owners or operators can monitor the real time parking information as well as collect and analyze statistic data about utilization of each car park space.

What are the benefits of Parking Guidance System?

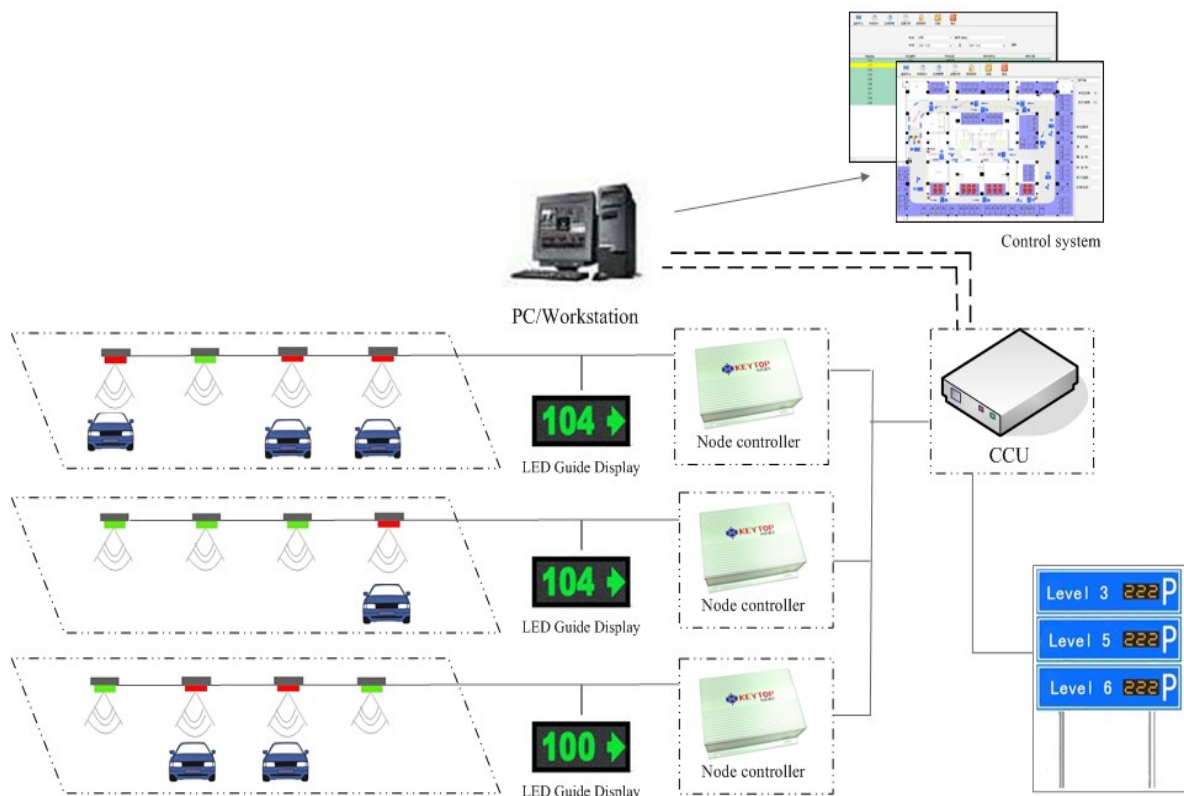
PGS have been proven to cut the customer's time-to-park in half and result in a 3-5% rise in visits. Simply put, the easier it is for customers to visit, the more customers will want to return again and again.

- Travellers: Reduced time looking for parking, and reduced frustration.
- Venue Operators: Increase in patronage, and customer satisfaction.
- Parking Operators: Increased space occupancy, and increased revenue.
- Environmental: Reduced air pollution, reduced congestion, reduced illegal parking.

PGS Key Components:

- CCU: Central Control System
- ZCU: Zone Control System
- UD: Ultrasonic Detector
- LED Indicator: Red/Green Led Indicator
- LED screen: Outdoor/Indoor LED screen

PGS wiring diagram



How PGS Works:

Firstly, UD takes use of ultrasonic wave to detect the car space to see if it is occupied by vehicles and transfer relative command to LED Indicator which will turn from green to RED when occupied, or it will keep GREEN; meanwhile, the UD transmit its status message to ZCU immediately, and ZCU will collect and forward the information to CCU; CCU processes these data and sends the relevant command to ZCU and LED panel.

1. Central Control Unit(CCU)



Operating Voltage	DC 5V
Operating current	375 mA
Power	1.875W
Communication way	RS485,LAN,wireless
Communication Distance	≤1000m
Maximum Number of Connections	60 node controllers
Operating Temperature	-40°C~+80°C

Description:

Central controller(CCU), the core of the whole system, is mainly responsible for the collection of parking information and datas processing of the whole carpark. Then send the feedback of the processed result to LED display to show carport information. The general Edition does not have the data storage function, thus the need to connect to the server and install the parking guidance system software.

2. Node Controller(ZCU)



Operating Voltage	DC 24V
Operating current	30 mA
Power	0.72 W
Communication way	RS485,TCP/IP,Wifi
Sensors No.	40 - 60 pcs.
Operating Temperature	-40°C~+80°C

Description:

The node controller(ZCU) is the middle layer of ultrasonic parking detector, which is to manage a group of ultrasonic detectors, detects then loops the information of the detectors and send the relevant information to central controller. One node controller can support 60 detectors in max.

3. Ultrasonic Detector

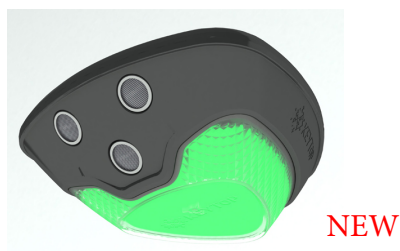


Operating Voltage	DC 24V
Operating Current	10mA
Power	0.24W
Communication Method	RS485
Detecting Distance	0.1~3.5m
Communication Distance	≤1000m
Communication Rate	4800bps
Operating Temperature	-40°C~80°C

Description:

Install ultrasonic detector right above every parking space to collect the real-time parking space information through the principle of ultrasonic, measuring the distance and transmit its feedback to led indicator and node controllers through RS-485.

Forward Mounting Sensor



Operating Voltage	DC 24V
Farthest Level Distance	2 meters
Installation Height	2.0m-3.0m
Communication Method	RS485
Maximum Distance Error	0.1m
Communication Distance	≤1000m
Communication Rate	4800bps
Operating Temperature	-40°C~80°C

4. LED indicator



Operating Voltage	DC 5V
Operating Current	40mA
Power	0.2W
bead number of LED indicator	6red 6 green
Material of enclosure	ABS
Operating temperature	-40°C~+80°C
Visual Angle	360°
Visual Distance	>50m

Description:

Install LED Indicator in the front of every parking space to display the current parking space status. When the indicator displays green, it means the parking space is available, when the indicator displays red, it signifies it is occupied.

5. Indoor LED Display



Operating Voltage	DC 5V
Operating Current	1.3-1.5A
Power	6.5-7.5W
Communication Way	RS485
Communication speed	4800
Luminance	300cd/m2
Dimension	36 x 12 cm

Description:

Receive the carport information from central controller(CCU) and display the amount of the available lots currently in terms of number and word and can be used 24hours a day. Internal procedure can be revised at any time according to the demands of the users,displaying other needed information.

6. Outdoor LED Display



Operating Voltage	DC 5V
Operating Current	1.4A
Power	7W
Communication way	RS485
Communication speed	4800
Luminance	>500cd/m2
Panel	32x 16 cm

Description:

Outdoor LED display is compose of high intensity outdoor LED module, driving circuit, controlling circuit, frame and other parts. It receives the statistic information of the parking spaces from the central controller, displaying the amount of available parking spaces in real time and can be used 24 hours a day. Internal procedure can be revised at any time according to the users' demands, displaying other information.

7. Parking Guidance Management Software

