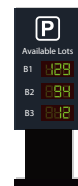


ZKTeco Video Parking Guidance Solution

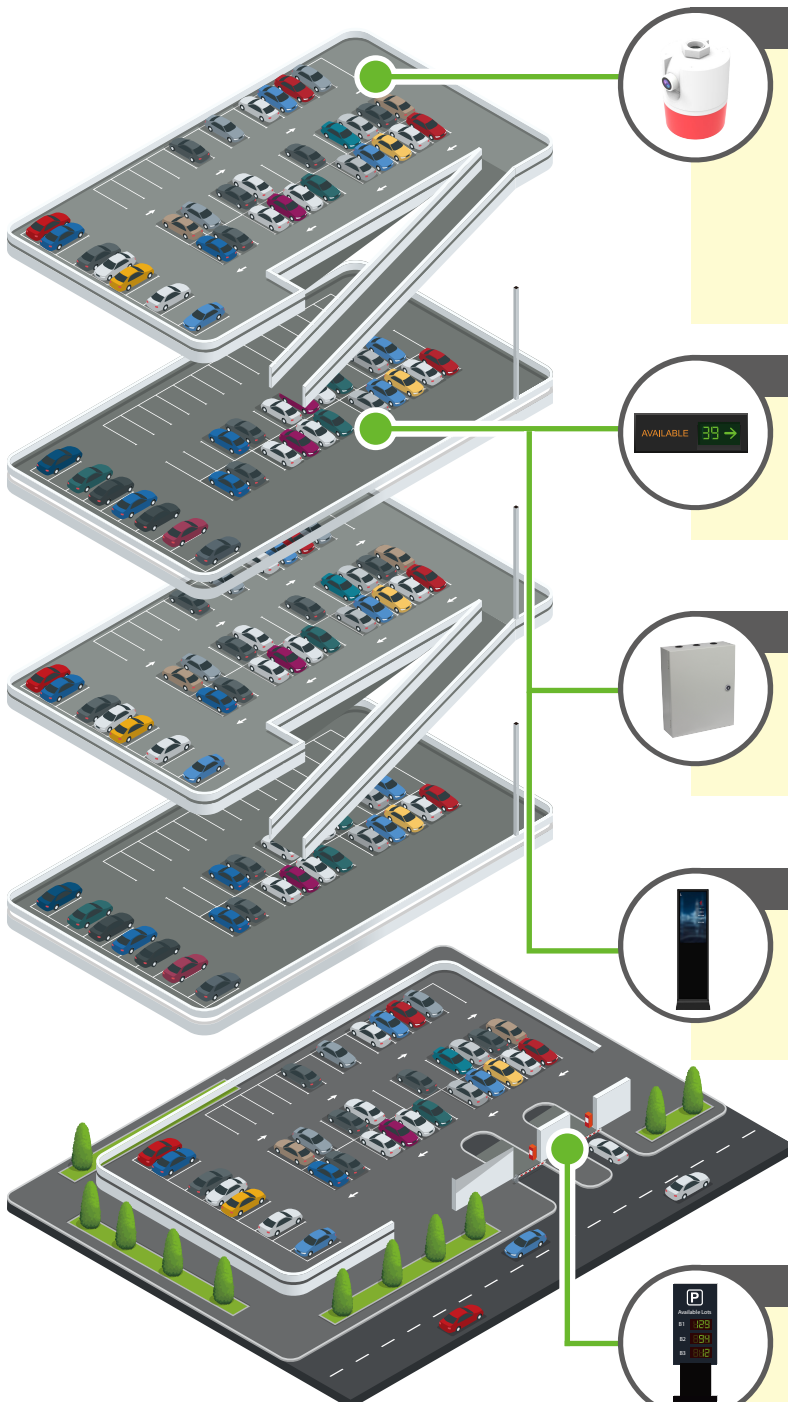


Introduction

ZKTeco Video Parking Guidance Solution is designed for busy and high-volume parking, which offers customers a precise parking guidance with indicating lights, guidance displays, vehicle search Kiosk. Therefore driver can directly and simply follow indications to go available parking bays easily.



ZKTeco video parking provides a total solution for both small parking lots and a busy multi-storey carpark. By providing drivers a precise parking guidance with indicating lights and parking guidance cameras, drivers can effortlessly search their car locations with vehicle search kiosk, and quickly go to the available parking bays at the carpark entrance area.



Parking guidance camera



- Built-in license plate and vehicle identification algorithm
- Support unlicensed cars recognition real-time monitoring of parking space status
- Adopt starlight level sensor for dark or dull environments
- Single and dual lens option, could cover 1-6 parking spaces
- Supports 7 colors configured
- Dual network port design, support camera series connection
- Support Onvif protocol, could connect with NVR

Indoor parking guidance display



- Outdoor highlight single green
- Shows a parking light box, arrows and three digits, 000-999
- Three direction of the direction arrow

Parking guidance camera controller



- 5 100/1000M Adaptive RJ45 Network Port
- 24V Direct Current Power Output supporting 10-network channel
- Supports Reverse Car Tracking System

Vehicle search kiosk



- 32 inch touch LCD screen
- Exquisite design, landing installation
- Directly input the license plate number can query the location of the vehicle and take the car path

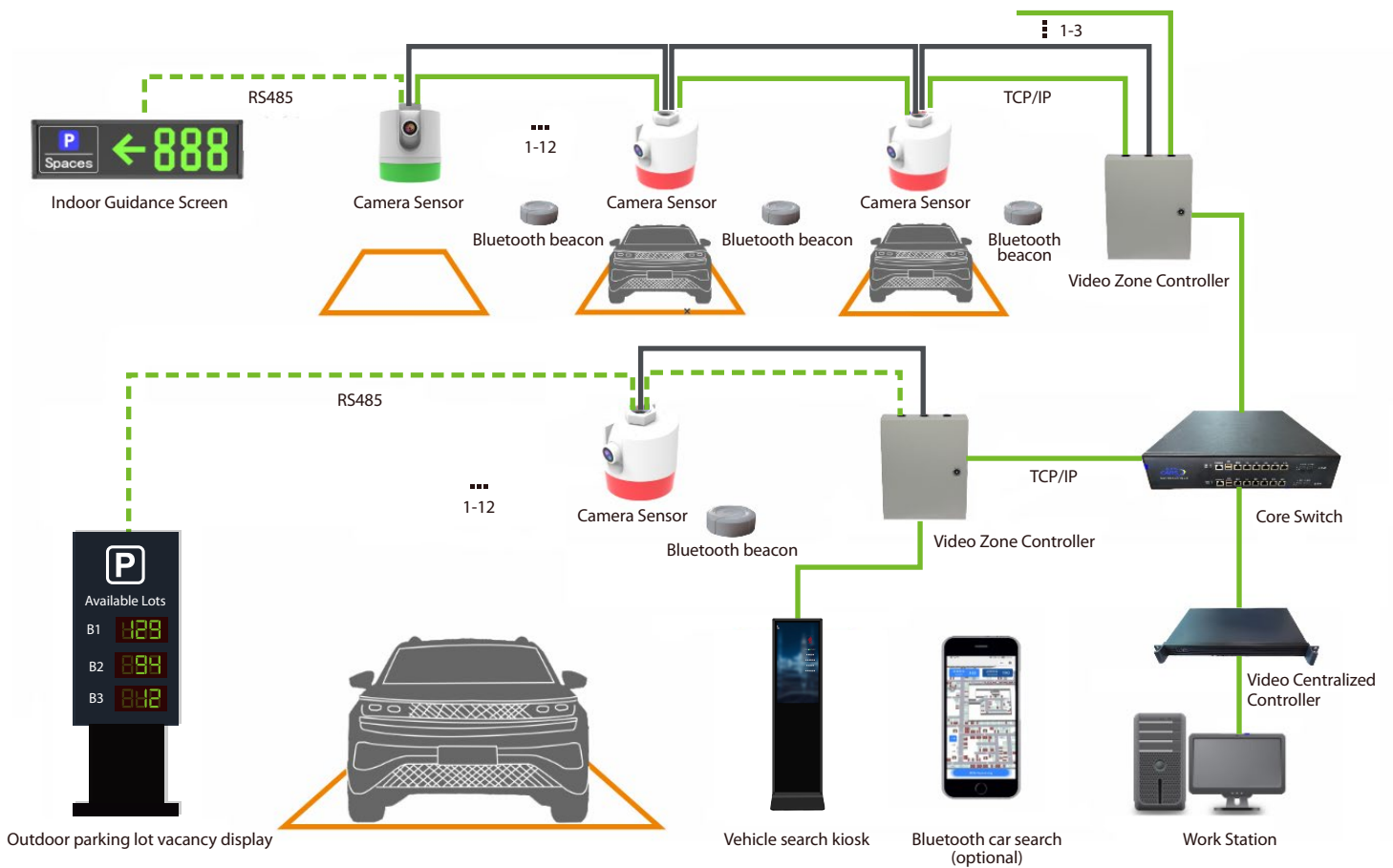
Outdoor parking lot vacancy display

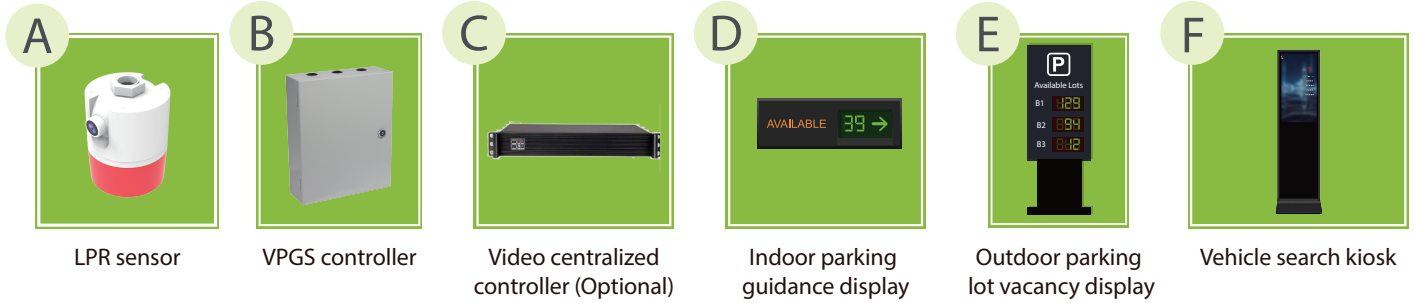


- Main light box and 1-3 lines display
- The main light box area displays Available Lots or customized contents
- Display light boxes and Numbers per row/area; Light box displays B1, B2, B3 or customized content; The Numbers show a three-digit range of 000-999

System structure

ZKTeco video parking provides a total solution for both small parking lots and a busy multi-storey carpark. By providing drivers a precise parking guidance with indicating lights and parking guidance cameras, drivers can effortlessly to search their car locations with vehicle search kiosk, and quickly go to the available parking bays at the carpark entrance area.





Hardware parameters

A- LPR sensor

Model	VPGS-C3	VPGS-C6
Lens	2.8mm lens. 4.0mm, optional prime lens	
Pixels	4MP	
Support Countries And Regions	Business version: Malaysia, Turkey, Thailand, Vietnam, Singapore, Indonesia	
	Basic version: Kazakhstan, Uzbekistan, Turkmenistan, Kyrgyzstan, Tajikistan, Qatar	
Maximum Resolution	2560*1440	
Minimum Illumination	2LUX	
Electronic Shutter	10-100ms	
Image Settings	brightness, contrast, saturation, sharpness, image inversion, exposure time, 3D noise reduction, etc	
Noise Reduction	Support 2D/3D noise reduction	
White Balance	Automatic	
Camera Angle	Auto pan-tilt, support remote debugging, rotation angle -20° to -40°	
Indicator	Support 7 colors (red, green, white, yellow, purple, dark blue, light blue)	
Built-in Bluetooth	Supported	
Network Interface	2*10/100Mbps adaptive RJ45 interfaces	
RS485	1 channel	
External Indicator*	Support 3-way LED External	Not support (six-car camera)
DC Power Supply	Standard working voltage DC 12V/1A, support DC 9~36V wide power supply	
Power Consumption	3-cars camera ≤3W, 6-cars camera ≤6W. External light ≤2W	
Temperature	Operating temperature: -20°C~60°C	
Humidness	10%~95% (no condensation)	
Static Electricity Surge	Contact 6KV, Air 8KV 10/700, common mode 4KV, differential mode 2KV	
Vibration Resistance	National standard	
Overall Dimension	Ø101mmx100mm	
Video Compression Standard	H.264 / H.265	
Video Resolution	2560*1440	
Video Bit Rate	512Kbps~5000Kbps	
Video Frame Rate	1~25frame	

Model	VPGS-C3	VPGS-C6
Image Compression	JPEG	
Image Resolution	640*360 /704*576 /1280*720 /1920*1080 / 2304*1296 /2560*1440	
Parking Space	Three-car camera: 1 to 3 parking Spaces. Six-car camera: 1-6 car Spaces	
Parking Status Recognition Rate	99% or higher	
Parking Space Light Change Time	After entry and exit, ≤3s	
Parking Automatic Wire Frame	It can automatically identify the parking space and generate the parking space wire frame	
License Plate Recognition Rate	99.6% or higher	
License Plate Recognition Speed	After stopping, ≤3s	
Identification Of Unlicensed Vehicles	support	
Line Stop Identification	support	
Parking Whitelist	300 in total	
Parking Lights Are Interoperable	support	
External Light *	Three car Spaces supported (option), six car Spaces not supported	
Event Light Cue	Support line parking, non-whitelist vehicle occupying events such as lighting prompts.	
Bluetooth Reverse Car Finding *	Built-in Bluetooth beacon support (option)	

B-VPGS controller

Parameter Classification	Parameter Name	Parameter Specification
	Model	VPGS-CTL10
Property	Capacity	60 (VPGS-C3) or 30 (VPGS-C6) (* One network port is connected to less than 10 detectors)
Connector	Net Interface	8 x 10/100M RJ-45 Network port
Conventional Parameter	Input Power Supply	AC110-240V
	Working Temperature:	-30°C to 70°C
	Storage Temperature:	-40°C to 85°C
	Housing Material	Cold steel paint
	Dimension(L*W*H)	400*260*90mm

C-Video centralized controller

Model	VPGS-ICS
System	Linux System
Dimension(L*W*H)	428*250*44.5mm
Working Temperature	-30°C to 70°C
Installation Method	Rack type
Operating Voltage	AC220V±10%
Appearance Material	galvanized steel sheet
Net Weight	3KG
Humidity	10%~90% (no condensation)
Power Source	250W Power

D-Indoor parking guidance display

Model	VPGS-D1	VPGS-D2	VPGS-D3
Dimension(L*W*H)	One-way 650*183*56mm	Two-way 1030*183*56mm	Three-way 1410*183*56mm
Lamp Bead Type	High-lighted LED light beads		
Illuminant	Two-color LED lamp beads		
Color Display	Red and green		
Operating Voltage	AC110~ 240V		
Operating Temperature	--30°C to 70°C		
Ambient Humidity	30%~90%(relative humidity)		
Appearance Material	Aluminum profile + Plexiglass panel		
Power Dissipation	≤20W (one-way)		
Communication Mode	RS485 / TCP/IP		
Communication Distance	RS485≤300m;TCP/IP≤100m		

E-Outdoor parking lot vacancy display

Parameter Classification	Parameter Name	Parameter Specification
Model		VPGS-FL1/2/3
Reveal	Support Display Bits	3/4
	Illuminant	Red/green highlighted LED
Communication	Communication Mode	RS485 / TCP/IP
	Communication Distance	RS485≤300M / TCP/IP≤100M
Conventional Parameter	Power Source	AC220V±10%
	Power Dissipation	≤15W(single layer)
	Dimension(L*W*H)	800*160*2200mm
	Class Of Protection	IP65
	Appearance Material	Cold steel paint + tempered glass panel
	Support layers	1 to 8 max

F-Vehicle search kiosk

Parameter Classification	Parameter Name	Parameter Specification
Model		VPGS-SK32
Input	Input Device	Touch screen 32 inches
	Number Of Touches	More than 60 million times
Connector	Cabinet Interface	RJ45 network interface
	Communication Control	USB interface
Conventional Parameter	Power Source	AC220V±10%
	Power Dissipation	≤200W
	Dimension(L*W*H)	820*500*1350mm

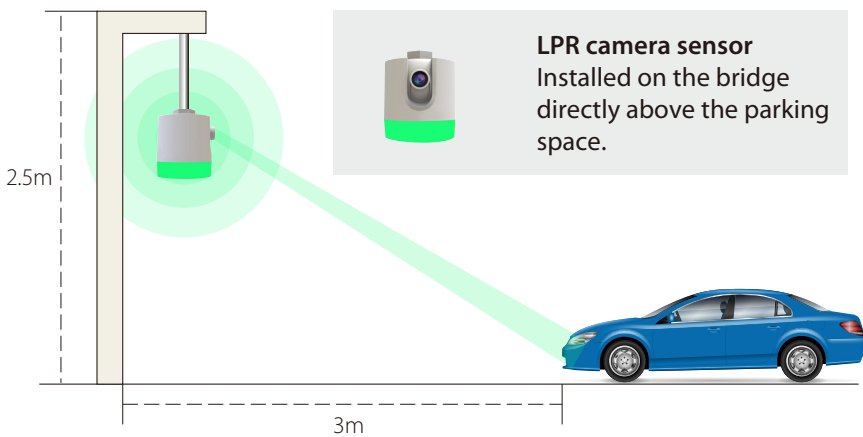
Enhance driver a special parking experience

Parking guidance camera are installed at the ceiling of the parking lots, and every single camera can detect the availability of parking lots by various indicator color that assists the carpark admin to improve their customers parking experience.



Various color indication of parking guidance camera

ZKTeco parking guidance camera are installed at each ceiling to detect and indicate real time occupancy. For example, a red LED indicates that the parking lot is occupied, and a green LED indicates the lots is available.



Various color indication of parking guidance camera

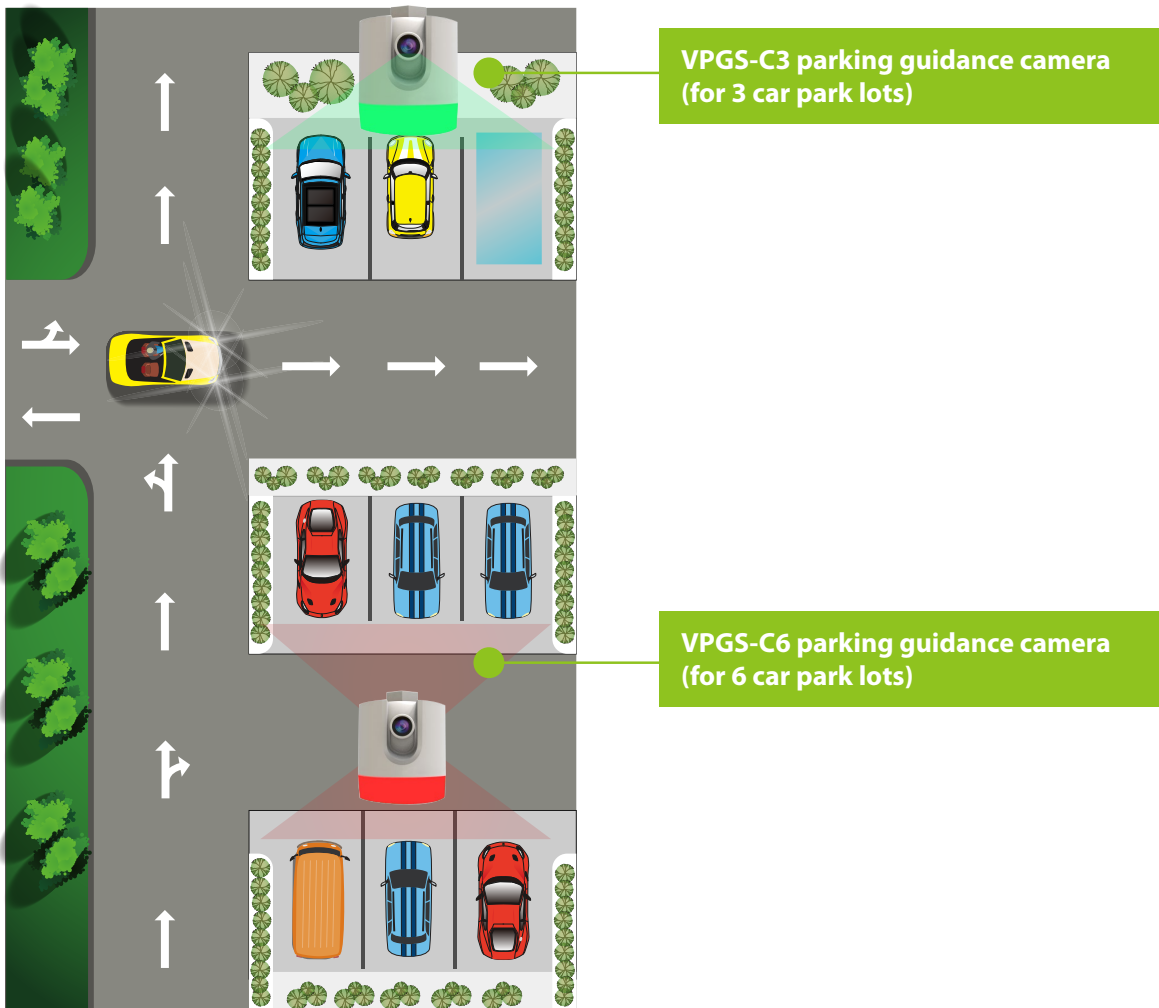


The indicator lights inside the parking guidance cameras can display seven configurable colors, allowing for dynamic indication of the status of the parking bay – disabled users, VIP, or other reservations – and instant indication of parking bay availability. Unique parking status, such as reserved, unlicensed use, or parking over the line can also be indicated.



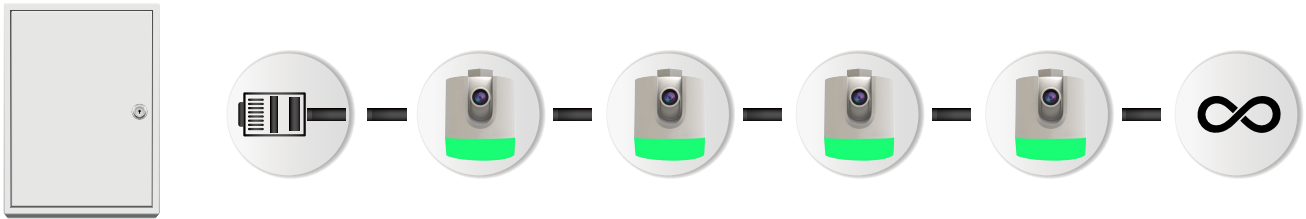
Vehicle detection by parking guidance camera

VPGS-C3 detects and monitors one to three bays while the VPGS-C6 camera has a dual-lens camera, which are able to detect and monitor six car park lots at the same time.



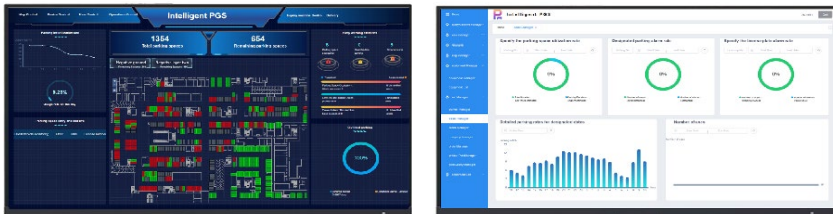
Highly Integrated Guidance Terminal

The installation of the ZKTeco video parking guidance solution does not require any tool or screw to connect between each camera. Due to its unique design and it supports PoE (Power over Ethernet), making the connection process between camera simple, by just simply plugging in cable and that it will allow a single cable to provide both data connection and electric power to camera.



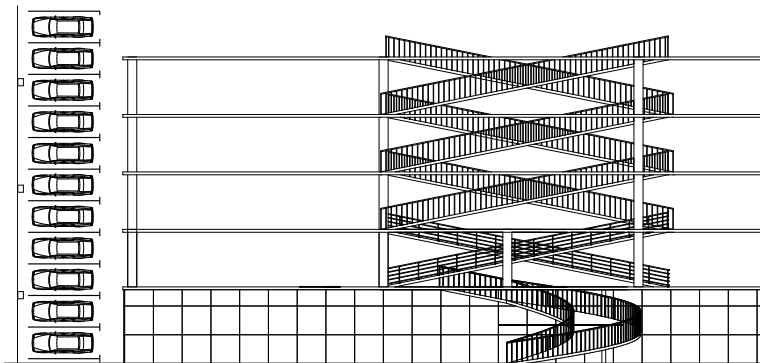
Find your Car parking guidance solution

ZKTeco video parking guidance solution allows drivers to search their vehicles via the vehicle search kiosk. It integrates with the carpark system and they are able to detect in real-time where and when cars are parked. Customers just simply enter their own car plate number, the Kiosk will show the vehicle on the 2D map as well as the shortest path and navigation.



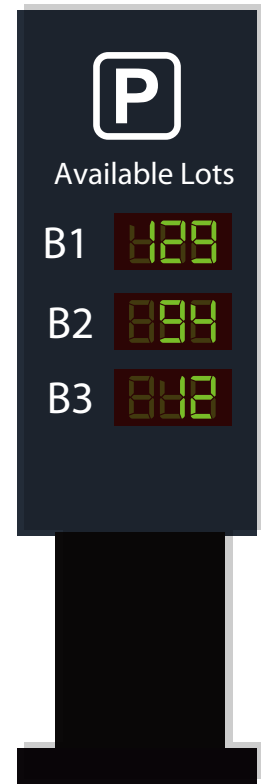
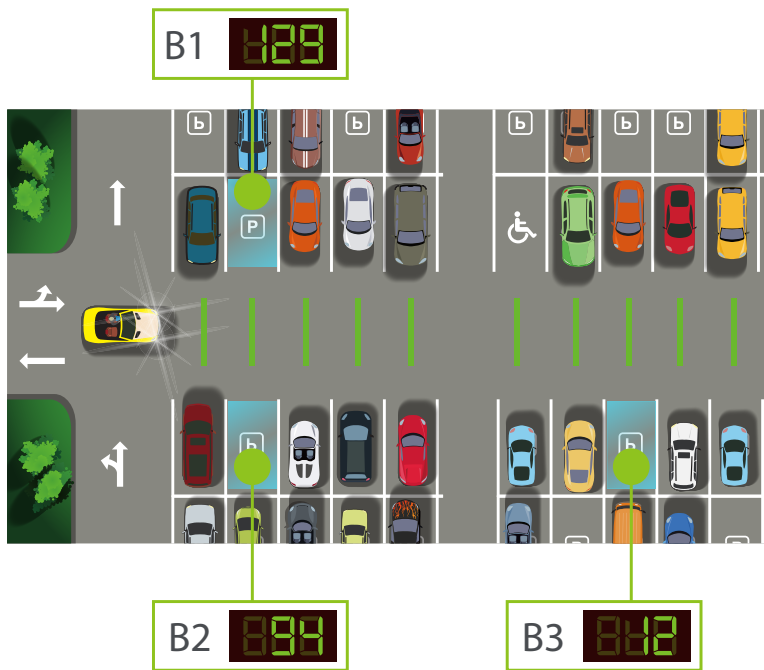
Supports CAD for the e-map format

The VPGS software supports "CAD" file for e-map format, the system is able to automatically display locations of all cameras and display monitors in e-map.



Real-time parking space counting accuracy

ZKTeco outdoor parking lot vacancy display can detect parking availability in real environment, once vehicles are at the entrance of the car park, the parking detection system will show the actual occupancy of the parking lots, providing drivers with valuable information about the vacant parking space.



Clear LED Guidance for Parking

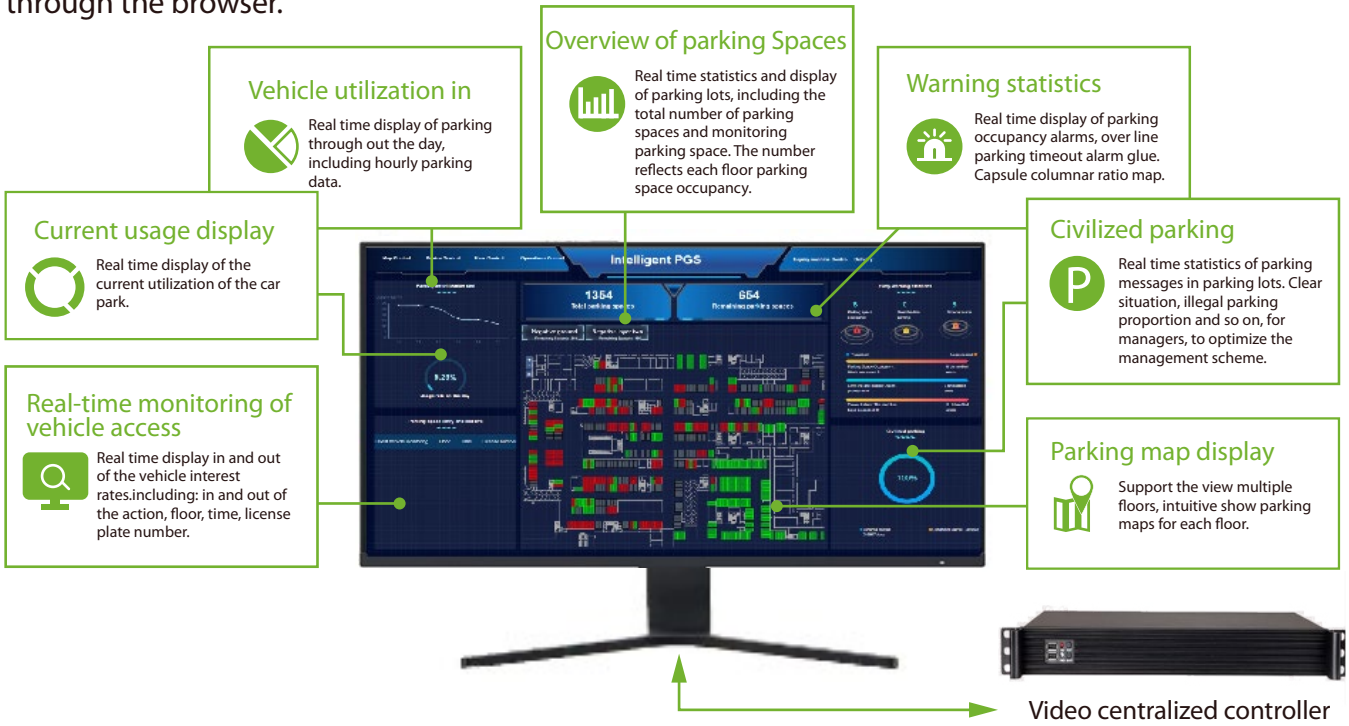
Indoor parking guidance display is fit for the indoor car park area, with its clear LED indicator, guidance and valuable information display on board, driver can follow the signs and effortlessly know where to go for the available lots once they enter into the parking lot.



ZKTeco carpark system could gather vacancy information of a parking facility to guiding drivers to find a free parking space efficiently.

Software Introduction

The VPGS-software is pre-installed in the industrial computer, customer's computer no need install the software again, better improve stability and avoid problems such as customer computer downtime, delays, and lags. Because the software has a B/S structure, customers can access software directly through the browser.



Local Query Platform

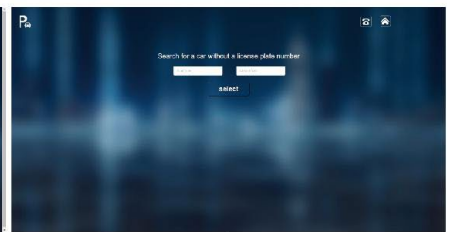
Vehicle search: show the current vehicle position status in real time by enter the license plate number, parking number, entrance time and other information, and display the current vehicle visually with the image capture by the LPR camera detector. Through the route instructions on the electronic map, car owners can more quickly find the vehicle and leave the parking lot.



1. Choose the way to find a car



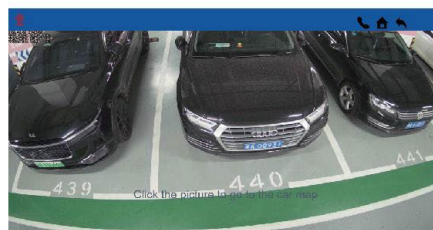
2. Enter the license plate number



Enquire on unlicensed vehicles



3. Select a vehicle



4. Confirm vehicle entering map



5. Automatic route planning

