

INTELLIGENT CAR PARK MANAGEMENT SOLUTION CREATING INNOVATIVE, SECURE, AND EFFICIENT

PARKING WITH VIDEO PROTECTION



WITH HIKVISION AS YOUR INTEGRATION PARTNER, YOU WILL STAND ON A SOLID FOUNDATION.

RAPID GROWTH

Hikvision is the world's leading supplier of video surveillance products and solutions, featuring the industry's strongest R&D workforce and state-of-the-art manufacturing facilities. Since 2001, Hikvision has grown from being a single-product supplier to a complete solution provider to a global market leader. Now, Hikvision has established one of the most extensive marketing networks in the industry, comprising 59 international subsidiaries and branches throughout the world, ensuring quick responses to the needs of customers, users and partners.



FUTURE INNOVATION

Hikvision's Research Institute conducts innovative research and development to keep us at the forefront of technology.

- Research topics include: Perceptive Technology, Intelligent Analysis Technology, Big Data and Cloud Storage Technology, and Multimedia Technology.
- Sophisticated experience in video target detection, image segmentation, video structuring and video retrieval.
- Introduced the AI Cloud structure that combines cloud and edge computing



Over 9%Of annual revenue invested in R&D



Research Institutes
Hangzhou, China
Shanghai, China



10 R&D Centers Montreal, Canada London, UK



Almost 1/2 of our employees are R&D Engineers in the security industry



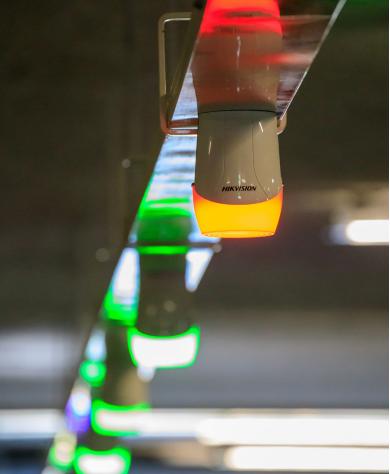
4,000+ patents (over 1,200 added in 2019 alone)

Car park operators and drivers have one thing in common: they want parking operations to be easy, secure, and efficient. However, in practice it can be tricky to find a free space after entering a car park. As many drivers will know, this is very frustrating!

Hikvision offers a way to guide drivers to a free space quickly, with products that can be easily combined and integrated for a simple and efficient solution. Streamlining parking, both at a entrances/exits and through the car park, makes operations much more efficient, speeding up the process and potentially freeing up spaces more quickly for further occupation. This means maximizing profits on spaces. It also provides extra layers of security, giving peace of mind to drivers and operators alike.

There's a wide range of options to cater for the requirements of any modern car park.









BENEFITS

FREE SPACE COUNT



The number of available spaces can be displayed, for example at the entrance to a car park on an LED Display. This uses count information using ANPR data from entrance/exit cameras or Parking Guidance Cameras, and updates immediately when a space fills, or becomes free. It informs a driver right from the start if there's space inside the car park.

SEARCH VIDEO BY TIME



Operators can search the Parking Guidance Camera footage via the Parking Control Panel by time, to see activity in the car park, if there's an incident. So, if something happens at a particular time, an operator can see if there were any alerts at that time, and investigate.

FREE SPACE INDICATOR



Parking Guidance Cameras detects a vehicle in a space and shows its availability status automatically by colored lights, so drivers can easily see where to park. For example, it turns red for occupied and green for free. Different colors can also be used to categorize spaces, for instance for disabled parking.

PARKING GUIDANCE



With larger, more complex car parks, drivers need more guidance to find a free space quickly. Parking Guidance takes data from entrance/exit ANPR cameras and Parking Guidance Cameras, and displays it on screens around the car park. The screens display arrows alongside the count, showing how many spaces in a certain area. They give drivers further direction on how to get to free spaces, making navigating large car parks less stressful.

SEARCH VIDEO BY LICENSE PLATE



Operators can search for license plates in the HikCentral VMS using ANPR data from the Parking Guidance Camera, increasing security and providing a useful feature if an incident occurs. For example, a 'hit and run' accident could be investigated. This data is also used by a Parking Inquiry Machine (see below).

ACCESS CONTROL BARRIER BY LICENSE PLATE



Controlling access to the garage with an Access Control Barrier Gate means only vehicles registered, or paid, can enter, increasing efficiency. A Capture Trigger Radar registers a vehicle as it enters, using ANPR, and raises the barrier if the vehicle is 'cleared'. This reduces human resources, since there's no need for a guard on the entrance, for example. It can also be configured to calculate a fee based on parking time as a car goes in and out.

VEHICLE LOCATOR



Parking Inquiry Machines can be placed at pedestrian entrances to the garage so drivers can find their car if they forget where they parked. They only need to enter their license plate number, and they can see the space, and directions to it, on a map on the screen. The machine picks up their license plate number from the ANPR data through the Parking Guidance Camera, coordinated by HikCentral.

PARKING DATA ANALYTICS



Operators can maximize their efficiency, and returns, using management statistics from the system, like detailed entry and exit records indicating occupancy. HikCentral Enterprise VMS is a powerful tool to make this intuitive and can provide a wealth of information in reports to help business decision making.

SOLUTION OPTIONS

	ParkSmarter	ParkSmarter Plus		- ParkSmarter
		Outdoor	Indoor	Premium
Free space count	•	•	•	•
Search video by time	•	•	•	•
Free space indicator			•	•
Parking Guidance		•	•	•
Search video by license plate			•	•
Access control barrier by license plate			•	•
Vehicle locator				•
Parking data analytics				•
Customization				•

PARKSMARTER

Simple, secure and efficient parking solution for garages with one entrance/exit.

Scenarios

- Residence Community
- Shopping Mall
- Industrial Park
- Stadium

Benefit

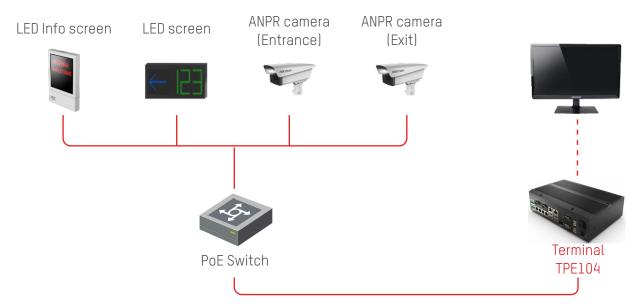




Seach Video by time

Free space count

Solutions Topology



Descriptions	Model number	QTY
Intelligent Entrance Video Unit	DS-TCG205-B(12V/Poe)	2
Special Entrance Control Terminal (independent utility, no need to use software)	DS-TPE104(2T)	1
Entrance\Exit LED Screen (product package Without Pole)	DS-TVL224-4-5Y	1
Indoor Guidance Display	DS-TVL121-3-5D	1
POE Switch	DS-3E1309P-EI	1

PARKSMARTER PLUS (INDOOR)

Adds more guidance and security to ParkSmarter – for garages with multiple entrances/exits.

Scenarios

- Shopping Mall
- Park
- Stadium
- Office Building
- Community

Benefit







Free space count



Parking guidance

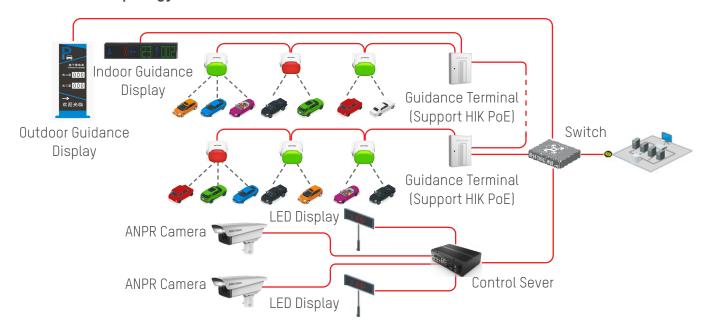


Search video by license plate



Access control barrier by license plate

Solutions Topology



Descriptions	Model number	
Intelligent Entrance Video Unit	DS-TCG205-B(12V/ Poe)	
Special Entrance Control Terminal (independent utility , no need to use software)	DS-TPE104(2T)	
Entrance\Exit LED Screen (product package Without Pole)	DS-TVL224-4-5Y	
Indoor Guidance Display	DS-TVL121-3-5D	

Descriptions	Model number	
POE Switch	DS-3E1309P-EI	
Parking Guidance Camera	DS-TCP440-B	
Guidance Terminal Server	DS-TPM400-P (3T)	
Management Software	Hikcentral Profes- sional	

PARKSMARTER PLUS (OUTDOOR)

Also provides Available Parking Space Display, Guide Parking, and Parking data to help managers improve the car park performance.

Scenarios

- Parking P+R (park and ride)
- Shopping Mall
- Highway Service Area
- Stadium
- Office Building

Benefit







Free space count



Parking guidance

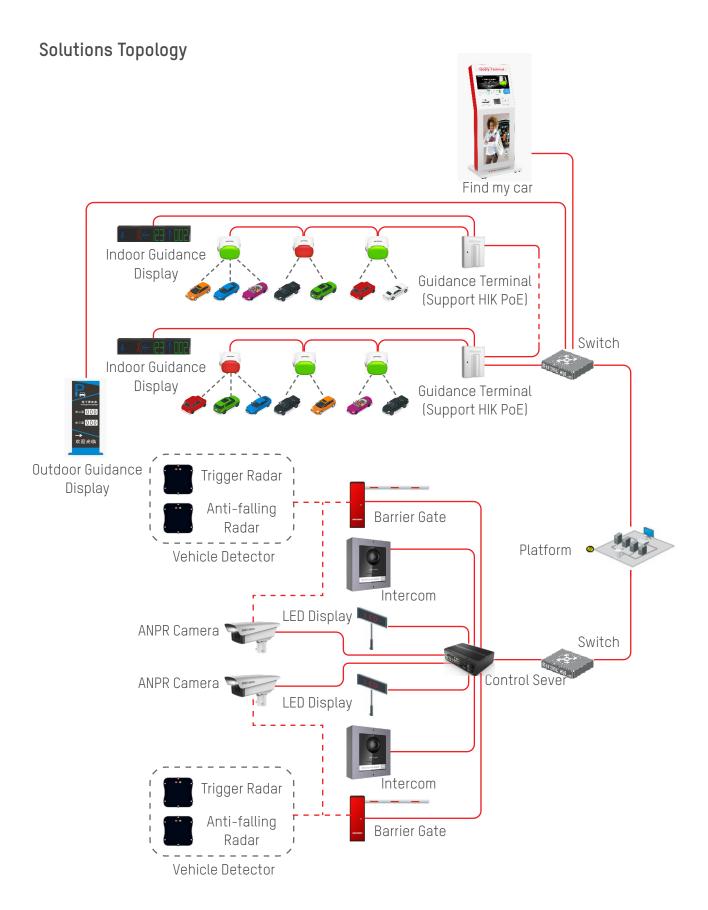
Solutions Topology



Descriptions	Model number	
DeepinView Varifocal Bullet Camera	iDS-2CD7A46G0-IZHS	
DeepinMind Series NVR	iDS-7716NXI-I4/16P/16S(B)/Parking	
LED Screen (product package Without Pole)	DS-TVL224-4-5Y	
Indoor Guidance Display	DS-TVL121-3-5D	
POE Switch	DS-3E1309P-EI	

PARKSMARTER PREMIUM

Adds further guidance features to ParkSmarter and more management tools - for garages with multiple entrances/exits.



PRODUCT SHOWCASE



ANPR Unit

- 2 MP, CMOS, 1920 x 1080, built-in LPR algorithm
- Integrated camera, housing, lens, power adaptor, supplement Lights
- Motorized lens
- · Software one-key focus, easy debugging
- LPR identification support, barrier / gate control, audio output



E&E Outdoor LED Display

- Four lines of text, LED outdoor Display
- Integrates with speaker
- LED Brightness: 1,200 cd
- Colours: Red, yellow, green
- Pixel Resolution: 64 x 64
- Dot Pitch: P4.75
- Dimensions: 364 x 484 x 60mm



Control Terminal

- 4 Channels of lane access
- 4 x 10/100 Mbps Ethernet ports, 2 x 1000 Mbps Ethernet ports, dual NICs
- •2 x RS485 ports, 3 x RS232 ports
- 4 x Relay ports support barrier / gate control
- •1 x audio output
- 2TB HDD included



Barrier Gate

- Entrance, HDD not included
- Supports chat, no card output, support LED audio remind
- Supports charging and accepting car when system offline



Capture Trigger Radar

- 79GHZ MMIC
- Maximum trigger distance : 6m
- Beam width: Vertical 34°, Horizontal 12°
- Adjustable Detection Range
- Distinguish the vehicle from pedestrian and only capture vehicle



Anti-fall Radar

- 79GHZ MMIC
- Maximum trigger distance : 6m
- Beam width: Vertical 12°, Horizontal 34°
- Adjustable Detection Range
- Avoid fall accidents of both vehicles and pedestrians



Guidance Camera

- 4 MP camera, single/dual lens options
- Detection of the parking space status and ANPR
- Smart analysis of over line, motion detection
- Integrated with indicator light, up to 7 color can be configured
- Covers 1 6 parking bays
- Angle adjustment, 0° to 30°
- Hikvision POE cabling, IP 54



Guidance Terminal

- Accesses up to 32 Guidance Cameras
- Integrates power supply, cabinet, indoor screen, kiosk and switch
- Wall-mounted design provides flexible camera access
- Video and image storage for up to 32 guidance cameras, 6 HDD bays



Platform-HikCentral All in one server

- HikCentral-P-VSS-Base/HW/300Ch
- HikCentral-P-EntranceExit-Module
- HikCentral-P-ANPR



POE Switch

- L2 unmanaged, 10/100M RJ45 PoE
- 1x 10/100M RJ45 uplink port
- 802.3af/at, PoE power budget.
- 300m long distance transmission
- 6KV surge protection



DeepinMind Series NVR

- H.265+/H.265/H.264+/H.264 video formats
- Up to 16 channel IP cameras can be connected
- 8 HDD can be used for continuous video recording
- Intelligent analytics based on deep learning algorithm
- Up to 16-ch perimeter protection
- Up to 16-ch 1080p decoding capability



Indoor Guidance Display

- Indoor one, two, or three-direction indicator
- Single-colour display
- Supports RS-485 and Network Transmission

SUCCESS STORIES

AC HOTEL BY MARRIOTT INNSBRUCK

Hikvision guidance Solution helps this Austrian hotel's customers to easily find a space.









CUSTOMERS OF SKI RESORT HINTERTUX GLACIER

Skiers in Austria can easily find spaces with the help of a Hikvision Parking Guidance System.









REMARKS

INTELLIGENT CAR PARK MANAGEMENT SOLUTION

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