

# COMPASS

Video-based Parking Guidance System



GUIDANCE | CAR SEARCH | SURVEILLANCE | ANALYSIS



## COMPASS

### Video-based Parking Guidance System

Equipped with up to 4MP high-resolution cameras, powerful OCR algorithm, well -designed signage, as well as brilliant software, COMPASS video-based parking guidance system can bring parkers amazing parking experience, park owners well-managed parking assets and easier operating. With a COMPASS, you won't get lost.



# KEY FEATURES

## Parking Guidance

Based on the detection of occupancy of individual parking lots and calculations, Compass guides parkers to available parking lots effectively by showing vacancies through colorful LED lights mounted above parking lots and LED signs that are deployed along the driveway.

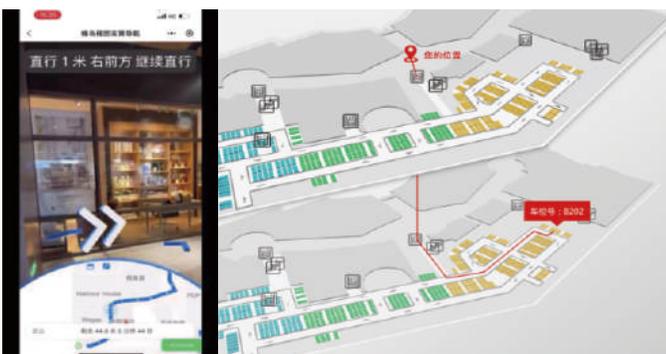
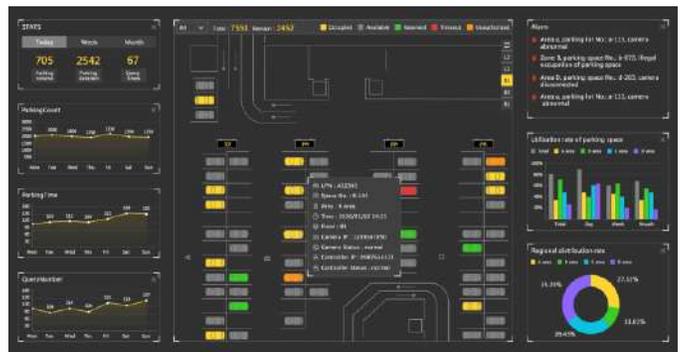


## Dynamic Overview

Compass provides a dashboard that combines parking maps, graphic charts, system alerts and key operating figures, so that the team can gain a dynamic overview of the operating just by logging in the system from anywhere, at anytime.

## Searching For Your Car

LPR algorithm along with mapping system of Compass allows parkers to search for their parking spot among hundreds, even thousands of parking lots and get there with navigating on a KIOSK or their own mobile phone. Optimally, with beacons installed in the parking, rea-time directions can also be available.

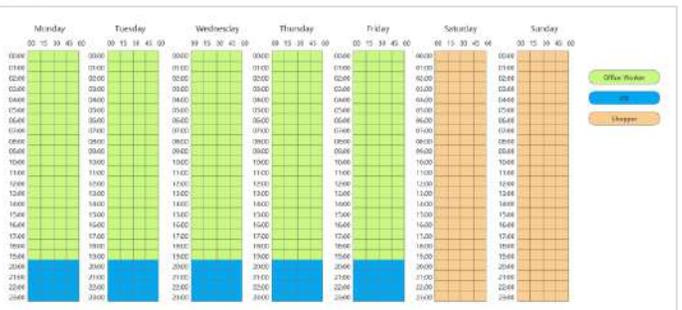


## Scheduling Parking Assignment

Parking patterns differ among parking-groups, office workers need more parking lots during weekdays while other parkers like shoppers may need more during weekends. Compass' allows the operating team to schedule the parking assignment to provide more parking time without increasing parking lots.

## Surveillance

Parking space areas are usually uncovered in a normal security system, which focuses more on driveways. However, lots of parking related issues happen in parking spaces. The feature of HD-video record and real-time video enables Compass to play the role like a surveillance system, as a supplement to CCTV.



## COMPASS VPGS CAMERAS



There are 3 series of cameras available with Compass VPGS, M2 (Single lens only), C2 (Twin/Single lens) and C5 (Twin/Single lens), of them, single-lens cameras can cover max. 3 parking lots, while twin-lens ones can cover max. 6 parking lots, 3 on each side. Each camera has built-in LED lighters (total 7 colors) to indicate the occupancy/vacancy of the parking lots, external indicator is also available. With high-definition, Compass cameras are capable of providing high quality pictures and real-time videos that can be supportive for various applications, such as surveillance, analysis, etc. Series C5 cameras are even equipped with a micro-PTZ so that they can be adjusted remotely.

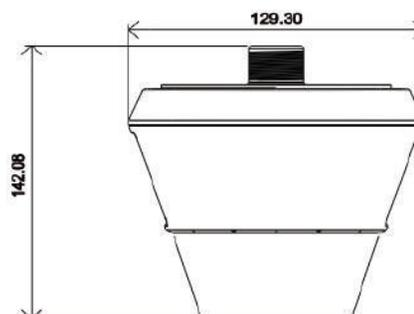
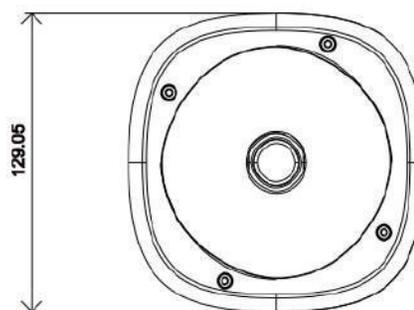
# COMPASS PARKING SPACE CAMERA C5



## SPECIFICATIONS

Video compression standards:	H.264/H.265
Video resolution	Main code stream: 2560*1440 Sub code stream: 640*360,704*576、
Video bit rate	512Kbps~5000Kbps
Video frame rate	1~25 frame
Image compression	JPEG
Image Resolution	640*360,704*576,1280*720,1920*1080、 2304*1296,2560*1440
Capacity	SingleCAM: Max. 3 parking lots TwinCAM: Max 6 parking lots
Vehicle recognition rate	≥99.8%
Status change time	≤3s
LPR recognition rate	≥99.6%
LPR recognition time	≤3s, After stopping
Lens	2.8 mm, 4 mm
Pixels	400MP
Maximun resolution	2560 * 1440
Low illumination	2LUX
Electronic shutter	0-100ms
Pan-tilt	Auto pan-tilt, support remote debugging, rotation angle -20°-40°
LED	7 colors available (red, green, white, yellow, purple, dark blue, light blue)
Bluetooth	BLE 4.2
Network interface	ch 10/100Mbps adaptive RJ45 port
Rs485	1 way

DC power supply	Standard working voltage DC 12V/1A, support DC 9~36 width power supply
Power consumption	SingleCAM≤3W, TwinCAM≤5W, External LED≤2W
Temperature	Operating temperature: -20°C ~ 60°C
Humidity	10%~95% (Non condensation)
Electrostatics	Contact 6KV, air 8KV
Surges	10/700, common mode 4KV, differential mode 2KV
Vibration resistance	Gb
Dimensions	129mm(L) * 129mm(W) * 142mm(H)C



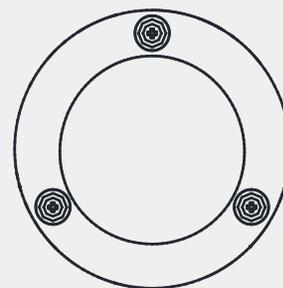
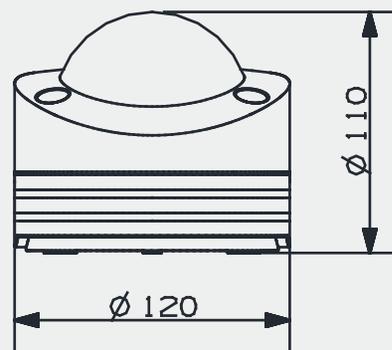


## COMPASS PARKING SPACE CAMERA M2

### SPECIFICATIONS

Pixel:	1.3 / 3 million
Lense:	2.8 / 4 / 6 mm @F2.0
Resolution:	1920* 1080
LED color:	Red/Green/Blue/Yellow /White/Cyan/Pink
Qty. of Bays:	1 - 3 bays
POE:	Supported
Video standard:	H.264 / H.265
Vehicle recognition:	99.8%
LPR recognition:	99.6%
Power supply:	12 VDC, 1 A
Power consumption:	10 W
Temperature:	-10 ~ 50 °C
Installation:	Lifting

### DIMENSION

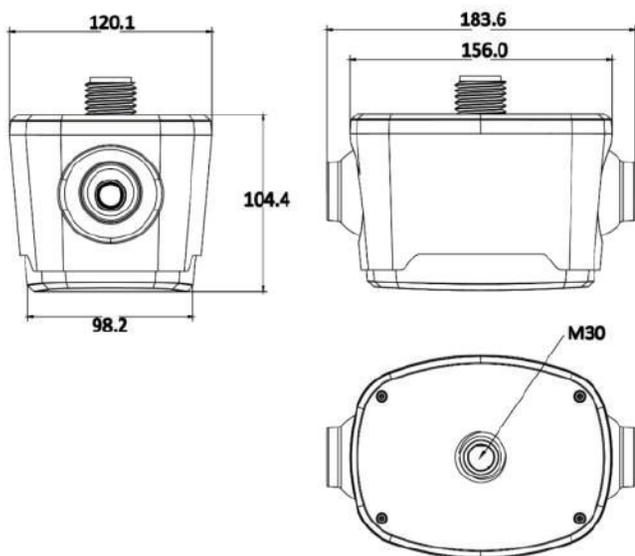


# COMPASS PARKING SPACE CAMERA C2

## FEATURE

Parking space camera C2 monitor 6 bays in maximum with 4M lens that greatly reduce the costs for devices and installation. Vehicles recognition, license plate recognition, video recording, LED display, POE connection are all integrated. Quick camera angle adjustment and remote commissioning are all supported.

## DIMENSION



## SPECIFICATIONS

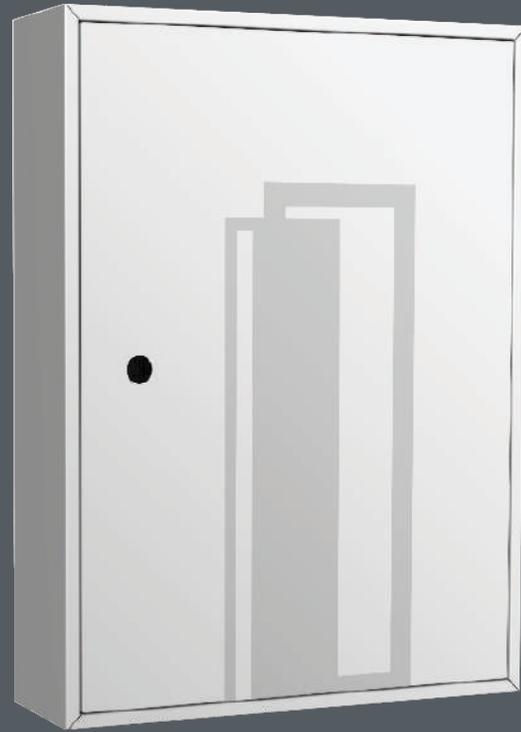
Pixel:	4 million
Lense:	2.8 / 4 mm @F2.0
Shutter:	1/3 - 1/100,000 s
Minimum illumination:	0.01 lux
Resolution:	2560 * 1440
Frame rate:	2560 * 1440, 25 fps
LED color:	Red/Green/Blue/Yellow /White/Cyan/Pink
Qty. of Bays:	Monocular 1 - 3 bays Bonicular 2 - 6 bays
POE:	Supported
Video standard:	H.264 / H.265
Vehicle recognition:	99.8%
LPR recognition:	99.6%
Power supply:	12 VDC, 1 A
Power consumption:	10 W
Temperature:	-10 ~ 50 °C
Humidity:	10%~95% (Non condensation)
Installation:	Lifting



# COMPASS ZONE CONTROLLER FOR C2/M2

## FEATURE

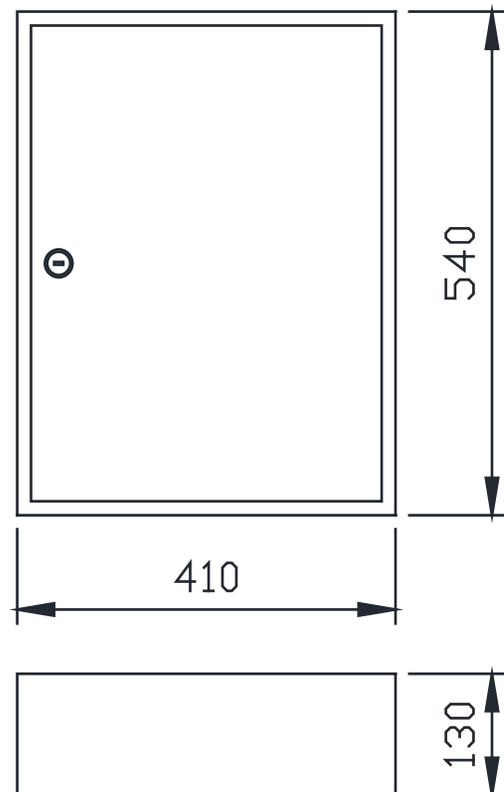
The Controller works as the intermediary of the VPGS cameras and management servers. It can connect up to 32 single-lens cameras or 16 twin-lens cameras. It includes 16 POE ports and each port can connect up to 6 single-lens cameras or 3 twin-lens cameras.



## SPECIFICATIONS

Rated voltage:	110/220 VAC 50/60 Hz
Power consumption:	500 W max.
Available Ports:	100 M with POE * 16 1000 M * 8 RS485 * 2
Fiber port	
Installation:	Wall mounting ( 2 m above)
Size:	450 * 410 *130 mm
Temperature:	-10 ~ 50 °C

## DIMENSION



# COMPASS ZONE CABINET FOR C5

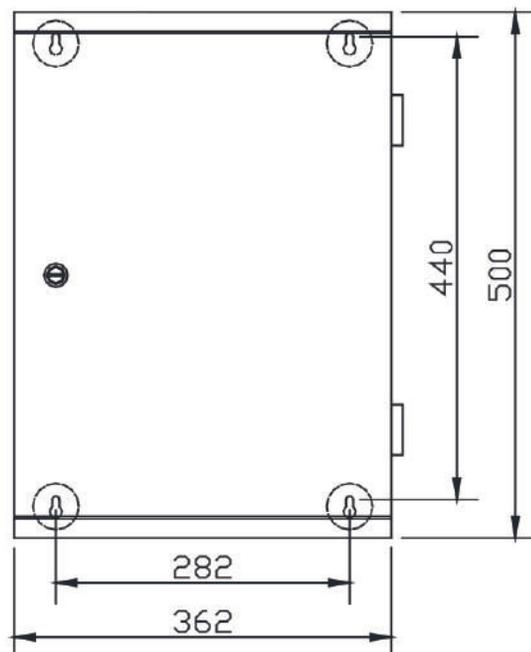
## FEATURE

The Cabinet works as the intermediary of the VPGS cameras and management servers. It can connect up to 32 single-lens cameras or 16 twin-lens cameras. It includes 7 POE ports and each port can connect up to 6 single-lens cameras or 3 twin-lens cameras.



## SPECIFICATIONS

Rated voltage:	110/220 VAC 50/60 Hz
Power consumption:	400 W max.
Available Ports:	100 M with POE * 7 1000 M * 1 Fiber port(Optional)
Installation:	Wall mounting ( 2 m above)
Size:	500 * 375 *105 mm
Temperature:	0 ~ 40 °C

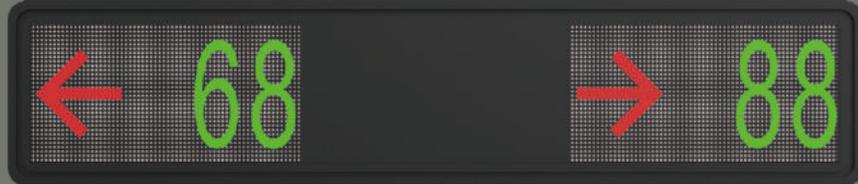


# COMPASS GUIDING LED SIGNS - HOUSING

1-direction



2-direction

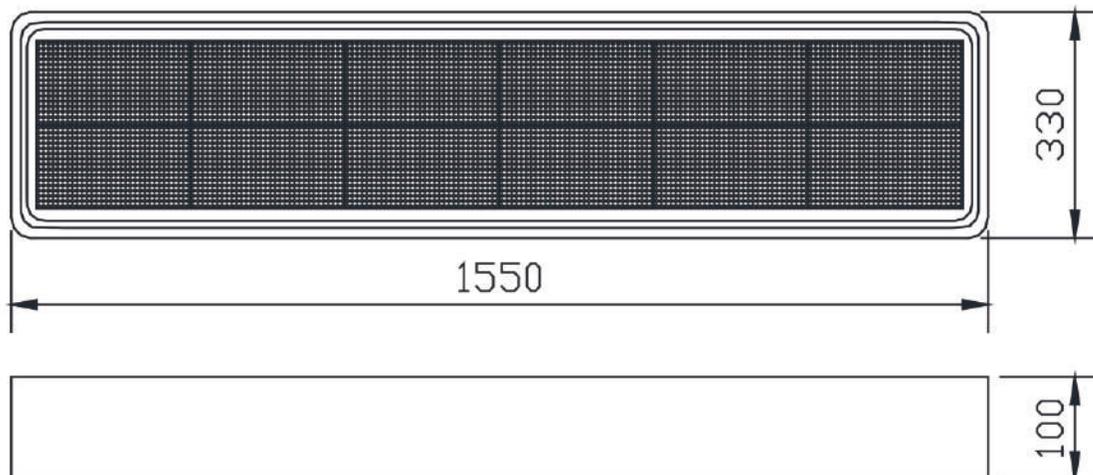


3-direction



## SPECIFICATIONS

Rated voltage:	110/220 VAC 50/60 Hz
Power consumption:	35 W / 70 W / 105 W
Color:	Green, Red, Yellow
Brightness:	600 cd/m <sup>2</sup>
View angle:	178 °
Pixel:	64 * 32 / 128 * 32 / 192 * 32
Communication:	Network / RS485
Installation:	Ceiling / Wall mounting
Temperature:	-10 ~ 50 °C

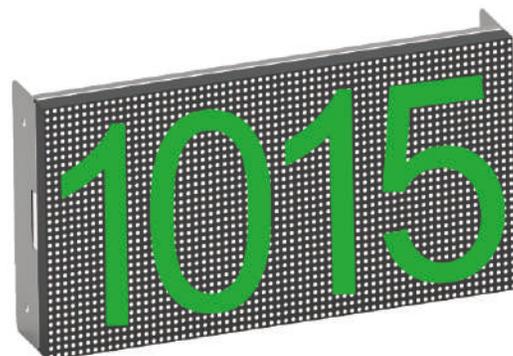
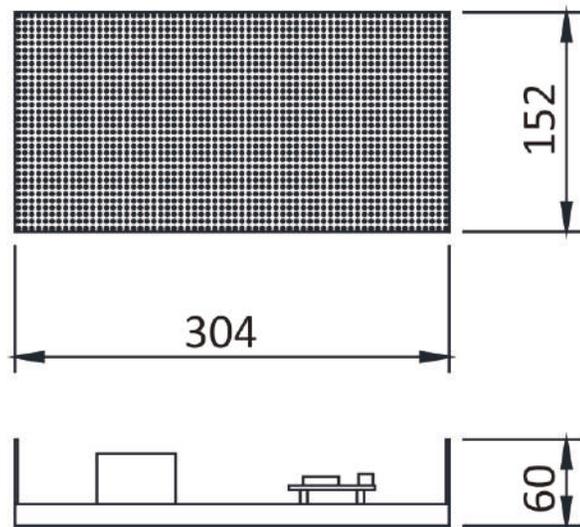




## COMPASS GUIDING LED SIGNS - EMBEDDED

### SPECIFICATIONS

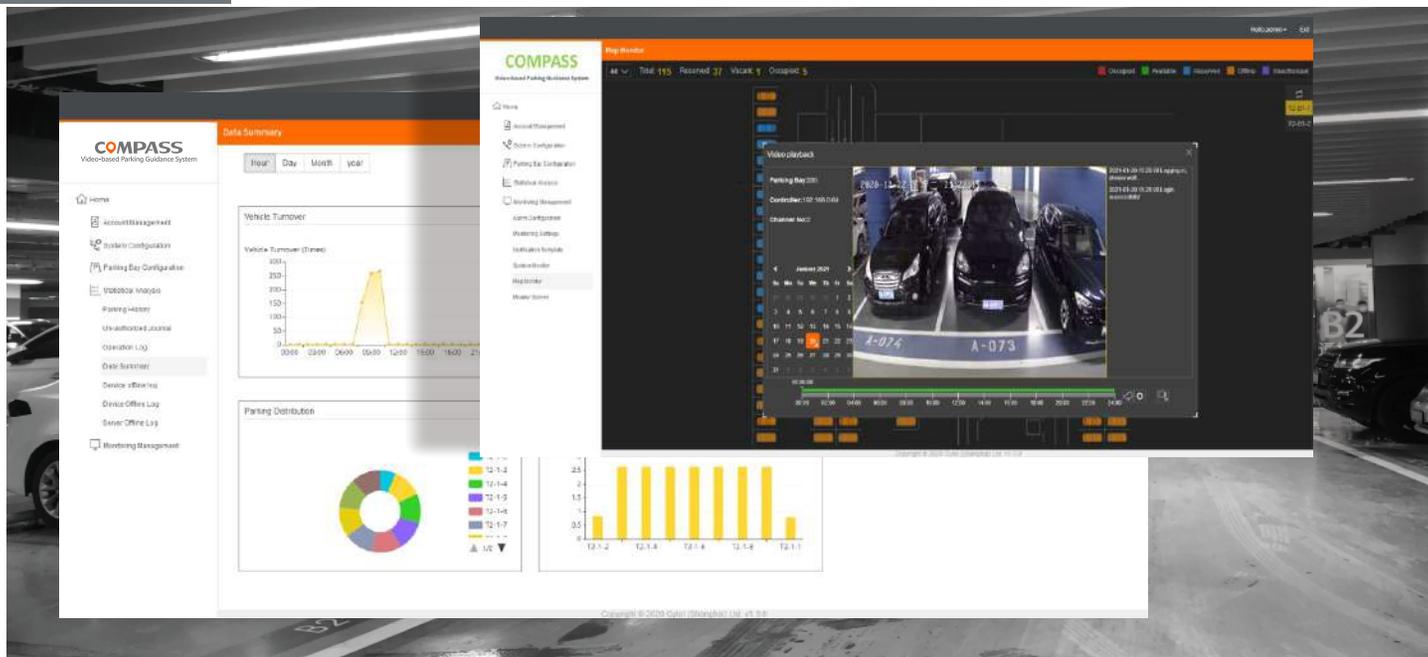
Rated voltage:	110/220 VAC 50/60 Hz
Rated power:	35 W
color:	Green,Red,Yellow
Brightness:	600 cd/m <sup>2</sup>
View angle:	178 °
Pixel:	64 * 32
Communication:	Network / Rs485
Installation:	Embedded
Temperature:	-10 ~ 50 °C



## VPGS PLATFORM



COMPASS VPGS Platform provides a one-stop management console where parking operators can gain a comprehensive dynamic view of their parking operating and execute specific managing measures in need. As a service provider, Compass VPGS Platform also supports system functions, like parking guidance, car searching, reporting etc. Compass VPGS Platform is very supportive for integration with 3rd-party applications, since there are a series of open APIs available.



## MORE ABOUT VPGS PLATFORM

### Basic Configuration

- Settings for parking lots, zones, floors and others of the facility.
- Settings for system hardware: cameras, LED signs, Kiosks, etc.
- Mapping the parking facility
- Car searching settings

### Advanced Functions

- Parking management console
  - Occupancies on map;
  - Visual Charts;
  - Alarms and Warnings
  - Key figures
- Parking arrangement schedule to suit different parking patterns
- Manage Exclusiveness

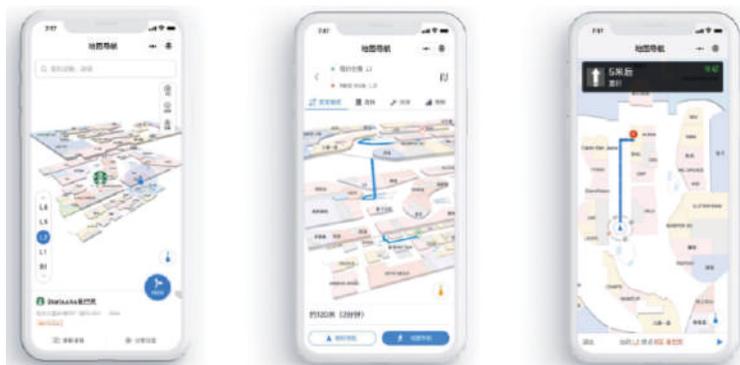
Video view and play back

- Manage parking LED signs (including VMS)

### Reporting & Analysis

### Integration

APIs are available fore integration with mobile phone APPs, PMS, Navigating and other applications





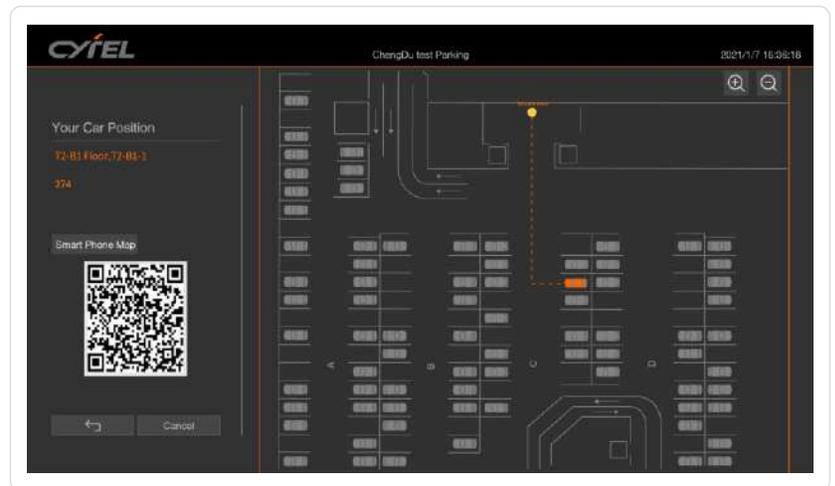
## STANDARD KIOSK

### Description

On Kiosks, drivers can search for their parking location and get the path to get there by entering the LPN, moreover, a QR can be shown for the drivers to scan and download the information to their phone to guide them along the way. After software or hardware integration, other functions can also be available on Kiosk, like paying parking fees, validating benefits, etc.

### Technical Specifications

Screen size:	27"
Resolution:	1920 x 1080H: 175°
Viewing Angle:	V: 175°
Brightness:	350 cd/m2
Screen type:	Capacitive touch screen



### Option

- Optional modules
- \* API for E-payment of PMS
- \* Other alternative designs
- \* Reader for scanning a ticket

Power:	300 w
Temperature:	-10- 50°C
Size:	760 x 500 x 1500 mm
Material:	Steel
Surface treatment:	Baked enamel



CUSTOMIZED KIOSK



\*NOTICE: The parameters of computer are up-to-date and can possibly be different.