COMPASS

Video-based Parking Guidance System

GUIDANCE | CAR SEARCH | SURVEILANCE | ANALYSIS

CYTEL (Shanghai) Ltd.

Cytel's history dates back to 1972, when the young German entrepreneur Mr. Michael Habicht established Cytel Far East specializing in importing high-tech equipment and systems into the rapidly developing Hong Kong. In 1976, Cytel installed the Asia's largest GE projector in Hong Kong Stadium.

In 1984, Cytel successfully introduced the advanced Scheidt & Bachmann parking system in to Hong Kong and the systems were installed in the ten government car parks. This had revolutionized the parking management in Hong Kong. Then, Cytel started its journey in parking industry, developing high-quality products, and providing professional solutions and services to prestigious projects worldwide.

With the experienced, creative and well trained team, inspired by the latest technological trends, Cytel's determined to dedicate state-of-the-art systems to support customers who want effective, efficient and reliable management of parking facilities

History

Year	Event
2021	Launch cloud-based PMS Minicloud
2020	Redesign VPGS into Compass VPGS
2014	Launch Single Space Find your Car System
2012	Launch Zone based Find your Car System
2006	Become von Ballmoos Distributor
2004	ISO9001:2000 certification
2002	MBO in Mainland China
2000	Installation of the first Parking Guidange System in China at Shanghai Jinmao Bldg
1989	Installation of the first Parking System at China World Trade Center
1972	Established in HongKong as importer of European high tech equiment

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.
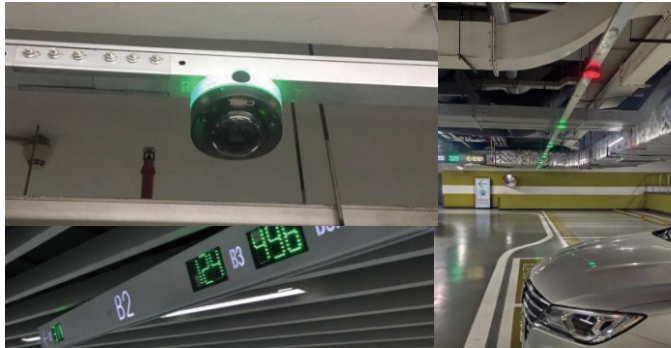

Dynamic Overview

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.
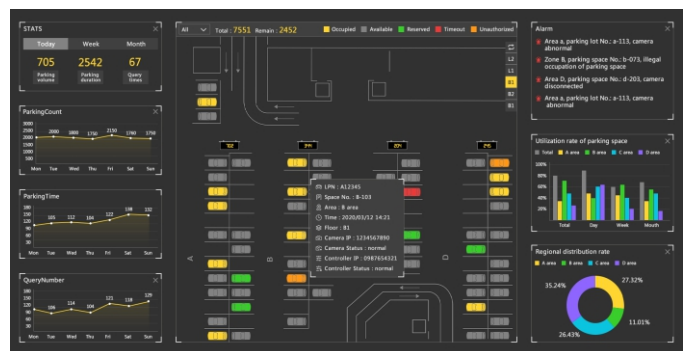
Searching For Your Car

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.
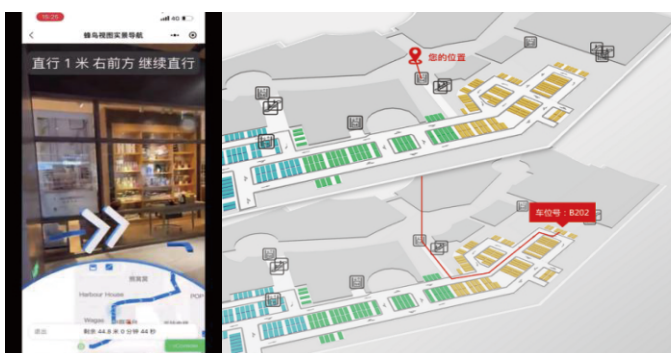

Scheduling Parking Assignment

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.
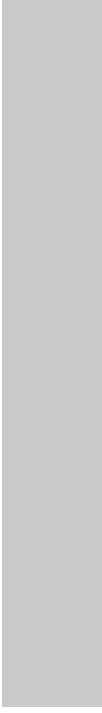
Surveillance

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.
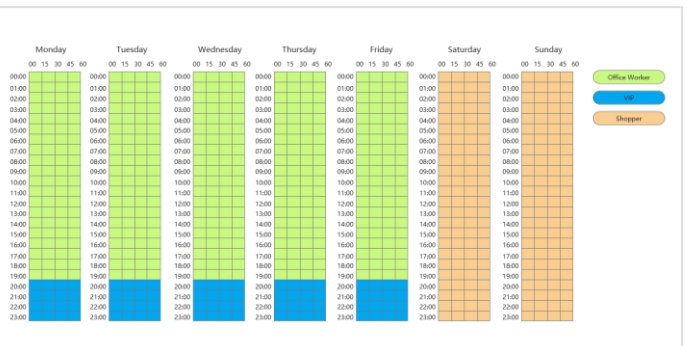
SITES VIEW
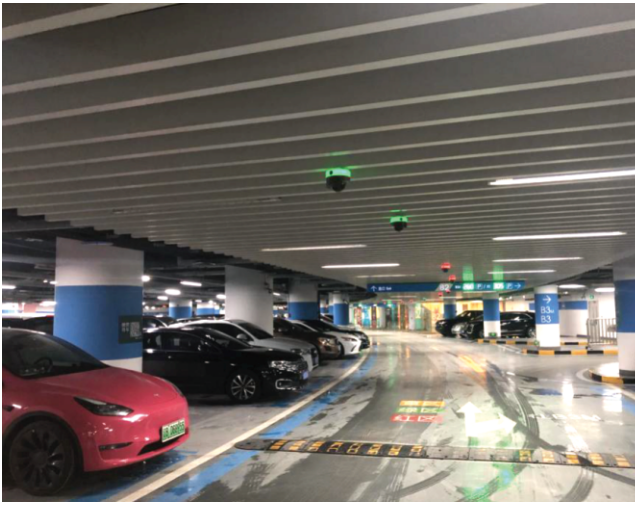
WORLDWIDE CUSTOMERS

JOB REFERENCES

iOiCiTY MALL

Prestigious Shopping Mall
KualaLumpur, Malaysia

12,000+Parking Bays

IOI City	Kuala Lumpur, Malaysia
Sequis Tower	Jakarta, Indonesia
Andermatt ski resort	Andermatt, Switzerland
Çukurova Airport	Tarsus, Turkiye
McLister Street Sporwood	Victoria, Australia
TaoZhu Garden	Taipei, China
FTV	Taipei, China
Elements	HongKong, China
The One	HongKong, China
Nan Fung City	HongKong, China
CWTC	Beijing, China
GTC	Beijing, China
HopsonPlaza	Beijing/Guangzhou, China
Kerry Center	Shanghai, China
Taikooli	Shanghai, China
Hanglung Plaza	Shanghai/Dalian, China

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 -20º -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℃ ～60℃
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)℃
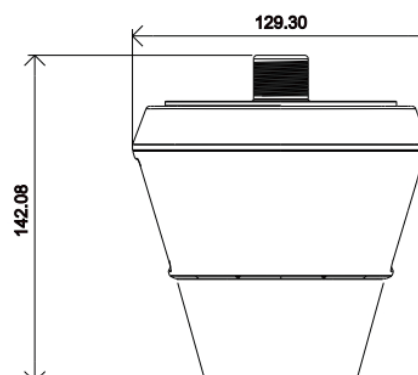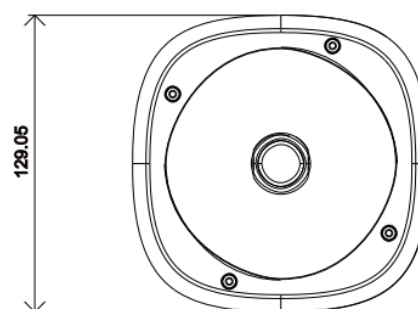
COMPASS PARKING SPACE CAMERA M2

SPECIFICATIONS

|	
Pixel:	1.3 / 3 miilion
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 ℃
Installation:	Lifting

DIMENSION
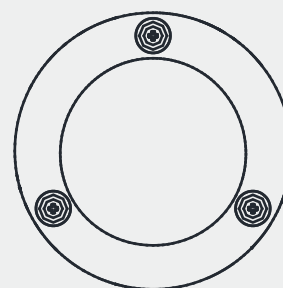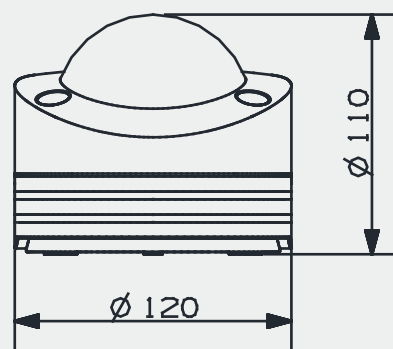
COMPASS PARKING SPACE CAMERA C2

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
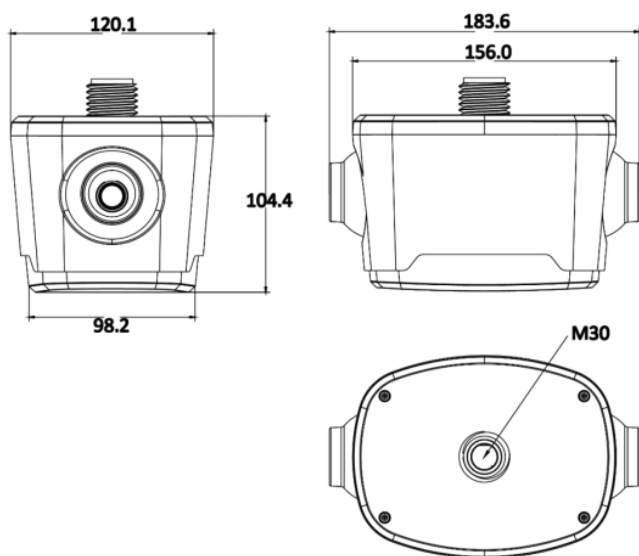
SPECIFICATIONS

Pixel: 4 miilion
Lense: 2.8 / 4 mm @F2.0
Shutter: 1/3 - 1/100,000 s
Minimum illimination: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 ℃
Humidity：   10%～95% (Non condensation)
Installation: Lifting
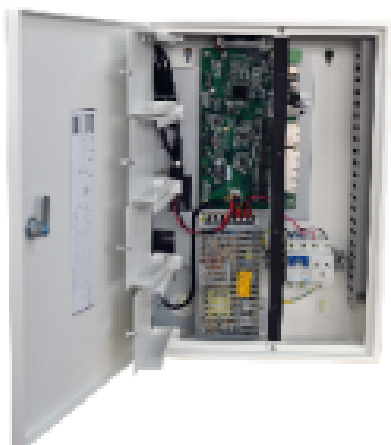
COMPASS ZONE CONTROLLER FOR C2/M2

FEATURE

The Controller works as the intermediary of the VPGS cameras and management ervers. 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-len cameras or 3 twin-lens cameras.
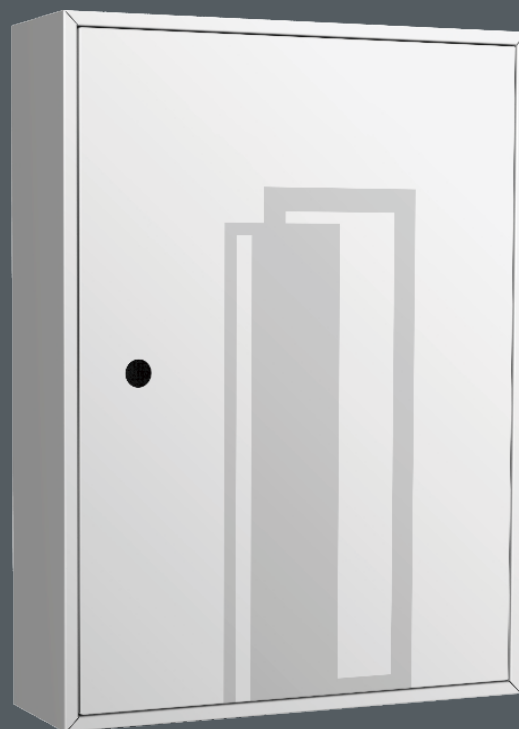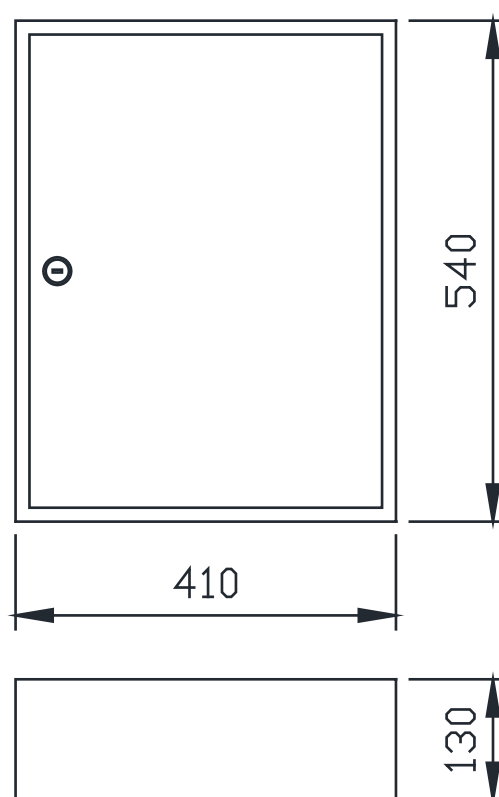

SPECIFICATIONS

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 ℃

DIMENSION


540

410

130

COMPASS ZONE CABINET FOR C5

FEATURE

The Cabinet works as the intermediary of the VPGS cameras and management ervers. 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-len cameras or 3 twin-lens cameras.

SPECIFICATIONS

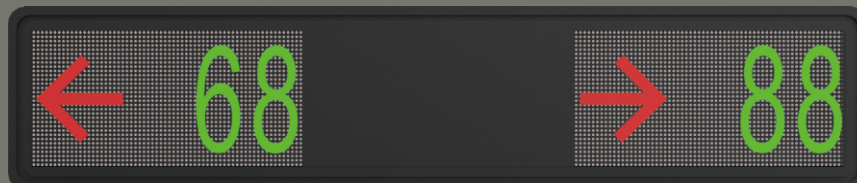|	
Rated voltage:	110/220 VAC 50/60 Hz
Power consumption:	400 W max.
Available Ports:	100 M with POE * 7 1000 M * 1 Fiber port(Optional)
Installation:	Wall mounting (2 m above)
Size:	500 * 375 *105 mm
Temperature:	0 ~ 40 ℃
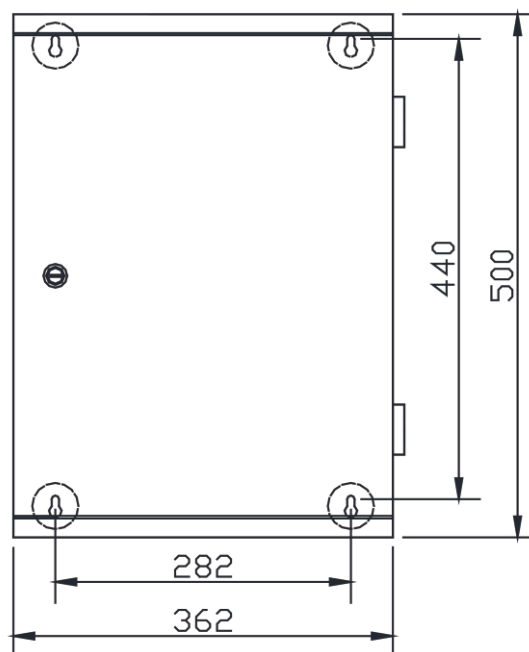
COMPASS GUIDING LED SIGNS - HOUSING

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/m2
View angle:	178 °
Pixel:	64 * 32 / 128 * 32 / 192 * 32
Communication:	Network / RS485
Installation:	Ceiling / Wall mounting
Temperature:	-10 ~ 50 ℃

330

1550

100
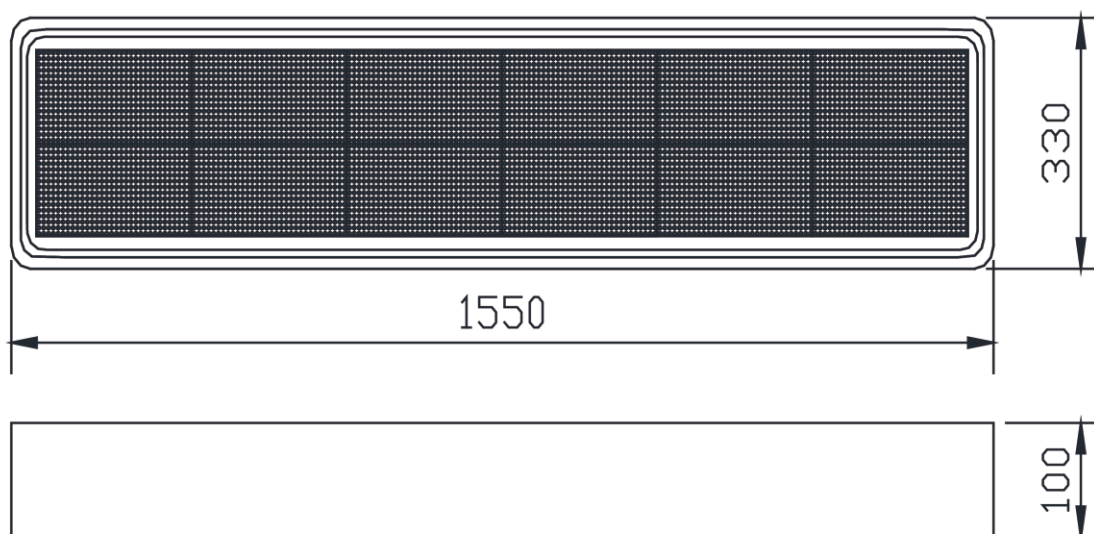
COMPASS GUIDING LED SIGNS - EMBEDDED

SPECIFICATIONS

Rated voltage:	110/220 VAC 50/60 Hz
Rated voltage:	35 W
color:	Green,Red,Yellow
Brightness:	600 cd/m2
View angle:	178 °
Pixel:	64 * 32
Communication:	Network / Rs485
Installation:	Embedded
Temperature:	-10 ~ 50 ℃

152

304

60

1015
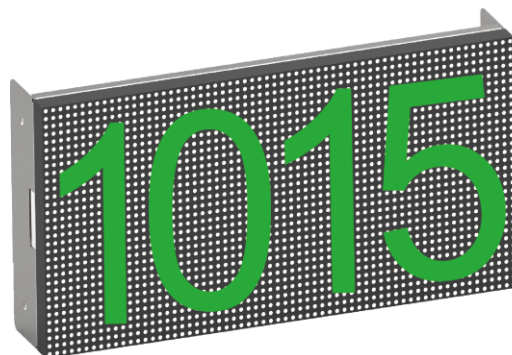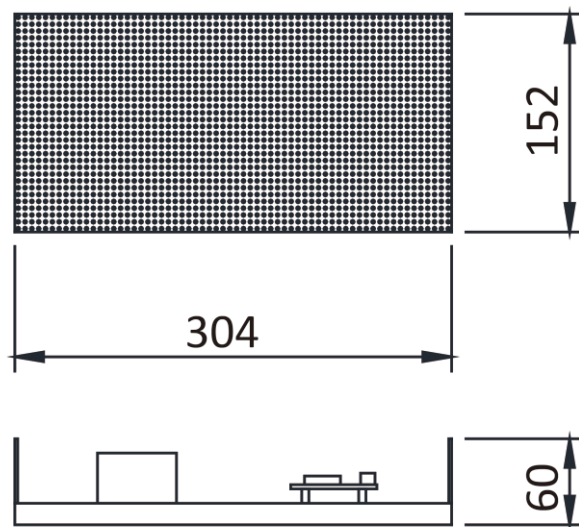
VPGS PLATFORM

COMPASS VPGS Platform provides a one-stop management console where parkingoperators 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.
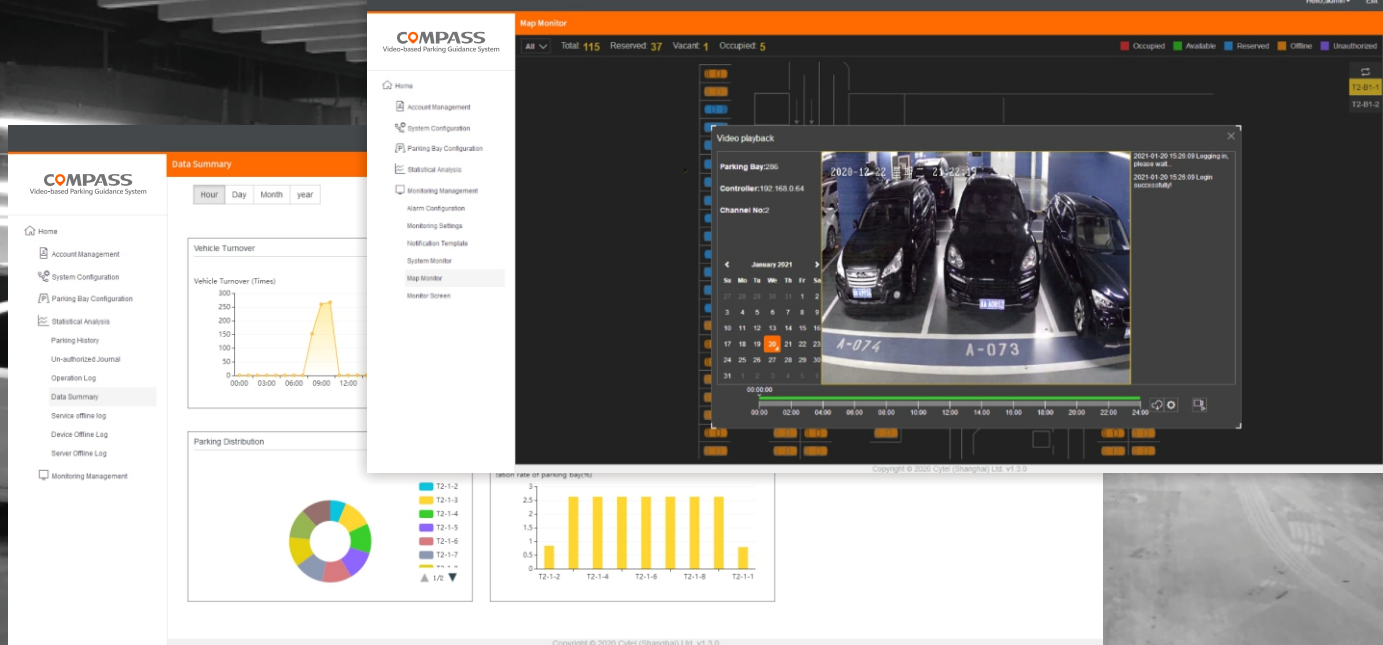
MORE ABOUT VPGS PLATFORM

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
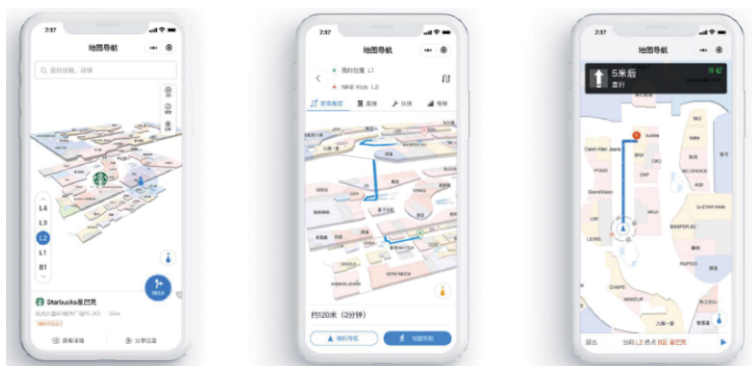
● Manage Exclusiveness

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
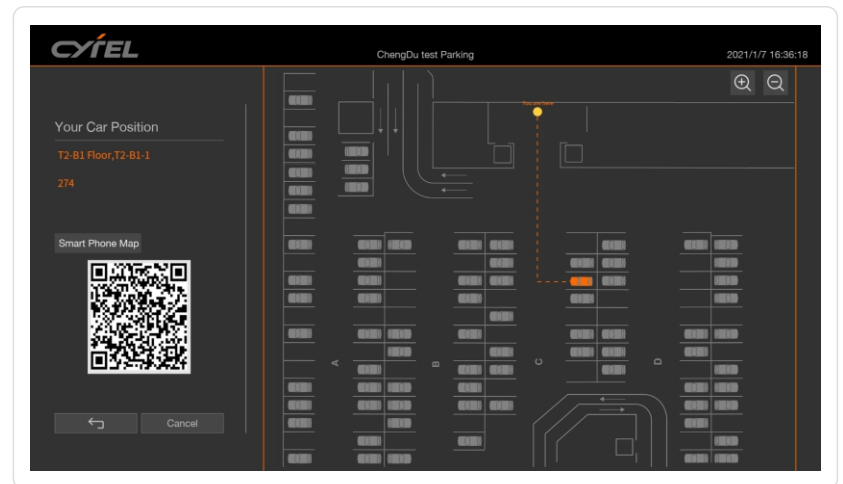
and other applications

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.

Option

-Optional modules

* API for E-payment of PMS

* Other alternative designs

* Reader for scanning a ticket

Technical Specifications

Screen size:	27"		Power:	300 w
Resolution:	1920 x 1080H: 175°		Temperature:	-10- 50℃
Viewing Angle:	V: 175°		Size:	760 x 500 x 1500 mm
Brightness:	350 cd/m2		Material:	Steel
Screen type:	Capacitive touch screen		Surface treatment:	Baked enamel

CUSTOMIZED KIOSK

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

SMOOTHEN PARKING JOURNEY

E A S E M A N A G E M E N T

ESCALATE VALUE OF ASSETS