

Smart Parking Guidance Technologies



- **Areas we will cover**

- > Evolution
- > Sensing Solutions
- > Navigation Solutions
- > Software Solutions
- > Network
- > Benefits & Opportunities

Evolution

The Evolution of PGS Technology

Zonal System



binary yes/no

occupancy only

rudimentary data

manual performance
monitoring onsite

low accuracy, needs
manual resets

Ultrasonic



binary yes/no

occupancy only

rudimentary data

manual performance
monitoring onsite

moderate accuracy,
hard to verify

Camera-based



data-driven + LPR

sensor with a brain

robust data & live
video

advanced tech
remote monitoring

verified 99%
accuracy

Sensing Solutions

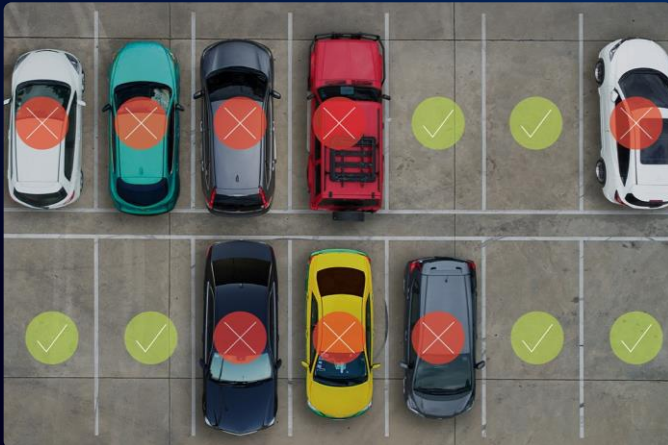


Parking Guidance Solutions

INDOOR



OUTDOOR





Each unit of 2 cameras and 1 LED controls up to 4 parking spaces, 2 per each side

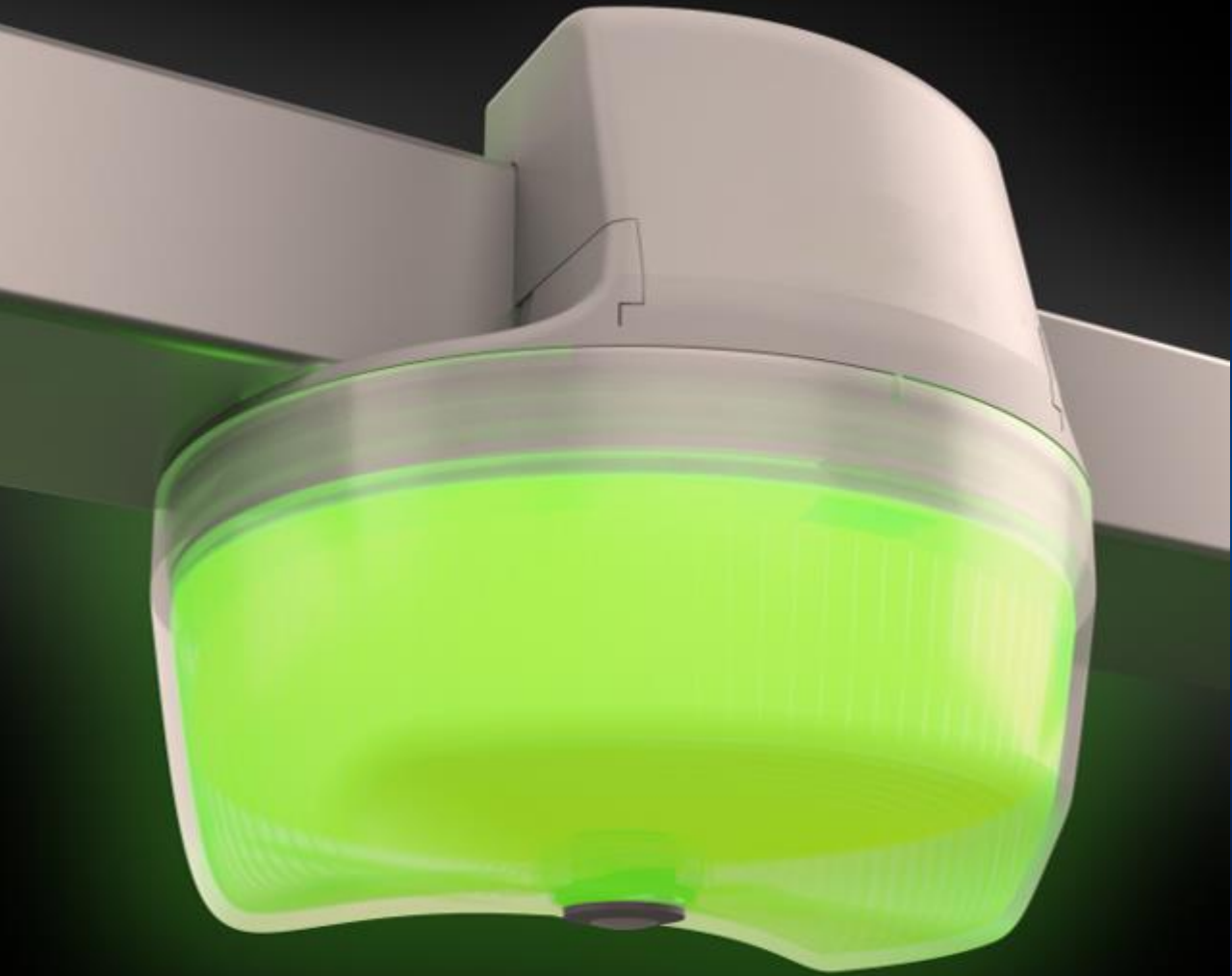
Bright RGB LED indicator that can display unlimited colors

Quick installation

LPR (license plate recognition)

Video monitoring & surveillance in and around the parking bays

IP66 seal rating



Each unit controls up to 6 parking spaces

360° field of vision

24/7 video recording, monitoring, and surveillance

Easy installation and light infrastructure

Price point competitive with low-tech ultrasonic systems

No LPR

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- *Real-time video monitoring allows operators to quickly react to any events, increasing control of and security in the garage*



Added Security

- Real-time video monitoring
- Increased garage security and parker comfort and safety
- Surveillance of parking spaces & corridors to protect against criminal behavior in hard to view spaces
- Protects owners and management against fraudulent claims of theft and vandalism



Find your Car Kiosk

Returning parker or staff member simply types in plate number

Via mobile app, touchscreen kiosk, pay station or other onsite system

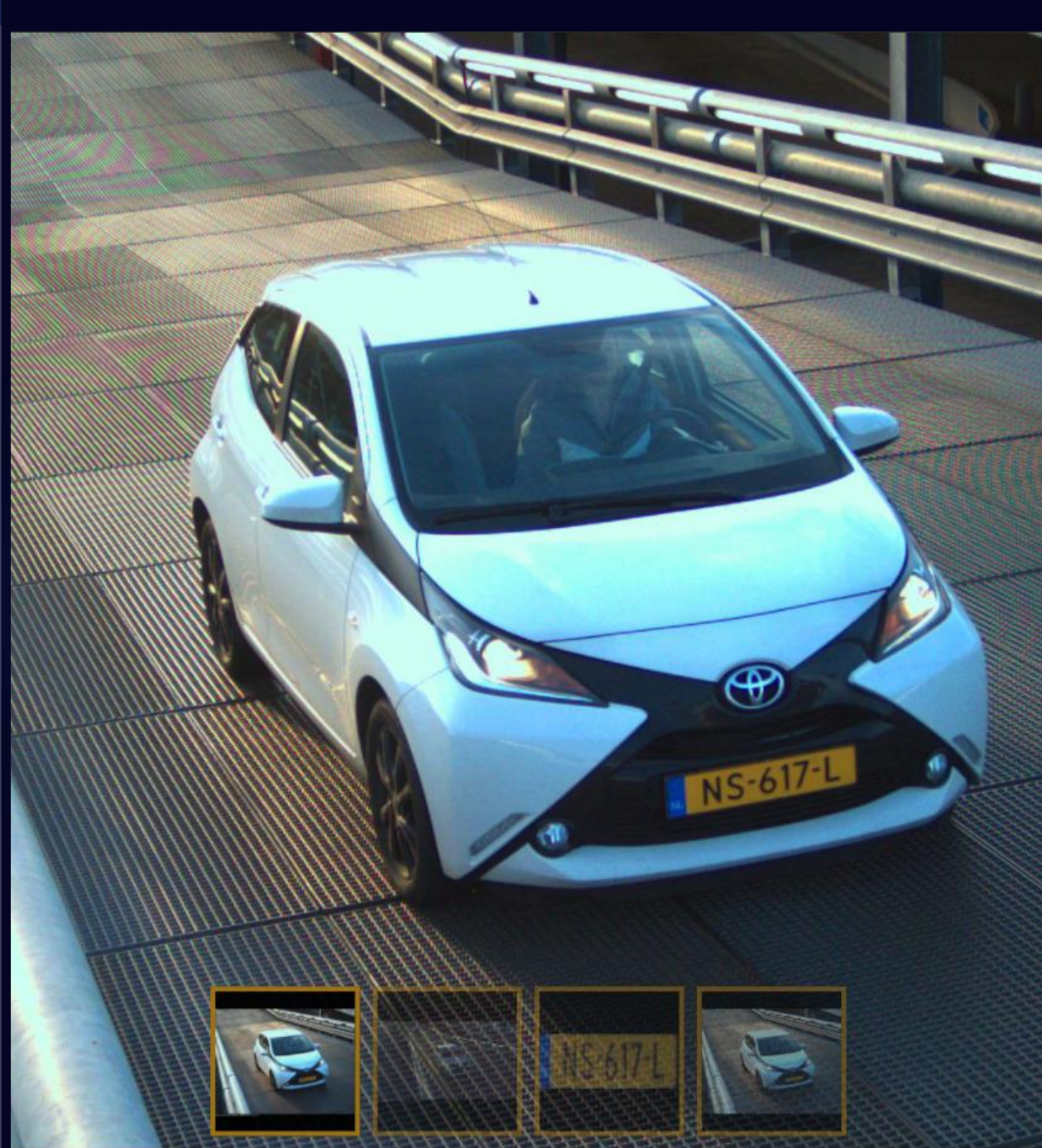


Wide-view cameras each monitor multiple bays

Video and rich data captured for business intelligence

Integrates with existing outdoor surveillance and indoor parking guidance system

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Lane Cameras with LPR

Cameras capture license plate images for vehicles exiting and entering rooftop or surface lots

Counts vehicles for occupancy data and tracking

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Navigation Solution



Data-driven Wayfinding Signage

Flexible Navigation Solutions



latest navigation solution

Real-time display updates

Advanced parking guidance

Important messages and alerts

Branding and promotional content

**Web-based content management
system for additional customizations**



Software Solution



- **Dashboard with actionable real-time data**

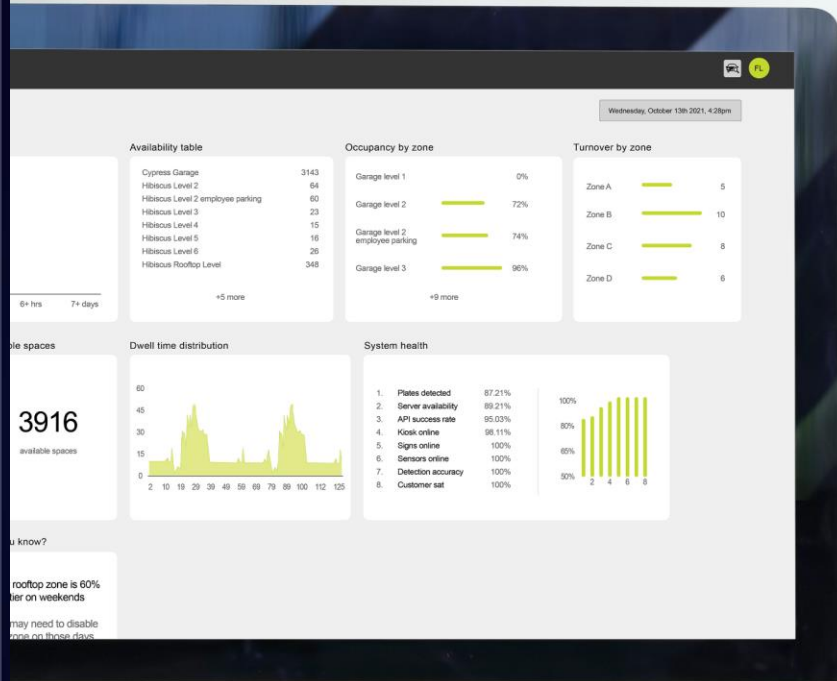
Live data: maps, signs and regions

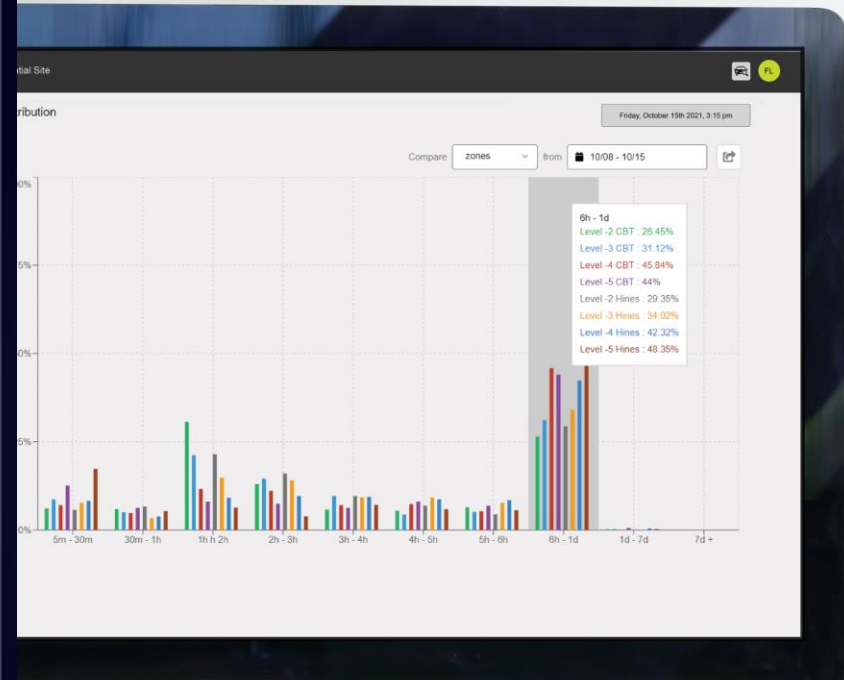
Historical data with comprehensive reporting

Augments PGS and next-generation wayfinding

Business intelligence at a glance for quicker decision-making

Intelligent mining of actionable system data





- **Maximize operational efficiency with incisive reports**

Track trends in visitor behavior

Designed for your installation and adaptable for your use

Easily create, save and retrieve reports

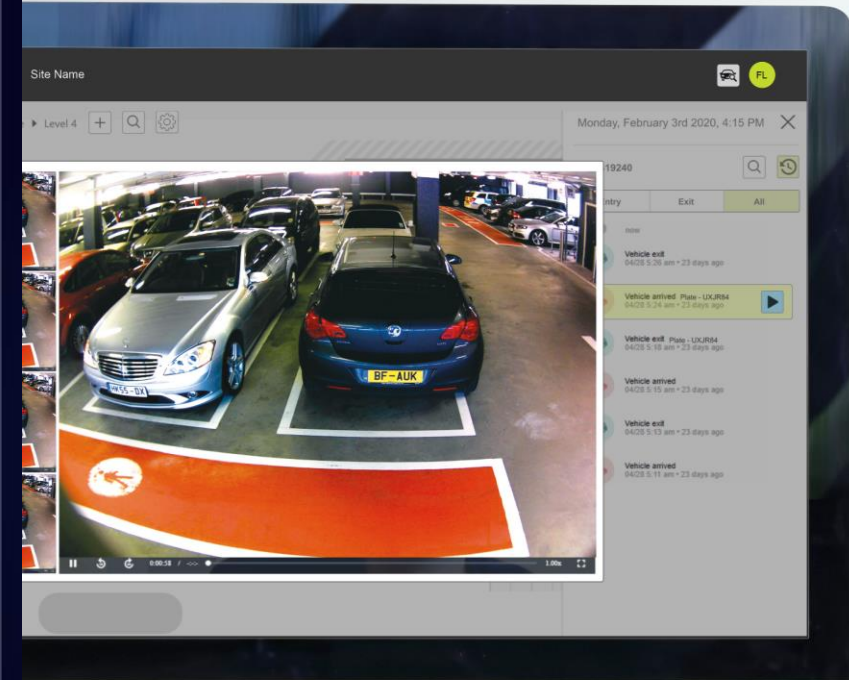
Surveillance

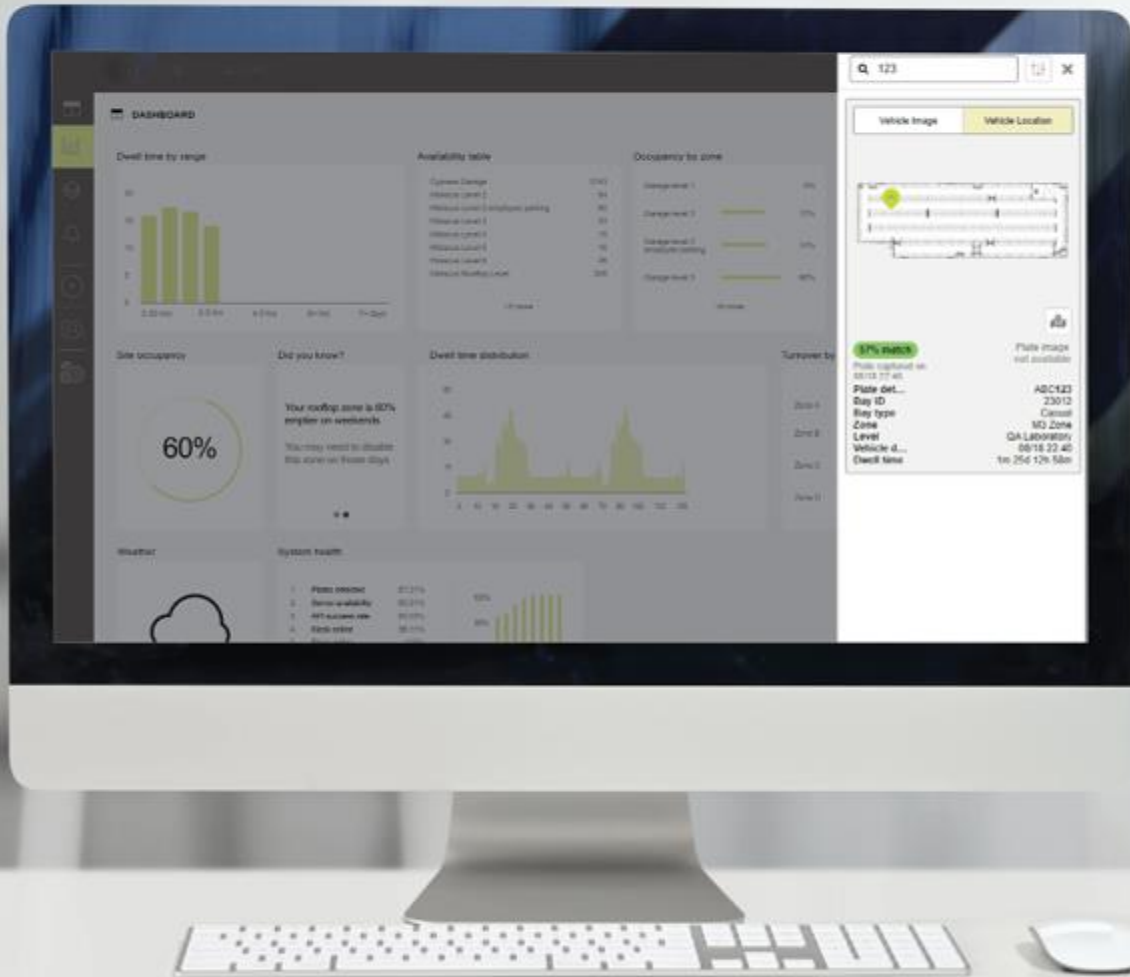
Next-generation video monitoring with multiple real-time views

Wide range of video and recording options including live streaming and video on demand

Search and view video associated with garage events based on location, time/event, license plate, etc.

Investigate video captures for both surveillance and parker preference/behavior insights





Software with Find your Car locator

Returning parker or staff member simply types in plate number

Available Via Server, mobile app, touchscreen kiosk, pay station or other onsite system

Alerts

Automated real-time email alerts for violators and staff

No fixed barriers/gates needed:

- > Policy/overstays enforcement
- > User group control for tiered parking
- > Guard against threat vehicles
- > Recognize VIPs upon arrival

From: no-reply@moacir.xyz
Sent: Tuesday, April 7, 2020 9:03 PM
To: paulomoacir.junior+test-email@gmail.com; paulomoacir.junior+test-email@outlook.com; Aileen Carolan
Subject: SES whitelist PPC



Alert

Policy **SES whitelist PPC** has been violated by the following vehicle.

Bay ID	47
Plate Text	CBL2017
Zone	PPC Level 6
Map	PPC_Level-6
Entry Timestamp	3/29/2019 8:53:04 AM -04:00
Exit Timestamp	3/29/2019 8:53:04 AM -04:00



APIs

Real-time access for third-party applications

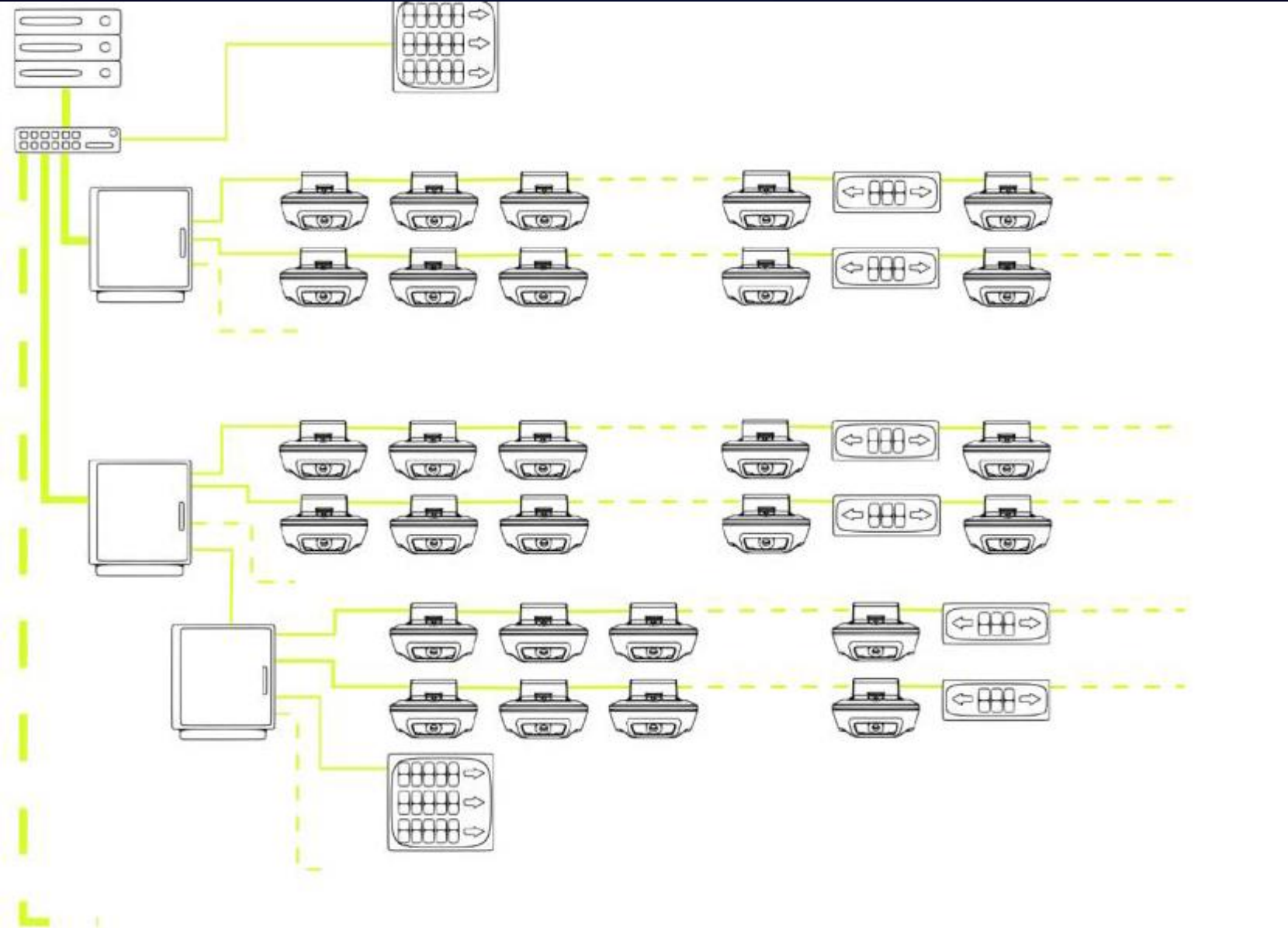
Increase system controls to change bay type colors, signs/regions display updates

Integrate with Find Your Car on a white-label app or client website/mobile app

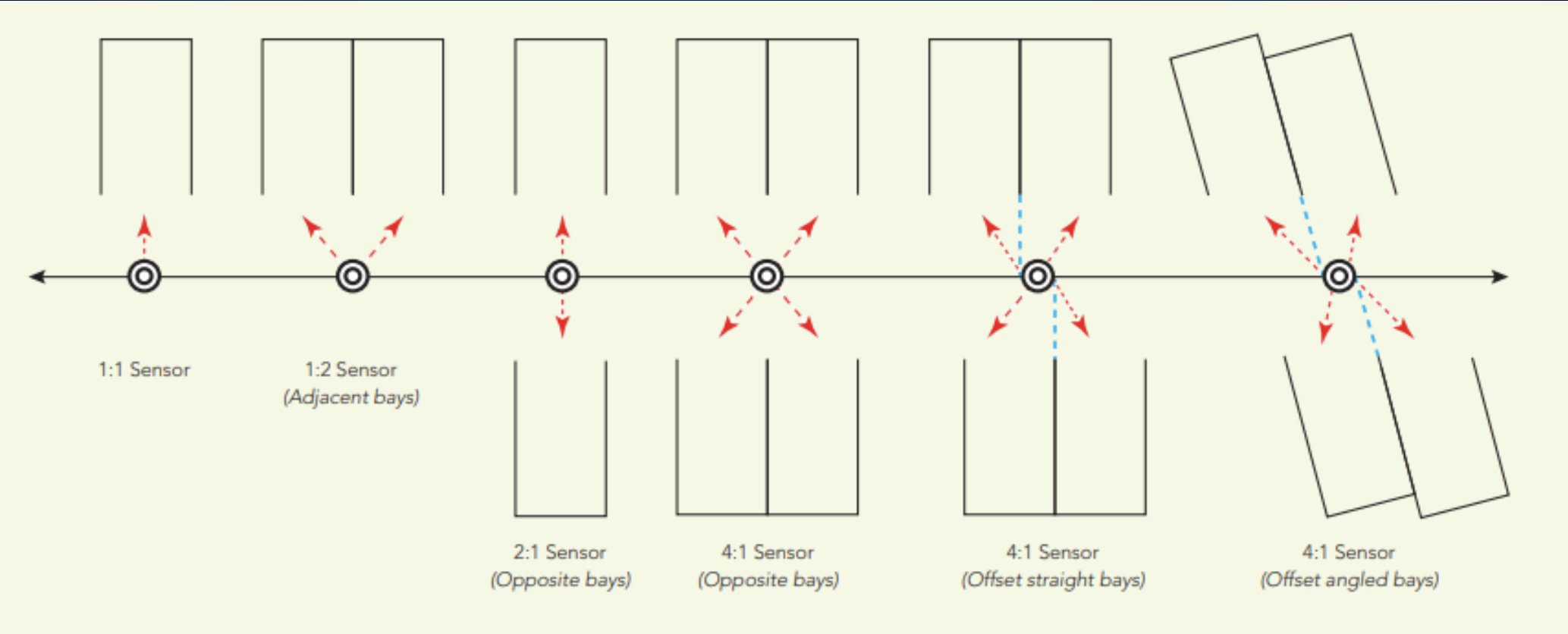
Live stream parking data into client-based applications for custom reporting



Network



Positioning



Benefits & Opportunities



Key Operator Benefits

Increased control

Ease operations

Boost revenues and profitability



Key Operator Benefits

Increased control

Drive expense out of operations

Boost revenues and profitability

Elevate the parker experience

Enhance security



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- *Time-to-park reductions from 36% to 63%.**



Reduced search time = increased sustainability

- Decreased the average time to park by 91.01 seconds
- Save the equivalent to 384 barrels of fuel
- 231,213 kg green house gas reduction per year
- 583,533 km (362,590 miles) reduction in travel distance for drivers

** According to a science-based benchmarking study on time-to-park conducted in collaboration with the Brisbane Airport Corporation (BAC). This groundbreaking before-and-after PGS analysis encompassed two parking facilities with a combined total of 7,903 individually M4-monitored bays.*

Elevating CX Across the Parker Journey

A Seamless Parker Experience



App to find availability



Wayfinding signs on arrival



Interior directionals



Smart-Sensor LEDs
signaling drivers to vacant bays



Find Your Car™ on return



Reduced Time to Park
through data/navigation synergy



Exit to roadway
includes validation by LPR exit camera

Thank you!



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