noctoptics

NoctoPark

Noctoptics Parking Lot Solution
Introduction

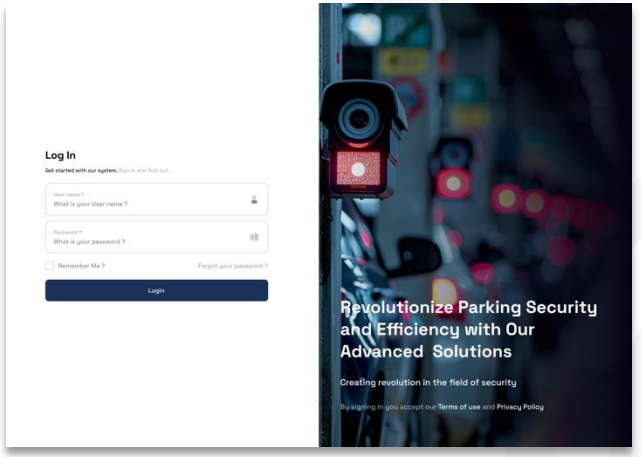
NoctoPark

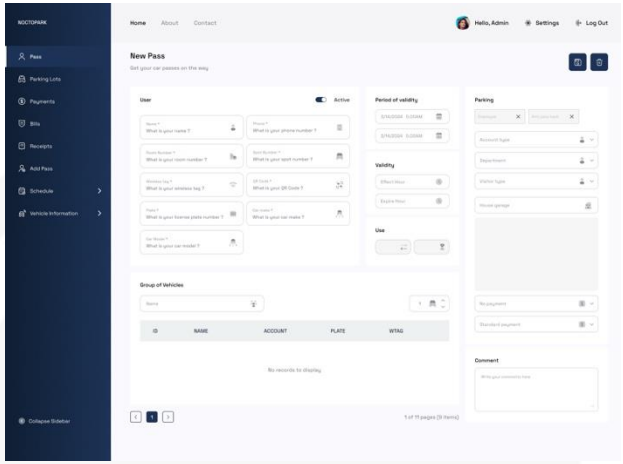
Noctoptics Parking Lot Management Software

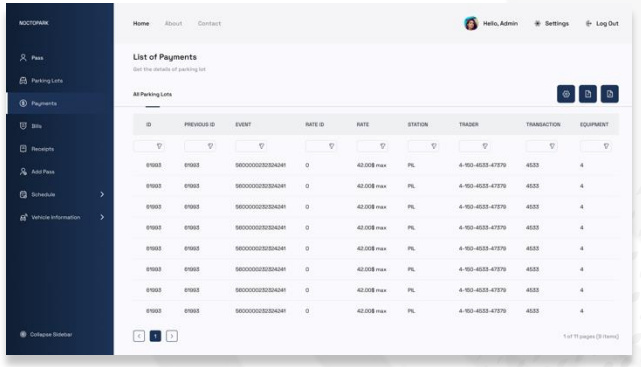
Noctoptics introduces NoctoPark, a cutting-edge proprietary parking lot management software that transforms traditional parking lots into intelligent ones.

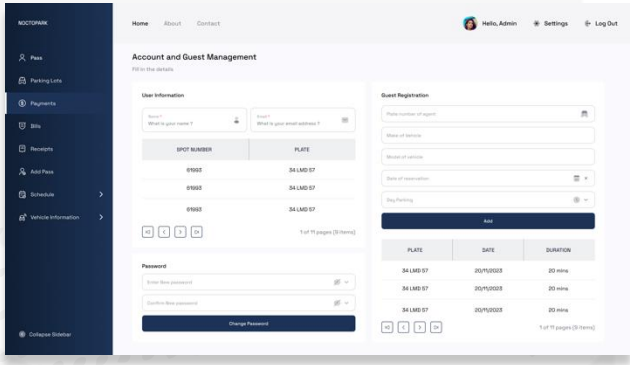
NoctoPark empowers parking lot operators and real estate parking lot owners to enhance revenue, efficiency, and safety through a comprehensive solution encompassing both hardware and software components.

Features include monthly and daily passes, validation, payment processing, detailed reports, parking reservations, video validation, and numerous other capabilities.

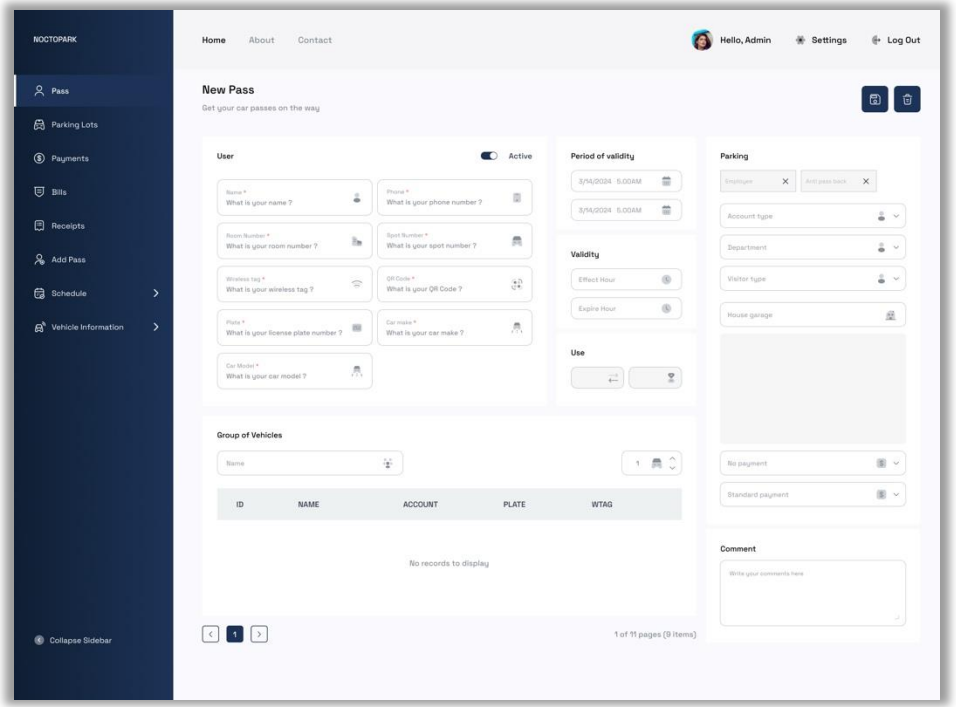


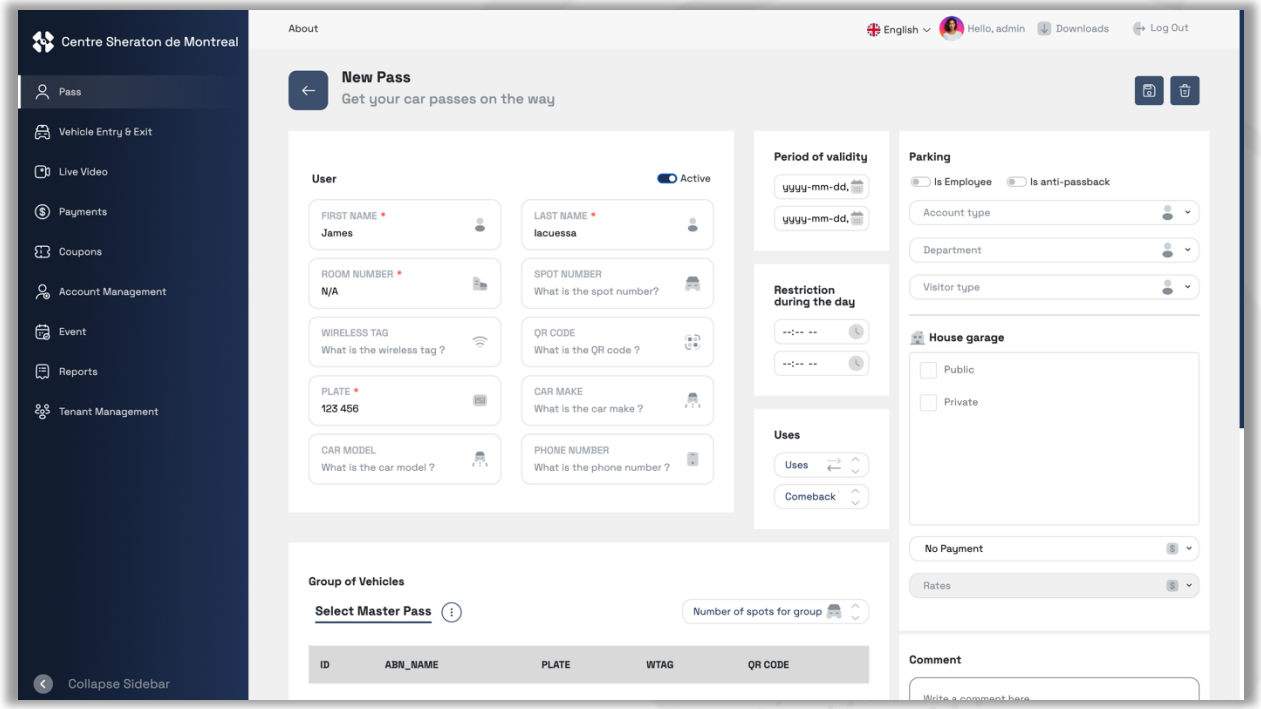






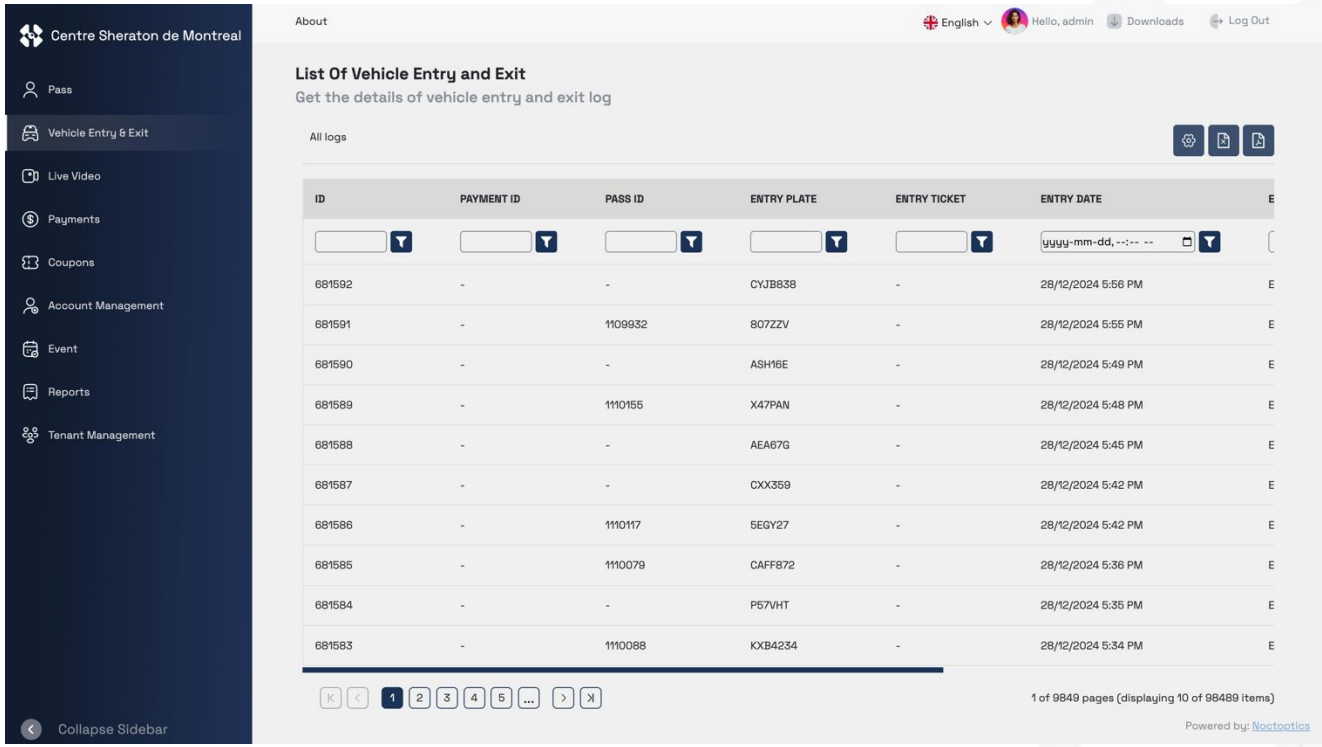
Pass Module – Monthly Users





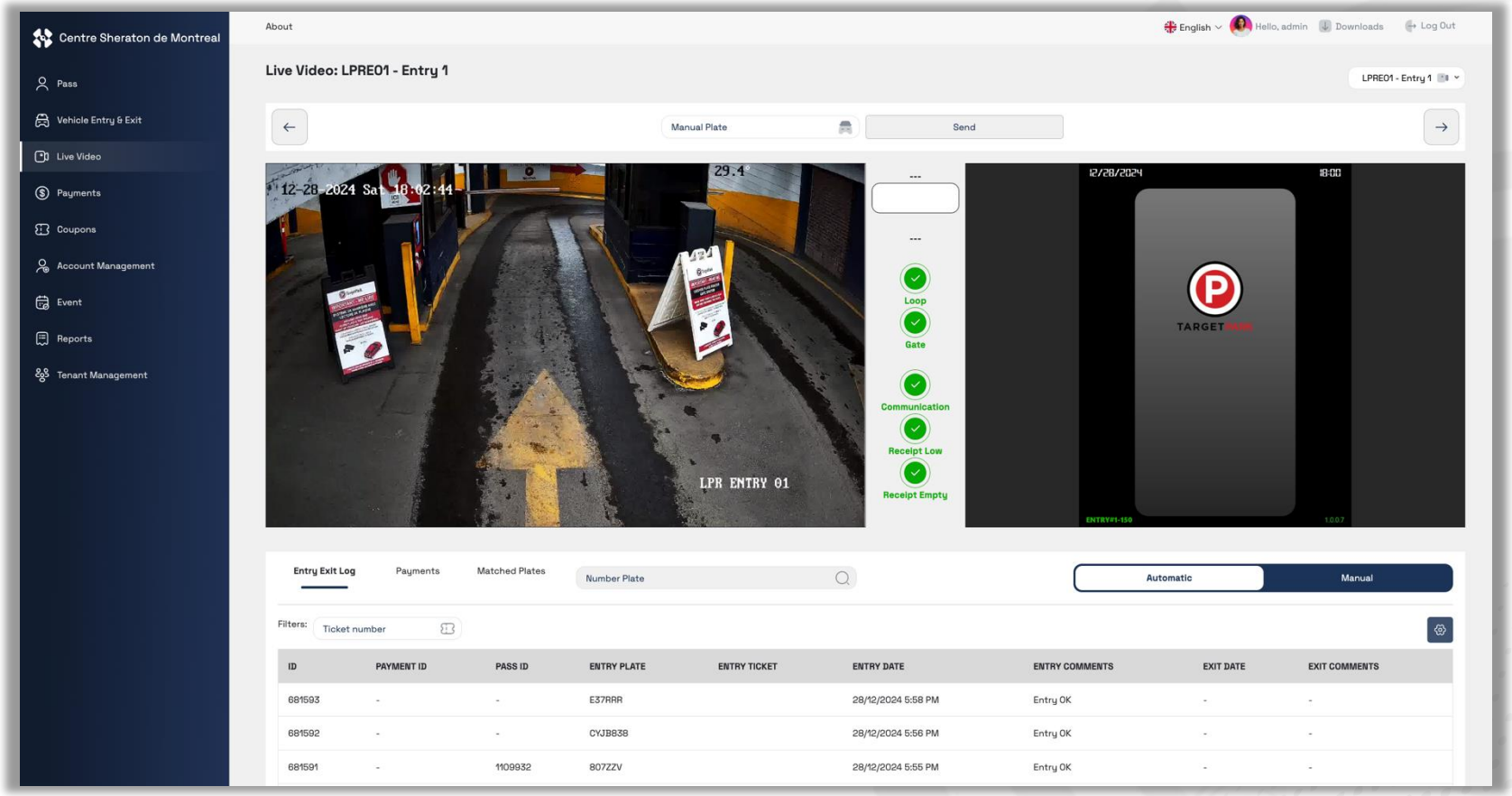
In the PASS module of NoctoPark, users can efficiently manage a list of drivers along with their associated license plates, RFID cards, and QR codes. This module is specifically designed for drivers who have subscribed to monthly parking plans. Additionally, the system allows users to group multiple vehicles under a single driver for streamlined management.

Vehicle Entry & Exit Module



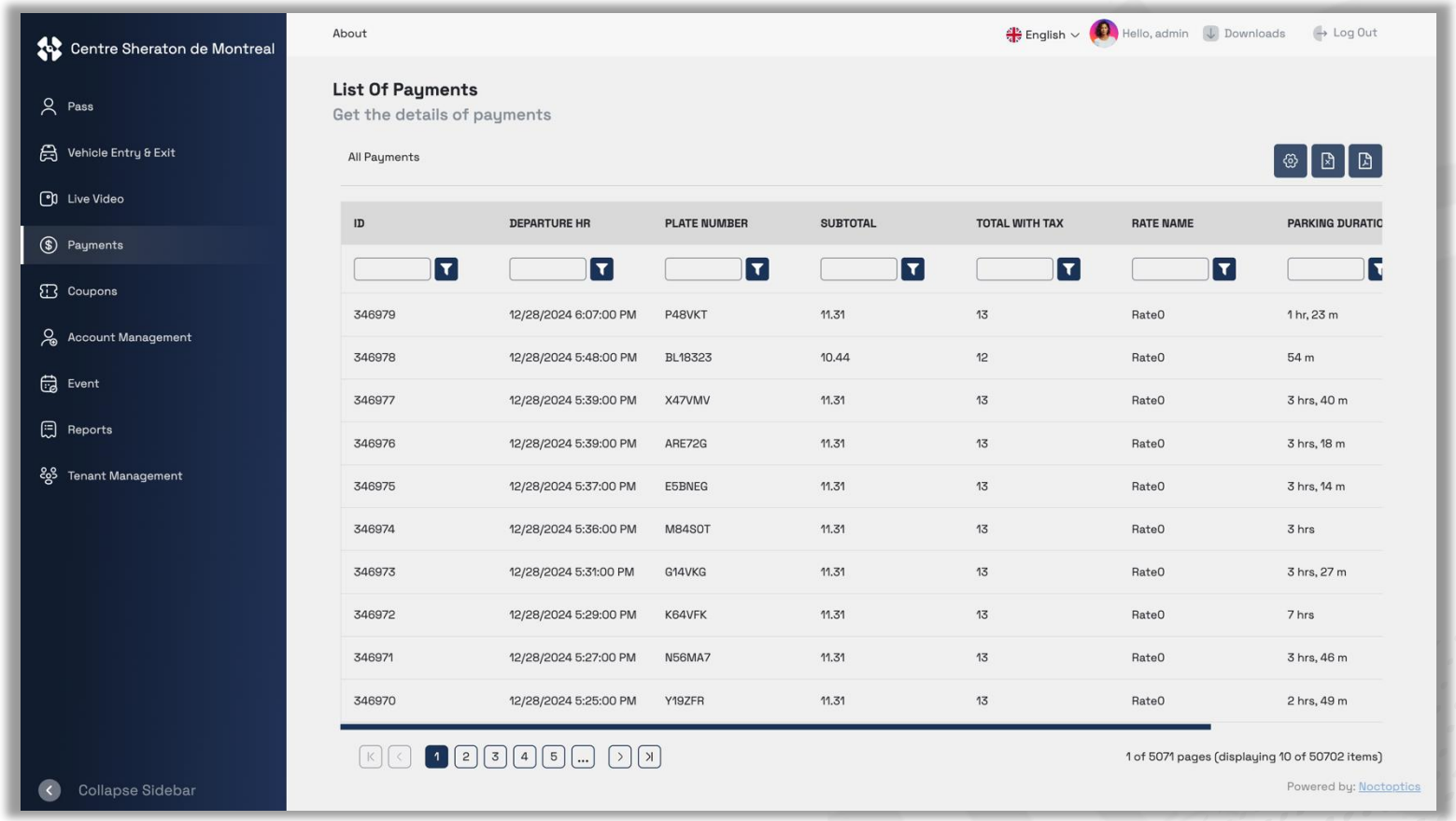
The Vehicle Entry & Exit module logs every car entering and exiting the parking lot, along with its associated license plate. NoctoPark distinguishes between monthly subscribers and transient drivers for seamless management. Additionally, the system allows entry denial for blacklisted vehicles, and the log data can be exported in PDF or CSV formats for reporting and analysis.

Live Video Module



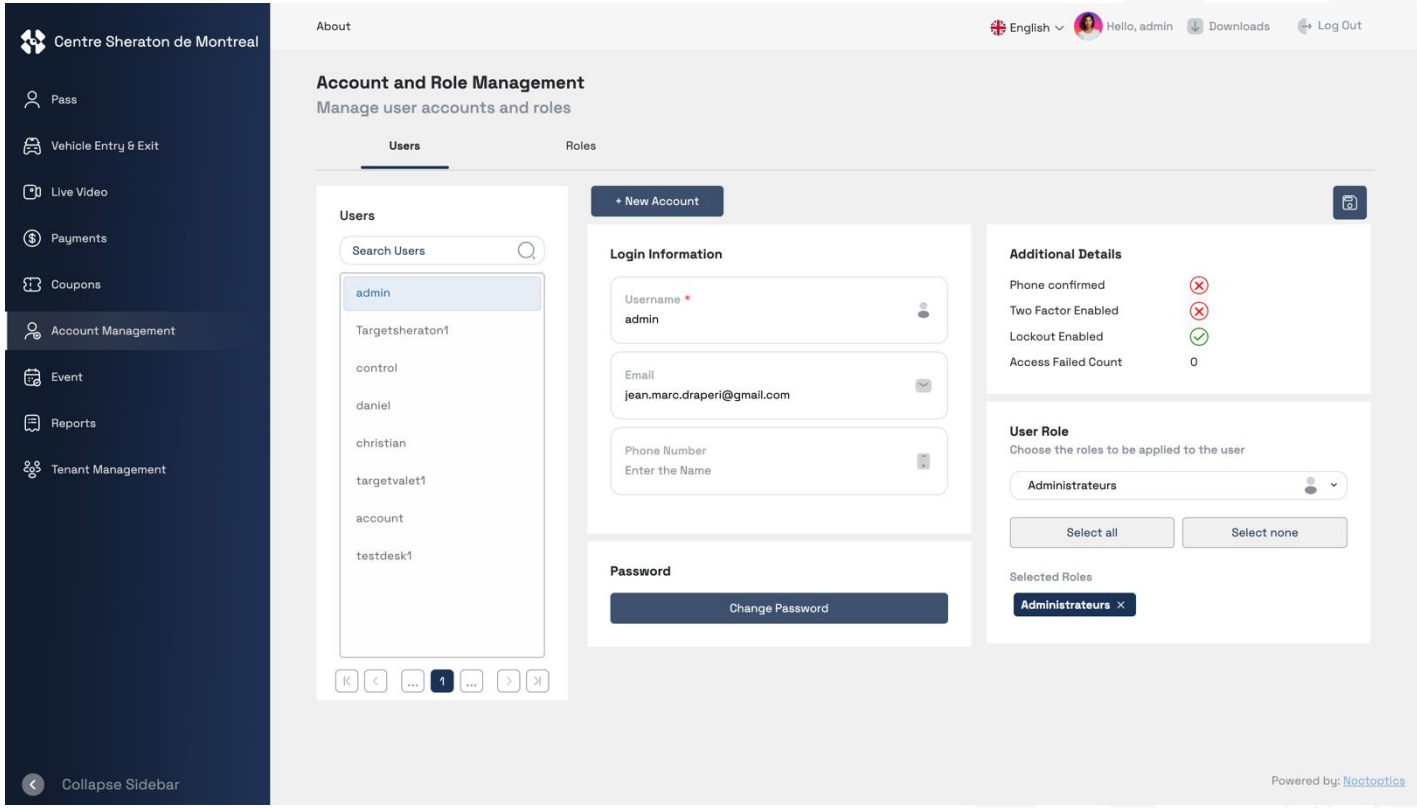
The Live Video feature in NoctoPark empowers operators, landlords, and property managers to actively monitor the parking lot in real-time. They can assist drivers when needed and oversee the operational status of parking equipment, such as the parking loop, receipt printer, and gate activity (open/close events). Additionally, they can view the payment station interface, including license plate detection and payment details, ensuring accurate charges based on the configured parking rates.

List of Payments Module



The List of Payments module provides a comprehensive record of all transactions for vehicles that have made payments upon entry or exit, depending on the parking lot's configuration. This data can be exported in PDF or CSV formats, making it an essential tool for operators, landlords, and property managers. It supports accurate credit/debit card reconciliation and facilitates remittance processes, especially in cases involving revenue-sharing agreements with the parking lot.

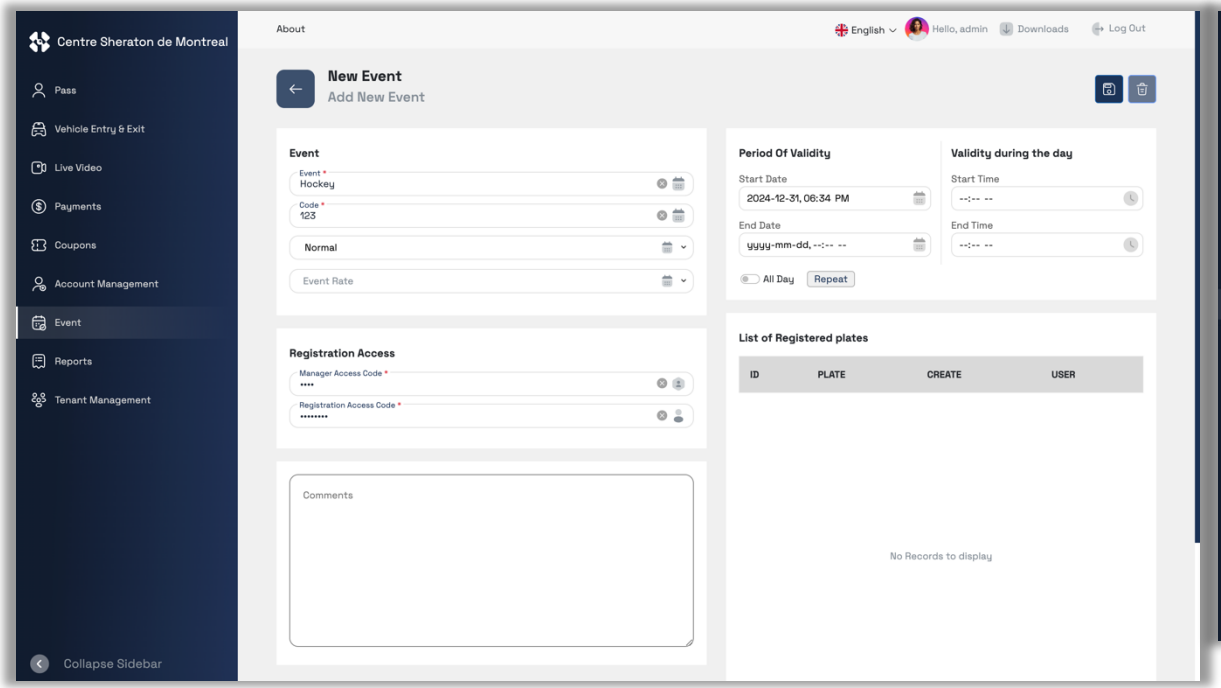
Account Management Module

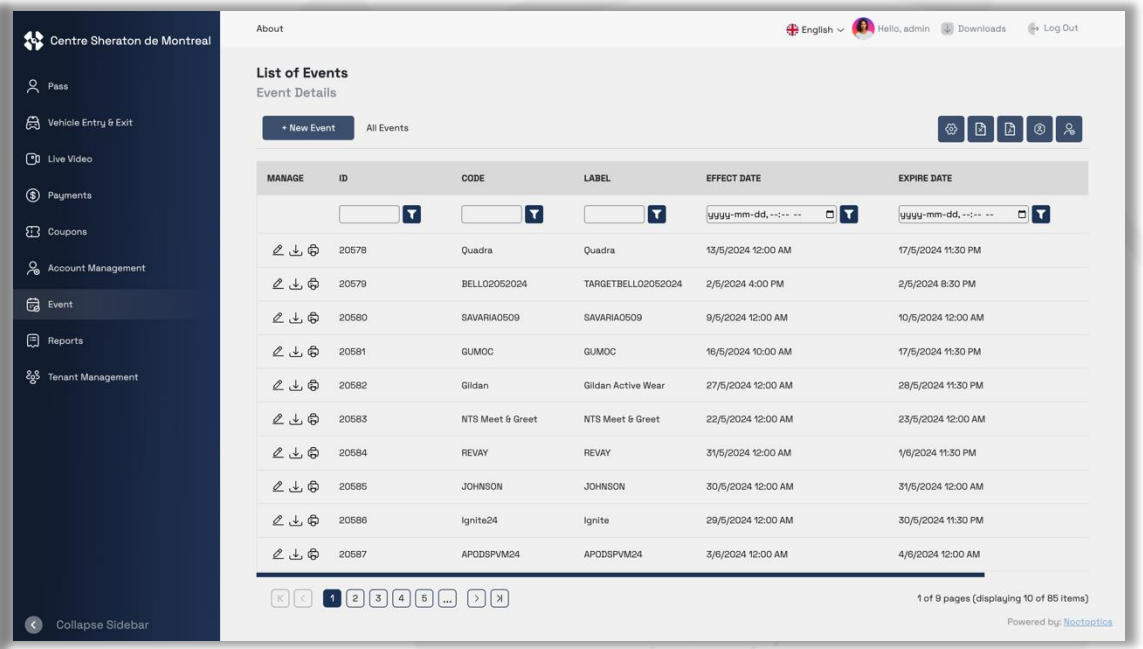


The Account Management module in NoctoPark provides operators and landlords with the ability to define and customize user permissions tailored to their operational and security needs. This feature ensures that access to sensitive data and system functionalities is controlled, enabling efficient delegation of responsibilities while maintaining a high level of security. Operators can assign specific roles and permissions to individual users, ensuring that only authorized personnel can perform certain actions, such as modifying configurations, accessing financial records, or managing parking data.

This granular control enhances accountability, streamlines management workflows, and reinforces the overall security of the NoctoPark platform.

Event Module

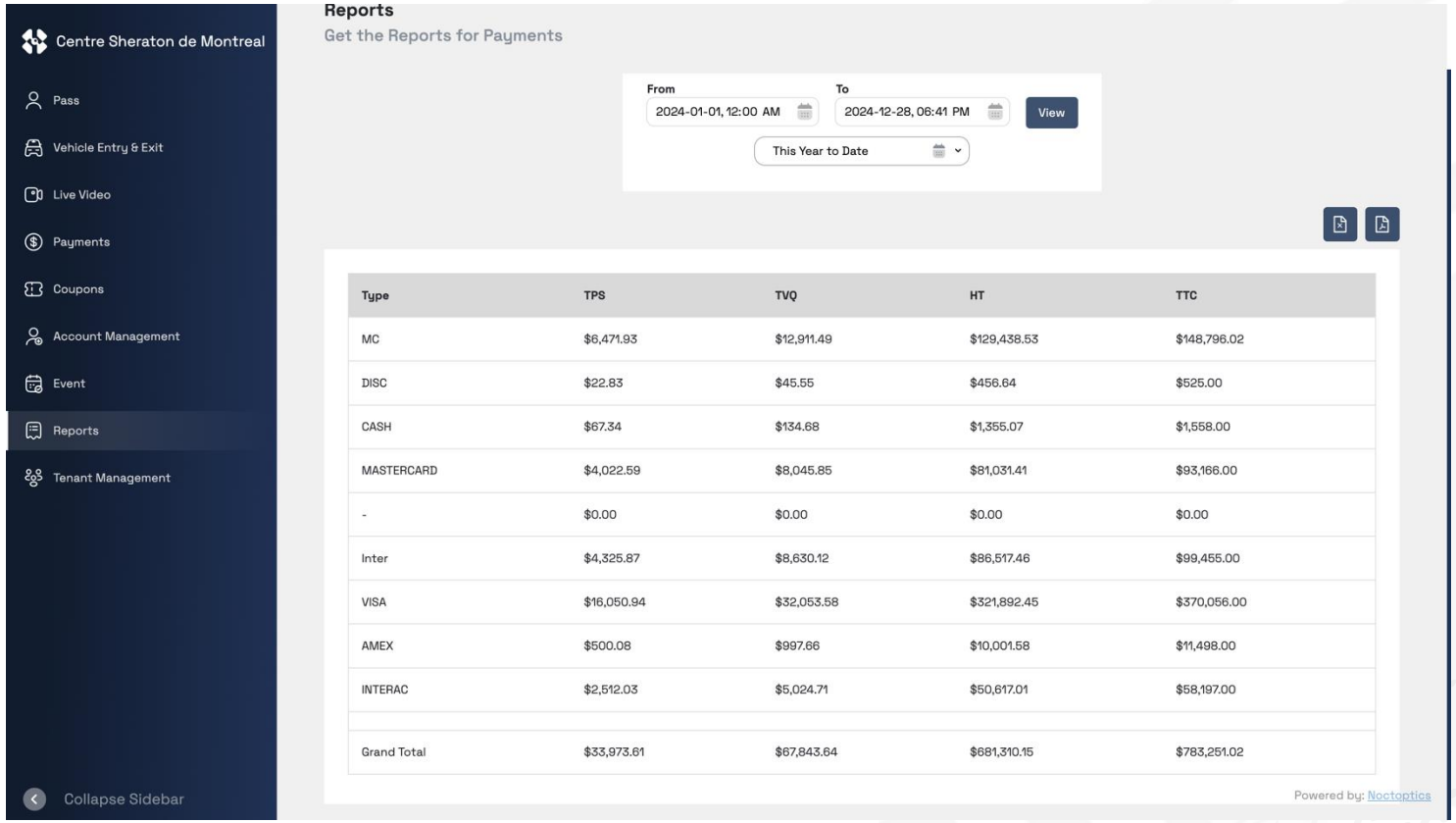




The Event Configuration module in NoctoPark allows parking lot operators to efficiently adapt the system for specific events or occasions. For instance, during major sports events or large gatherings near the parking lot, operators can pre-configure changes such as adjusting parking rates or modifying payment workflows—e.g., collecting payments at the entrance instead of the exit. This ensures smoother vehicle flow and reduces congestion when the event concludes, preventing traffic jams.

By leveraging this module, operators can schedule event-specific configurations well in advance, eliminating the need for on-site personnel to oversee these adjustments manually. This proactive approach enhances operational efficiency, improves customer experience, and ensures the parking lot is optimized for high-demand scenarios.

Reports Module

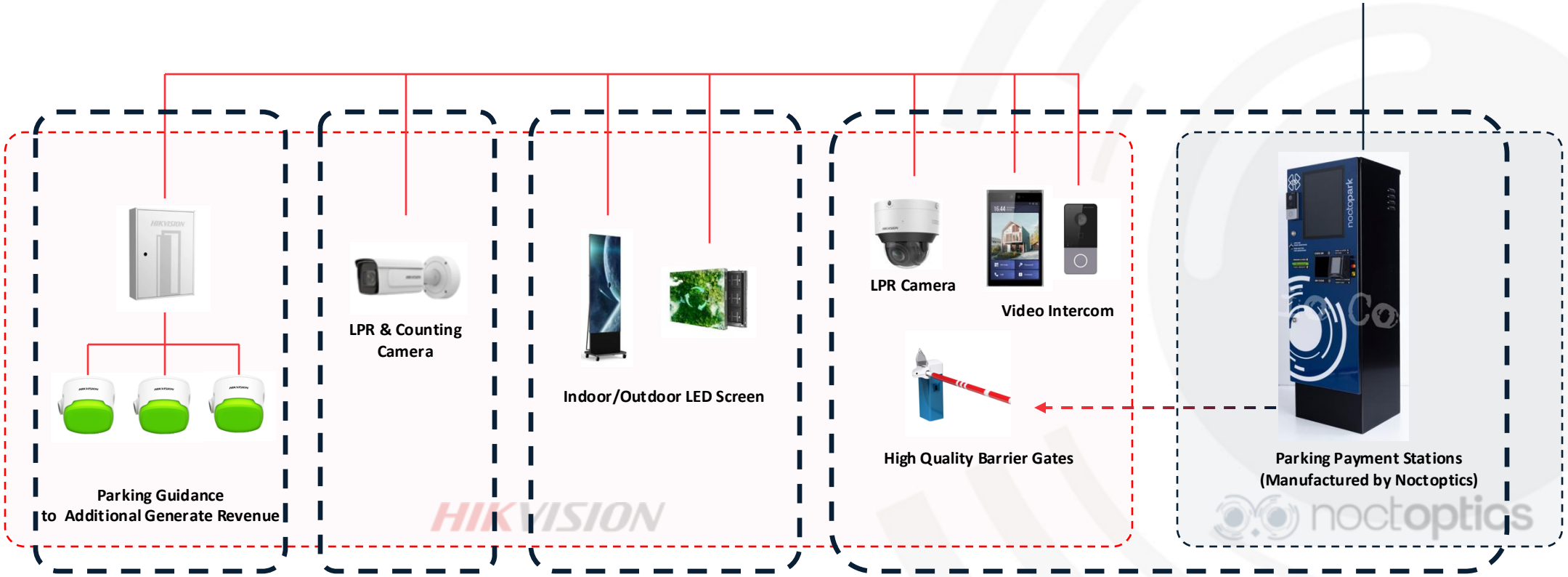


The Report module provides a comprehensive overview of the financial performance of the parking lot. It offers detailed insights into revenue generated through various payment methods, including Mastercard, Visa, AMEX, and Debit/Interac. This module serves as a valuable tool for financial reconciliation and remittance processes, especially in cases where operators or landlords need to manage revenue-sharing agreements or ensure accurate financial reporting.

By consolidating payment data into an easy-to-understand format, the Report module streamlines financial oversight and supports informed decision-making.

NOCTOPARK SYSTEM Topology

NoctoPark

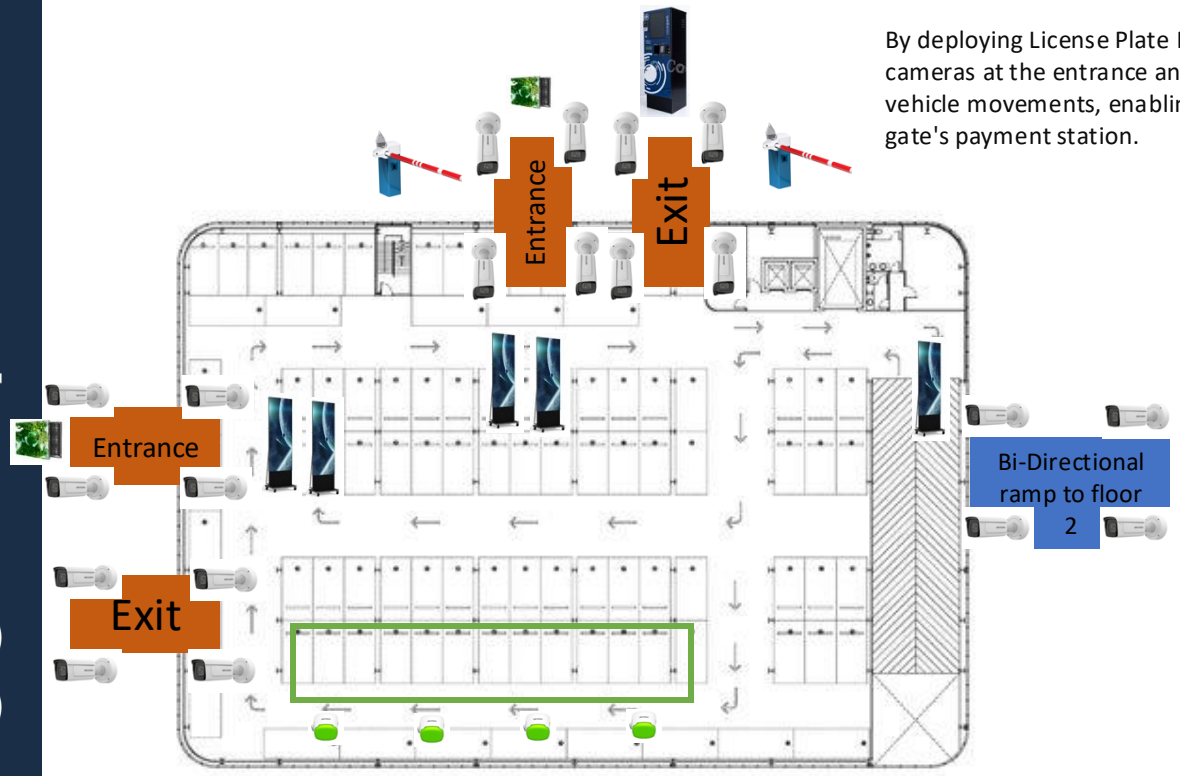


Our proprietary built Payment stations to process payments which communicates with NoctoPark to provide reports and associated the video feed with the transaction. We install Hikvision Intercom & Door station.

These can be white labeled for our customer if they prefer their own branding.

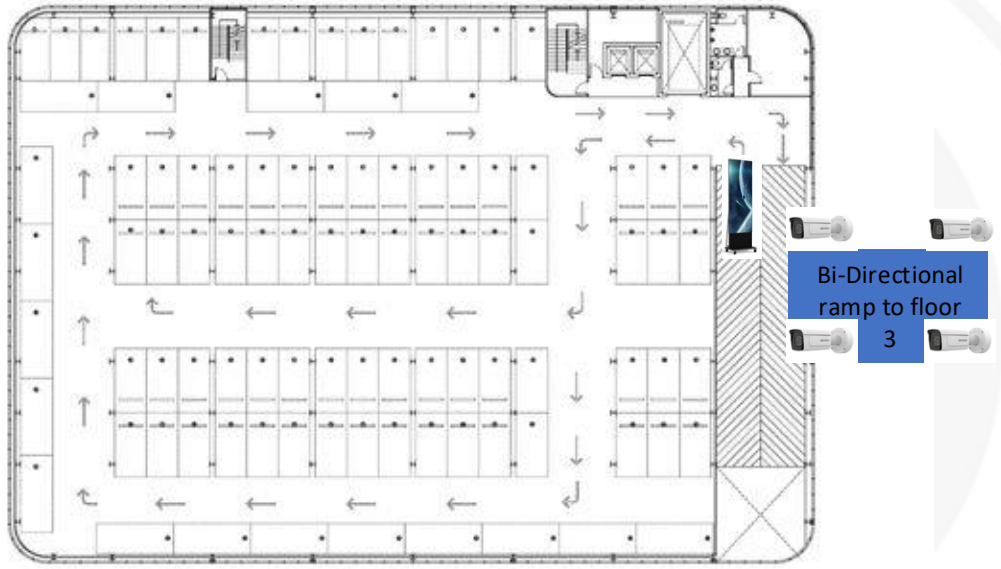
Product Placement on Floor Plans
(illustrative Purposes ONLY)

By deploying License Plate Recognition (LPR) cameras at the entrance and exit, Noctopark tracks vehicle movements, enabling precise billing at the gate's payment station.



Floor 1

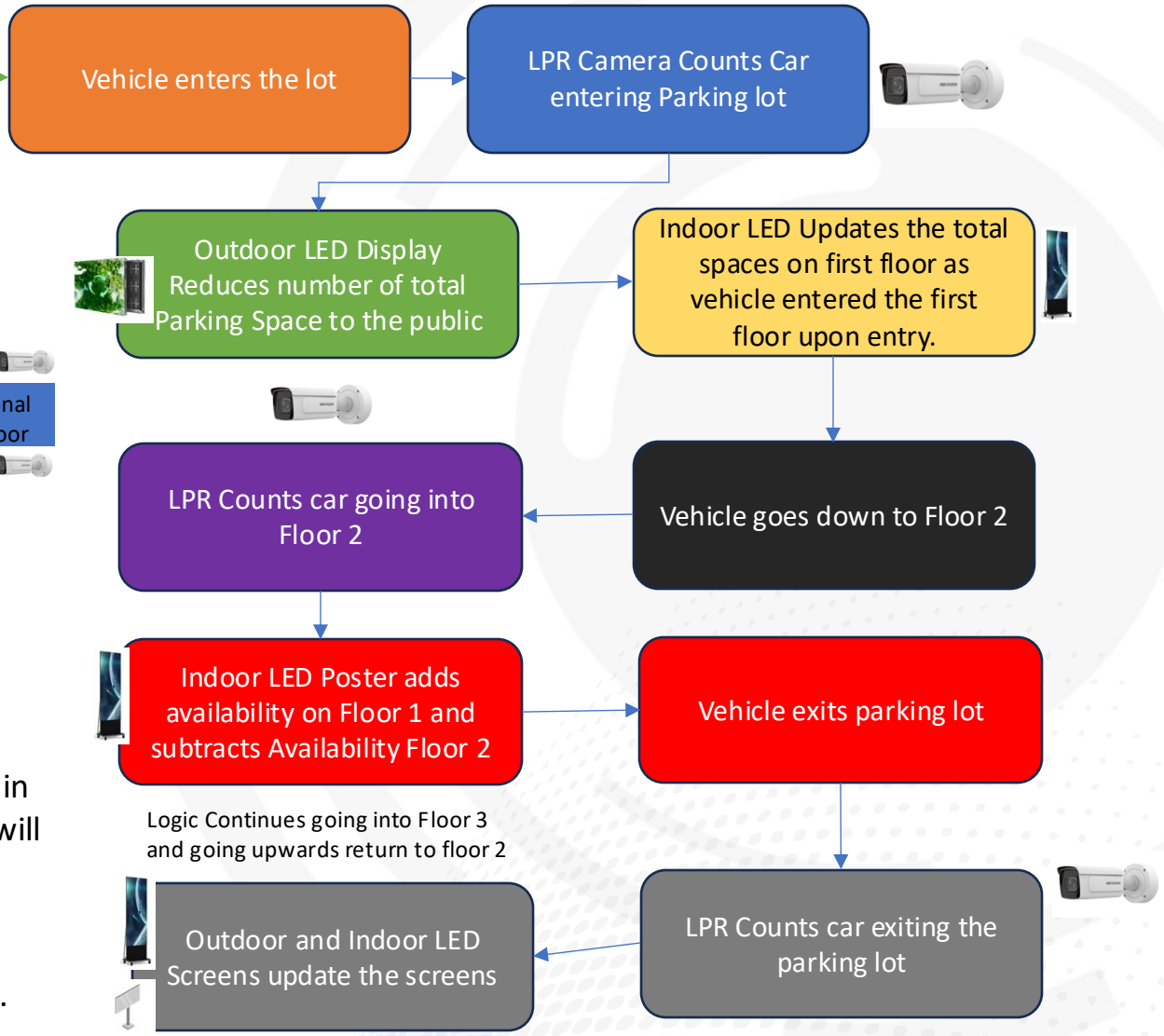
- LPR Cameras to count how many cameras are on each floor there two separate entrance/exit to the parking lot. 4 Cameras in each entrance. We also recommend 4 LPR cameras in ach Bi-Directional Ramp.
- Parking Guidance for VIP parking spots which will constitute a higher price for parking
- Indoor LED POSTER displaying available spaces based on car counting. These screen can promote ads to generate revenue
- Out door LED Screen showcase the number of available spots changing dynamically as well as pricing and advertisement



Floor 2 & 3

- LPR Cameras to count how many cameras are on each floor there two separate entrance/exit to the parking lot. 4 Cameras in each entrance. We also reecomend 4 LPR cameras in each Bi-Directional Ramp.
- Indoor LED POSTER displaying available spaces based on car counting.

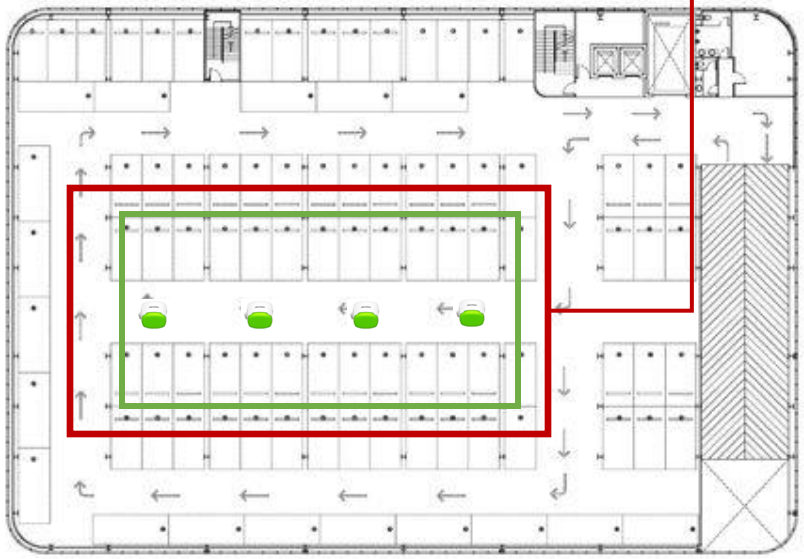
Car Counting



The logic consist of the cameras counting the amount of cars are in the parking lot subtracted by the amount of parking spaces. We will need the availability of each floor and make the LED Screens Dynamically displayed as vehicles go from floor to floor.

This data also provide reports on the efficiency of the parking lot.

Noctoptics Premium Parking Spots



1 Camera bay status detection

2 ANPR & Camara

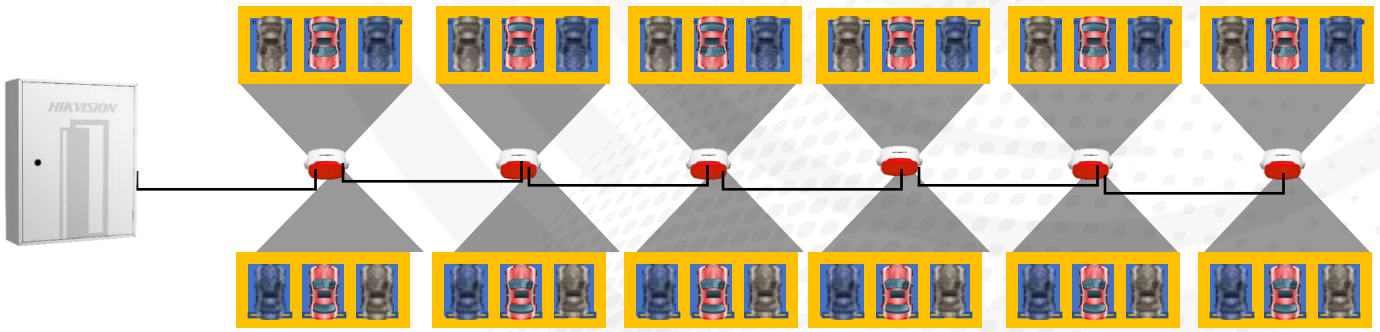
3 Line parking detection

4. indicator of different colors

For the VIP section of the parking lot. We can install the Parking Guidance Camera that will be lit up green when available and red when not available/.. This camera can read the license plate and inform the NoctoPark platform to charge the customer more for that spot.

The camera can detect if 2 parking spaces are occupied by one car and provide an alert and will show the customer yellow or the driver will be charged for 2 space. The alarm will be populated in HikCentral which will also populate on NoctoPark.

This feature allows parking lots to increase revenue in a parking lot.

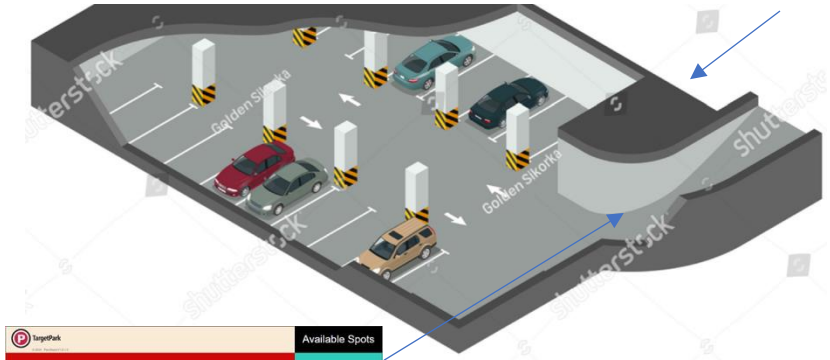


Indoor LED Screen – Parking Indicators (Illustrative Purpose Only)

From Floor 1 to Floor 2 (vice versa)

			Available Spots
P2	4$/20mn	18$ Max	80
P3	4$/20mn	18$ Max	173

Going downwards from Floor 1 to 2.
The LED Should have this display show casing the availability of P2 & P3.



			Available Spots
Premium	5$/20mn	No Max	12
P1	4$/20mn	18$ Max	17

Going upwards from Floor 2 to 1.
The LED Should have this display.

From Floor 2 to Floor 3 (Vice-Versa)

Going downwards from Floor 2 to 3.
The LED Should have this display.

P3	4$/20mn	18$ Max	173

Going upwards from Floor 3 to 2.
The LED Should have this display.

			Available Spots
Premium	5$/20mn	No Max	12
P1	4$/20mn	18$ Max	17
P2	4$/20mn	18$ Max	80

noctoptics

NoctoPark

Success Cases/End-User Benefit & Reference Sheet

Success Stories 365 Bloor Est, Toronto

END USER: TargetPark

Project Goal: Target Park was tasked with the removal of its existing parking lot system and mandated to furnish performance reports to the Real Estate owners of the building. Additionally, a dynamic pricing mechanism was required to replace manual adjustments, alongside real-time availability updates for the high-traffic area in Toronto.

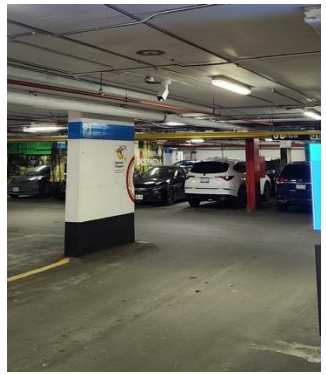
Further directives included integration with No Frills, offering complimentary parking for shoppers exceeding $150 in purchases, and implementing a tailored solution to exempt condo owners from parking charges, given the multi-user nature of the premises encompassing both commercial and residential components.

End-User Benefit:

- Pricing can be changed dynamically at any given moment
- Premium zones have been implemented to generate more revenue
- Condo owners can seamlessly enter/exit the lot without paying (their car is registered on a white list)
- Management of Monthly Parking Passes
- Custom development with No Frills grocery. When customer spend $150, they are added to the white list on HikCentral and can leave without paying
- Cars quickly enter and exit the parking lot
- Reduced man-power to Target Park, they no longer need multiple staff on site and none over night. Reducing operational cost.
- With report, the Parking lot generates approx. $190k/Monthly. The solution paid for itself in 4 months. The reporting allowed the operator increase revenue by increase the price during busy periods”

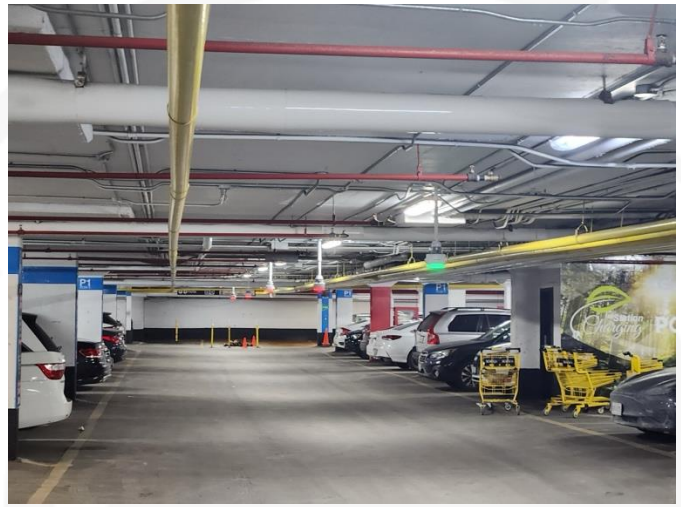
Hikvision Product:

- **iDS-2CD7547G0/P-XZHS(Y)**
  - Car Counting
  - Time Stamps of Car entering to allow NoctoPark to charge the customer accordingly upon leaving
- **DS-D4215MI-070H(B)**
  - Dynamically provided parking availability
- **DS-KV6113-WPE1**
  - Installed on the payment station for when a car is having issues with payment. This intercom is connected to Target Parks Control center using NoctoPark / HikCentral.
- **DS-TCP440-B / DS-TPM400-P**
  - For Premium parking zone. When a car parking in a premium parking zone, the data is collected by Noctopark to associate the license plate and the correct charge upon exiting.
  - First sold and installed in Canada.
- **HikCentral- Customized**
  - Provided the data to NoctoPark from the CCTV, Intercom and Video Screen

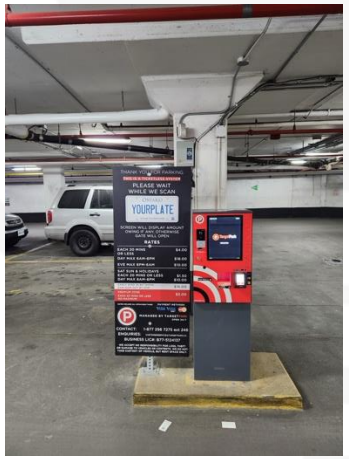


LPR Camera to time stamp car Upon entry.

Customized LPR View on HCP. Populated on NoctoPark.



Parking Guidance Camera
For premium parking. These parking spots are closer to the No Frills entrance and elevator of the multi-use commercial building.



Villa Door Station installed on white label payment station. User can communicate with a control center for payment issues etc.

Other Success Stories

Espresso Hotel
Downtown Montreal

Sheraton
Downtown Montreal

Station Mont-Tremblant
Quebec

Parq & Hotel Casino
Vancouver

Hilton Garden Inn
Toronto Airport

131 Bloor
Toronto

Aloft Hotel
Montreal

Choice Properties Vaughn
Toronto

And much more!

noctoptics

THANK YOU!

James Iacuessa
Chief Executive Officer / Founder

+1 514 294 5770
james@noctoptics.com
Noctoptics.com