

The NEXPA logo is positioned in the upper center of the image. It features the word "NEXPA" in a bold, white, sans-serif font. A red diagonal line cuts through the letter "X". The background of the entire image is a grayscale photograph of an underground parking garage. In the foreground, a dark SUV is driving away from the camera, its headlights on. To the left, a barrier gate is partially visible, and a person is standing near a service counter. The garage has concrete pillars and overhead lighting. A yellow box in the top right corner contains the title text.

# NEXPA SYSTEM

## Manila Bay, Ayala Malls, Philippines

### CASE STUDY

PMS : Parking Management System  
VPGS : Video-based Parking Guidance System  
Auto Payment Station (Find-My-Car)  
Mobile Parking Reservation

# Project background



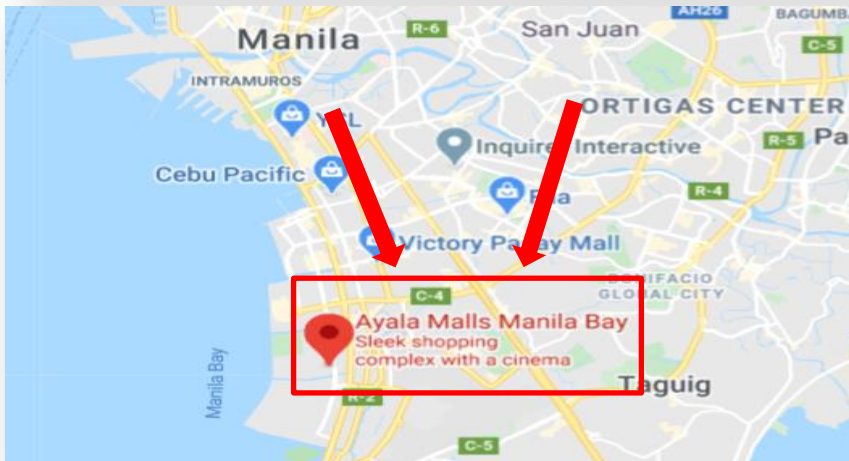
## <Introduction of Ayala Malls Manila Bay>

Ayala Malls Manila Bay is one of the largest complex malls in the Philippines. Ayala Malls Manila Bay is owned by Ayala Land Inc. under the Ayala Malls brand. They selected NEXPA's SMART PARKING SOLUTION for their convenient operation of large parking infrastructure. SMART PARKING SOLUTION transformed the mall into one of the first SMART PARKING enabled sites in the country.

## <Challenges>

The main purpose of this project is;

- ① PMS: Ticketless parking system
- ② VPGS: Construction of Security and convenient system
- ③ Auto Pay Station: Advance and Exit payment, Find-My-Car
- ④ Pre-Booking: Mobile application



# Project Solutions

Parking guidance system based on the video technologies including parking lot surveillance systems through the single framework and enables virtually unmanned day to day operations.

VPGS

KIOSK

Various payment method integration with G-cash, RFID Card and BPI. (G-cash, BPI - Using QR code)

<Requirement>  
Unmanned smart parking system

Using LPR machines and integrated with RFID ticket system for License Plate Recognition and plugs-ins such ACCESS-LIST Management, Gate Side Synchronization/Controlling System.

PMS

Mobile Web-app functionality

Payment, Find my car, reservation functionality include

# NEXPA Proposed Solution Features

SMART

01

Automatic payment solution enables ticketless parking system.

State-of-the-art  
TECHINOLGY

02

NEXPA's solution uses the state-of-the-art devices developed with our proprietary technology.

AUTOMATIC

03

By using LPR machines and Auto payment stations, all process will be automatic.

EXPANDABILITY

04

Based on various PMS/ PGS such as ticketless and non-stop system, we can show the excellence of our products to all over the world.

Customer  
Satisfaction

05

NEXPA's solution is easy to run for parking lot operator and convenient to use for parking lot visitors.

# NEXPA Proposed Solution Major Components ①



Uni-directional IP camera-12 MP

- Indicate parking availability
- Detect 3 slots with 1 camera
- 12 mega-pixel
- Multi-streaming
- Built-in 256 color LED indicator



Single camera LPR machine

- Recognize front license plates
- Built-in LED display
- IR/White LED light



Dual camera LPR machine

- Recognize front and rear license plates
- Built-in LED display
- IR/White LED light

# NEXPA Proposed Solution Major Components ②



Mini LPR

- Recognize front or rear license plates
- Designated to accommodate challenging installation environment



42 inches Auto Pay Station

- Various payment types:  
Cash/Card/e-wallet
- Optional Find my Car function with vPGS
- Commercial and advertisement can be displayed on the main screen



RFID Dispenser/Collector

- Standalone type, VoIP included
- Compact size design to save the installation space
- Dispense Mifare card 13.56MHz card with read and write module

# NEXPA Proposed Solution Major Components ③



### Fee Calculator

- PC type, Cash box included
- Prompt payment calculation
- Vehicle number can be printed on the receipt
- Various discount options
- Daily, Monthly, Yearly vehicle access date can be provided.



### Floor/Zone Guidance Display

- Ceiling type
- Provide optimal parking route
- Dynamic LED display
- Customizable design



### Outdoor Guidance Display

- Standing type
- Three colors for different status (Green-available, Red-congested or full)
- Bright LED module
- Customizable size

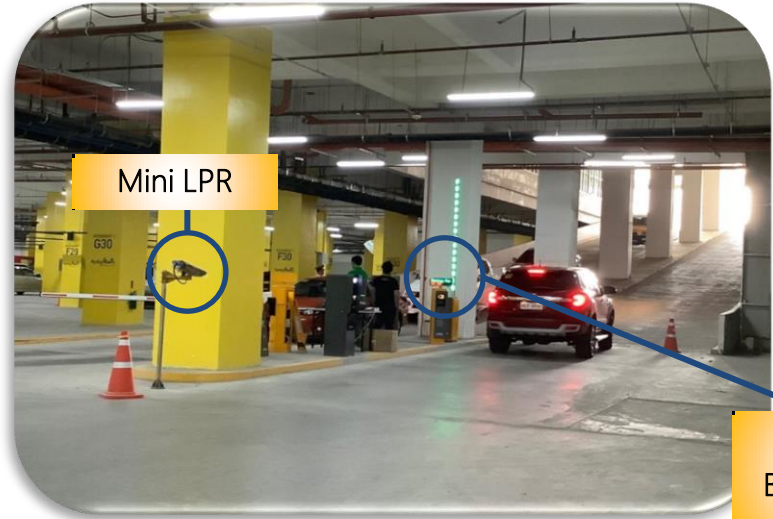
# Installation pictures



Dual camera LPR machine



Guidance Displays



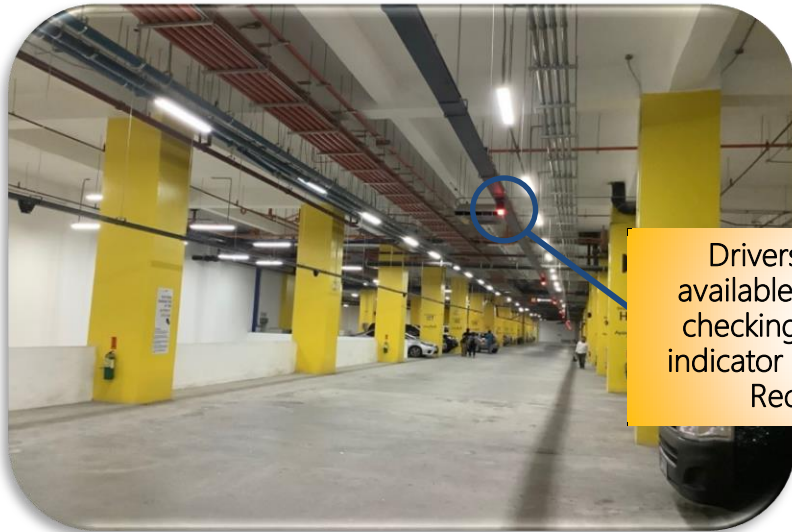
Mini LPR

Automatic Barrier Gate

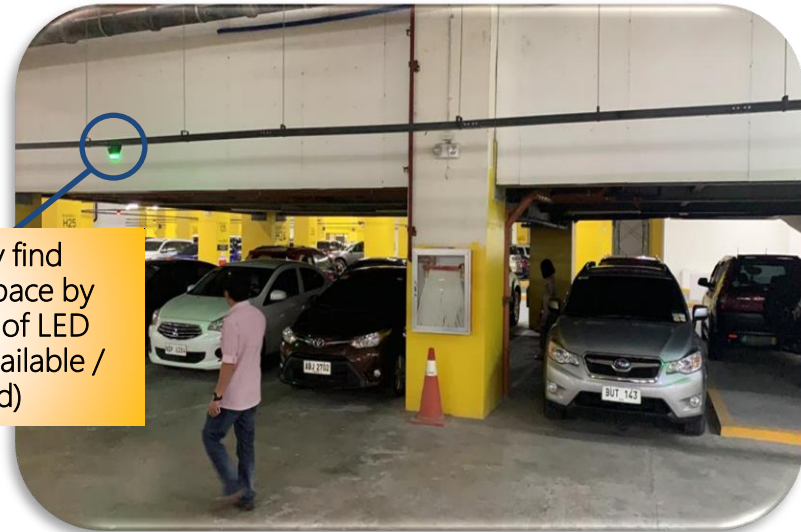




# Completion pictures



Drivers can easily find available parking space by checking the color of LED indicator (Green: Available / Red: Occupied)



Drivers can check the floor/zone guidance signage to decide where to go.



Main entrance guidance display shows the real-time parking lot occupancy by floor level of the entire parking lot.

# Results

- NEXPA installed smart parking system into Ayala malls Manila bay, and is operating the mall with unmanned system.
- Our system is not only accessible for customers, but it is also cost efficient. In visitors' perspective, they can use various type of payment method and can easily find an available parking space through guidance signage. As one of the very first smart parking system in Philippines, this Ayala mall Manila bay case will make their parking environment more intelligent/smart.
- Based on the Ayala malls Manila bay case, the NEXPA smart parking solution is being expanded to the parking management market in the Philippines.

Ayala Malls  
Feel it. Love it.