

# 無人化自動停車場解決方案

## SMART AUTOMATED PARKING SOLUTIONS

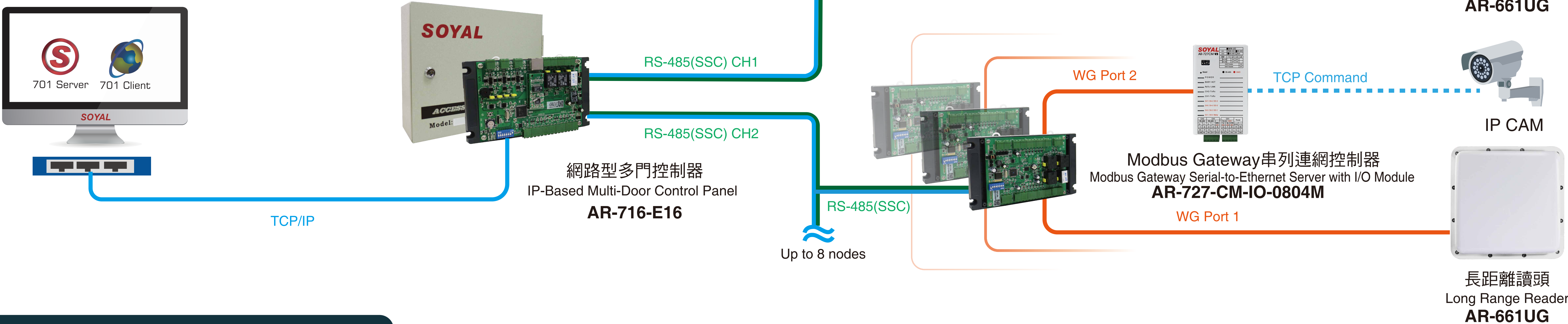
**SOYAL**<sup>®</sup>  
ACCESS & INDUSTRIAL CONTROL

### 32門多進多出雙重驗證

Multiple Entry and Exit with LPR and eTag Authentication for 32 Doors

- 結合車牌辨識(LPR)與eTag辨識系統，搭配多門連網控制器架構與專用功能韌體，設定該車輛需以車牌辨識與eTag皆符合才允許通行，或是擇一符合即可通行功能，避免同車不同卡號誤開閘門情形發生。控制器可管理16道進出口並執行一進一出管理與多卡多車位共享功能

Integrated with License Plate Recognition (LPR) and eTag, IP based control structure with specific firmware can control which car can access by two control modes: both LPR and eTag are verified, and LPR or eTag is verified. This two-factor authentication can prevent one car with two UHF tags getting access to gate. IP based controller can manage 16 gates, and execute anti-passback and function of multi cards sharing multi parking spaces.

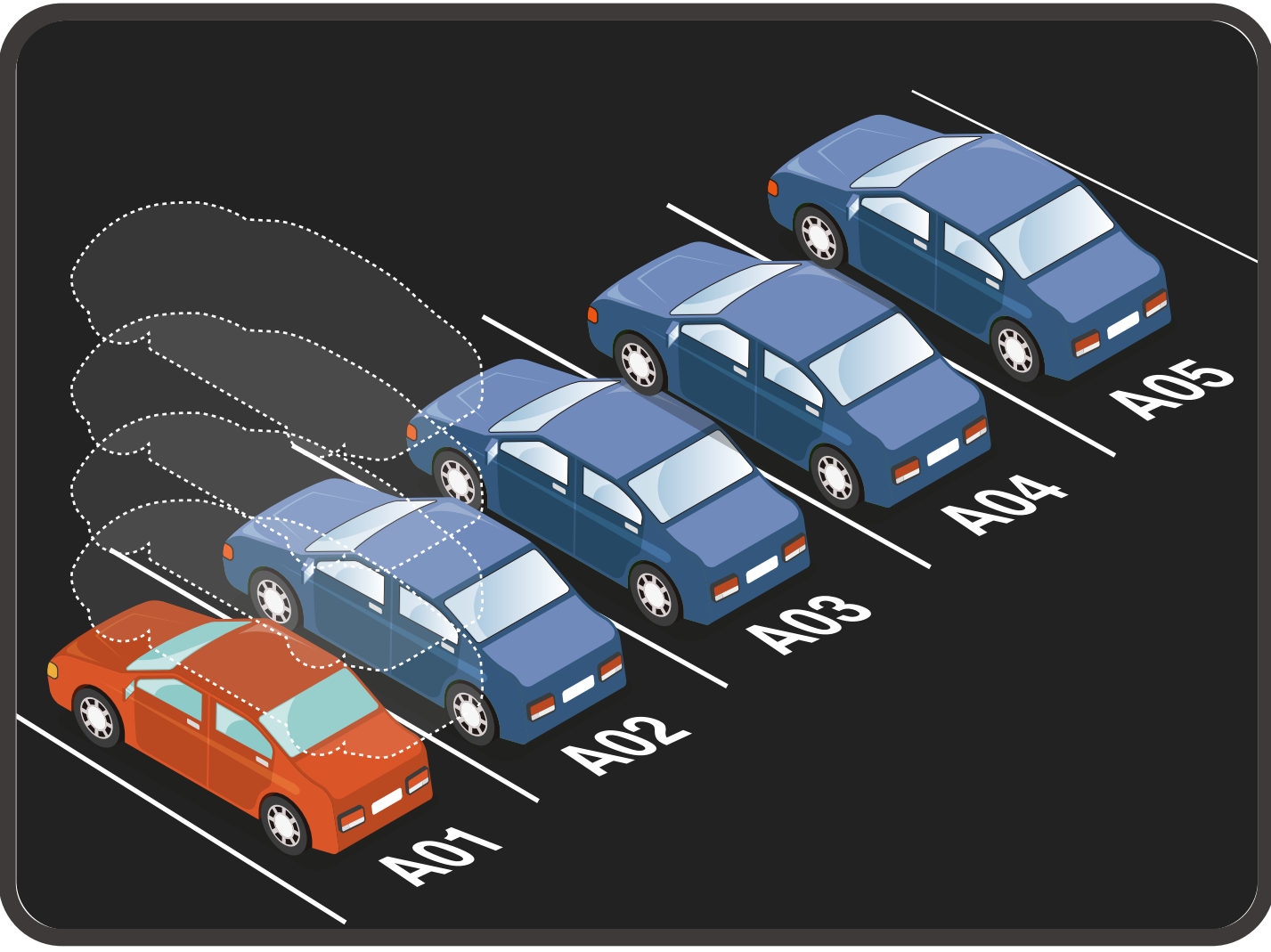


### 自動化無人管理停車場應用

Automated Parking Lot Applications

#### A. 車位共享

Packing Space Sharing  
(停車場內部Parking Area)

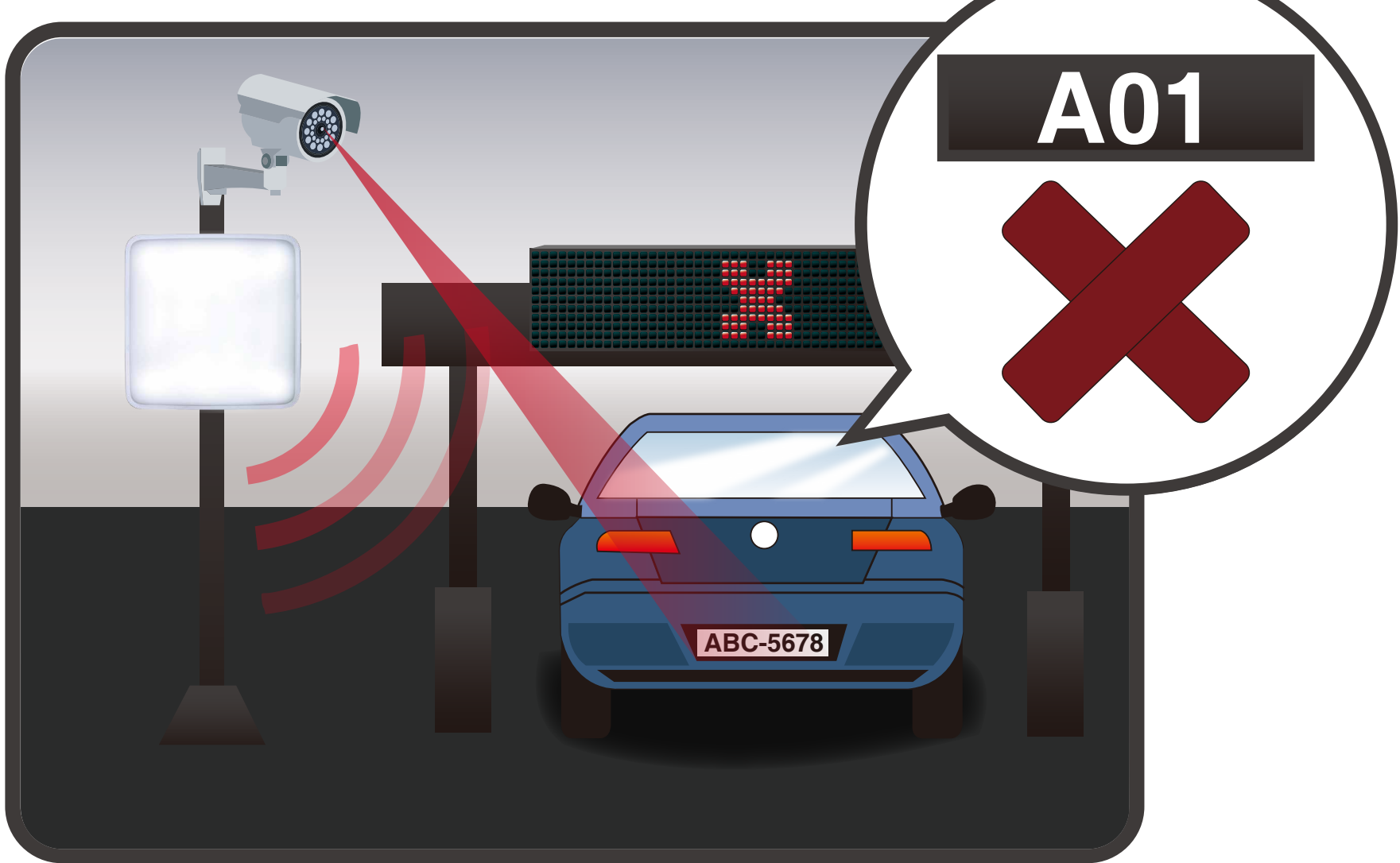


- 多卡共享一車位  
Multi-Cars share One Parking Space.
- 車位已停滿時其他車輛就會被拒絕進入  
Car is denied to enter when all spaces are occupied.



#### B. 電子標籤(eTag)與車牌辨識(LPR)雙重驗證

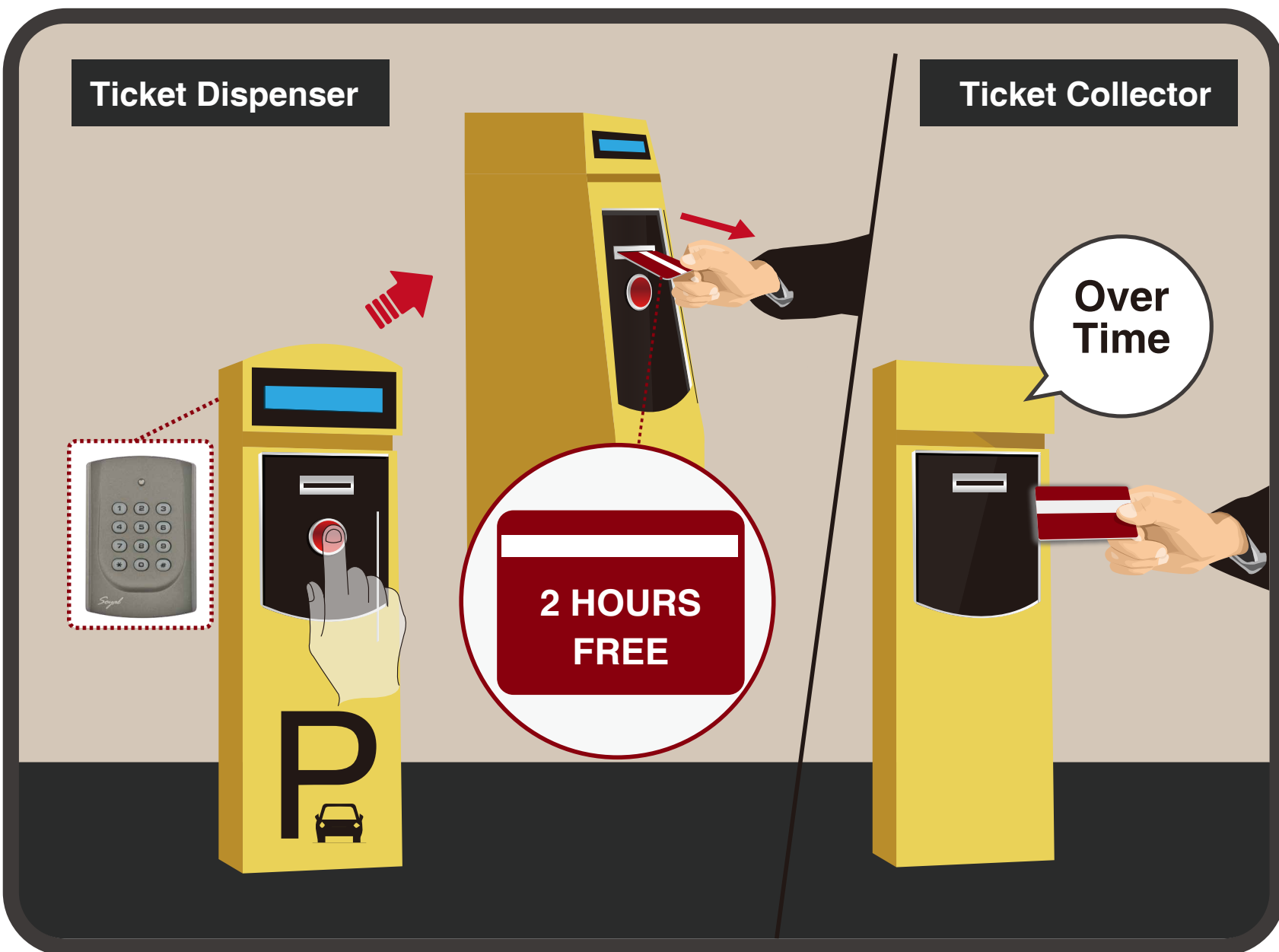
eTag & License Plate Recognition (LPR)  
Two-Factor Authentication  
(停車場出入口Parking Entrance)



- 長距離讀頭在車輛進入時就會啟用偵測感應標籤  
Long range reader detects tags when the car is coming
- 狀態指示: 違反進出管制、車位已滿、無效卡片  
Status Display: Anti-Passback Error, No Space, Invalid Card

#### C. 會員折扣管理方案

Membership Management



- 無人管理停車系統可以透過入場出票機，取票時利用卡機來寫入免費使用期間至票卡，離場時計算使用時間  
Free parking period is written into tags through controller on ticket dispenser at Entrance; check if the tag is overtime or not at Exit.

#### D. 充電站管理方案

Charging Station Management



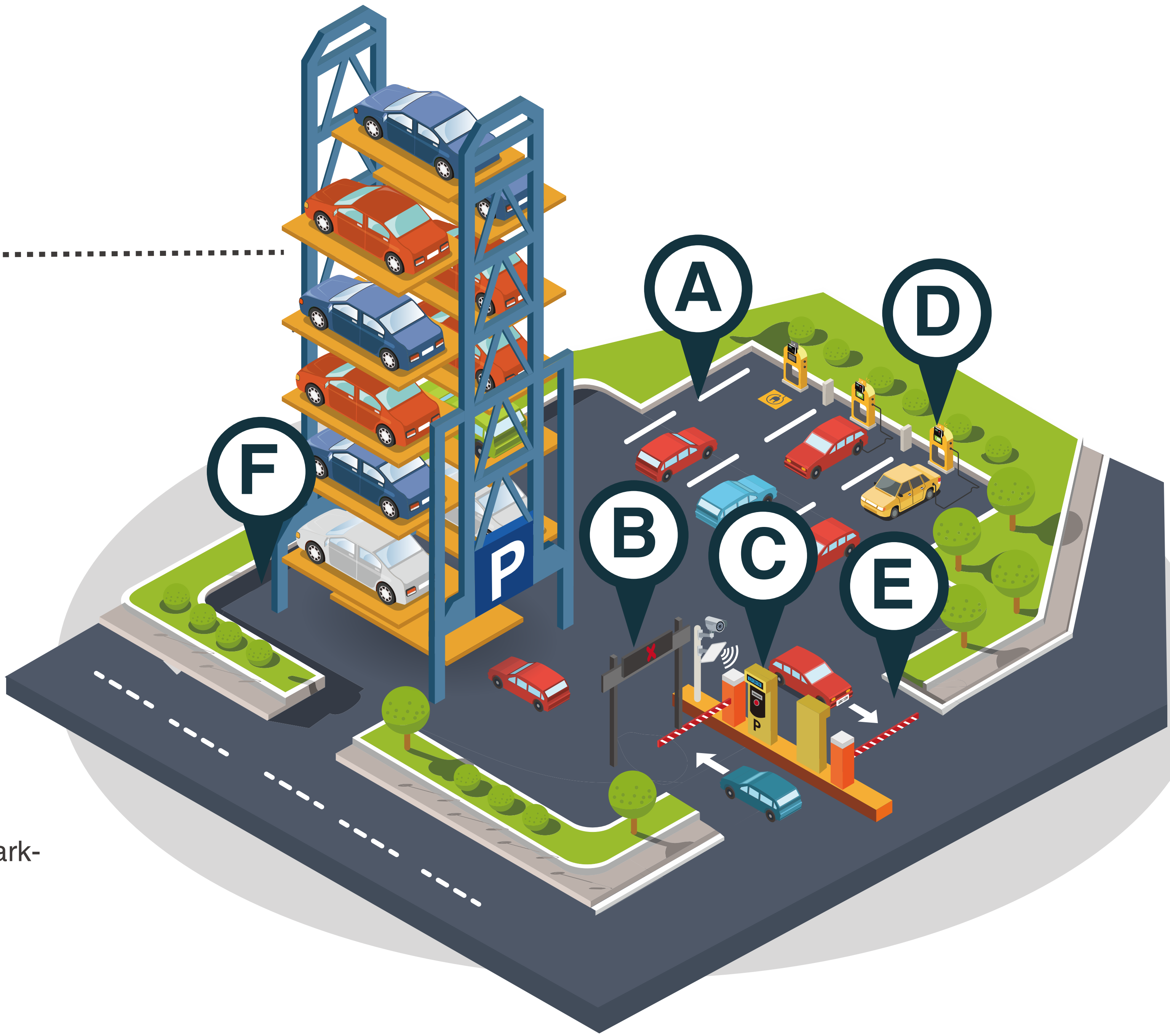
- 商辦大樓、社區大樓或是賣場及公共(私人)停車場可提供臨時充電計時計費管理使用，使用者只需插入卡片即可啟用充電，並依據時間或數位電錶使用度數來扣點，而拔除卡片隨即停止充電。  
Parking lots in communities, office buildings and hypermarkets can provide timely billing charging service. Users can insert their cards to obtain the service. Expense will be deducted depending on time or electricity consumption. Charging will stop once card is taken out.

#### F. 停車塔刷卡自動取車方案

Auto-Pickup Solution in Automated Parking Garage

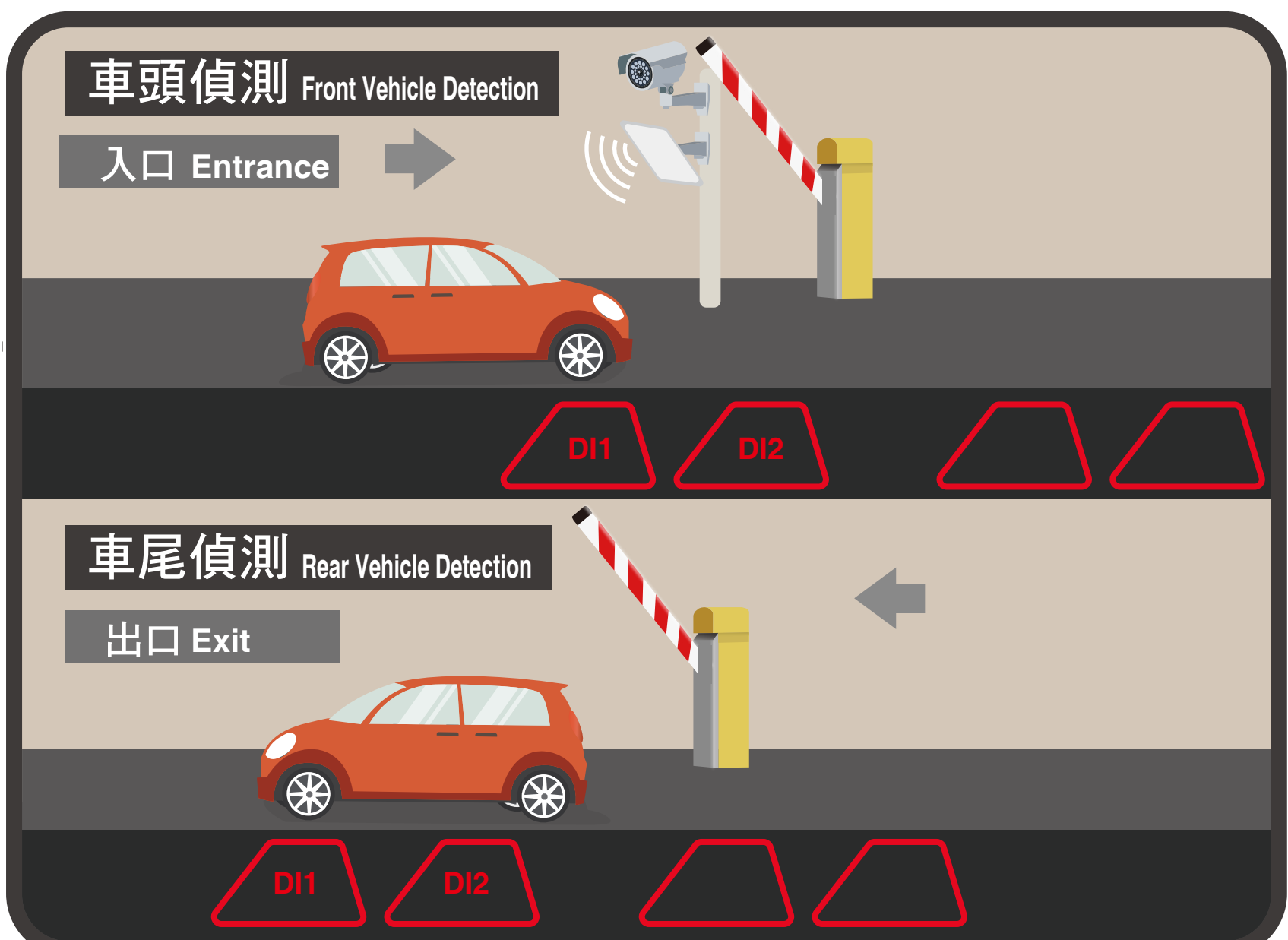


- 讀卡機可搭配整合自動化機械停車塔系統  
Controller can be integrated with automated parking garage with customized firmware.
- 自動化停車塔系統可以有效分配停車空間  
Automated parking garage can allocate parking spaces efficiently and effectively.



#### E. 車頭/車尾方向辨識偵測

Detection of Vehicle Direction



- 萬用I/O模組搭配紅外線或感應線圈，可支援方向辨識功能，入場觸發eTag 讀頭與LPR 啟動辨識，出場觸發出車警示燈與關閘使用。

Integrated with IR or induction coil, I/O module can determine direction. When car enters, it triggers eTag reader and LPR. When car exits, it triggers car coming sign. After car exits, barrier closes.

