

## **ZKBioSecurity Parking Management System**





Fingerprint Recognition



Face Recognition



Palm Recognition



Finger Vein Recognition



Iris Recognition

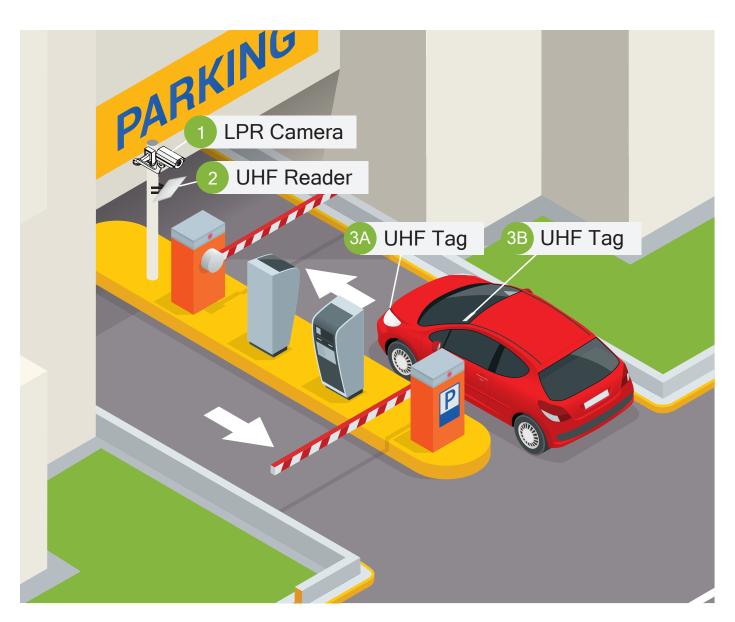


Card Recognition

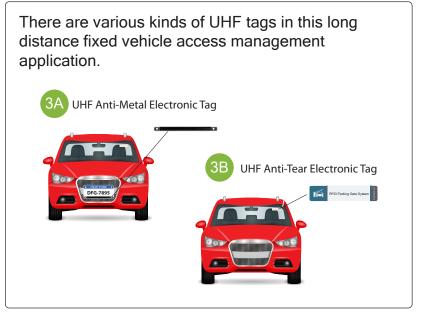
With the rapid development of the global economy and the consistently improving living standard, there has been a growing number of vehicles. for efficient vehicle management, there has been an increasing number of parking lots and vehicle management areas beginning to use License Plate Recognition (LPR) products and Ultra-high Frequency (UHF) products. The automatic license plate identification enables fast vehicle access to parking, which provides convenient user experience.



## **ZKBioSecurity Parking Management System**









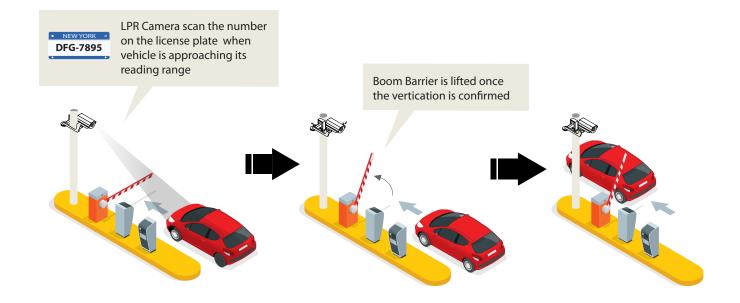
# Automatic Vehicle Recognition (With UHF Reader and UHF Tag)

Its operation starts when a user with the passive tag drive through the UHF reader located at the entrance of the parking lot. The UHF reader will recognize the tag. The carpark barrier will lift up for access upon valid recognition. If not, access will be denied.



# **Automatic Number Plates Verification**(With LPR Camera)

LPR technology is an application of computer video image recognition technology in license plate identification area. Its operation starts when the vehicle is located at the entrance of the parking lot, the LPR Camera will scan on the license plate character, and its recognition technology will identify the license plate number, color and other information. If the number on the license plate is valid, the car park barrier will lift for access, otherwise, no access will be allowed.

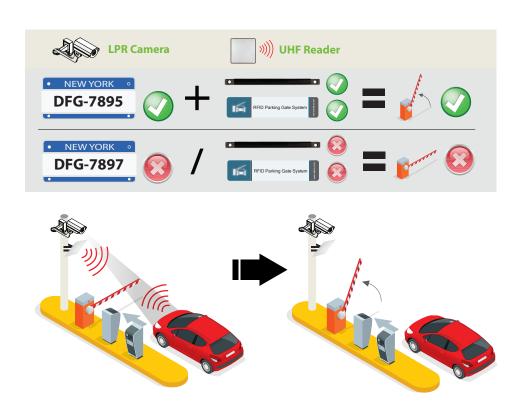




## **Dual Number Plate Authentication**

## (UHF and LPR Based Two Level Authentication System for Vehicles)

Dual number plate authentication is a Multi-factor authentication to use of several authentication techniques together. Once the vehicle is located at the entnance of the carpark lot, both of the UHF reader and LPR Camera will start to recognise the UHF Tag and the number plate on the vehicle. If the vertification of the number plate and the UHF tag is valid, the car park barrier will lift for access, otherwise no access will be allowed.



## **Blacklist and Whitelist Management**





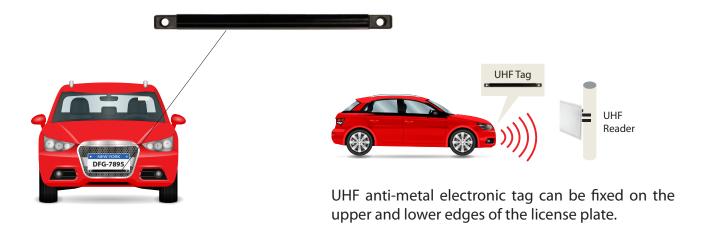
Car Park System management Software includes Role and Black and White Lists. If the cars are pre-set on the white list, including fire trucks, police cars, and privileged cars, can enter and exit the parking lot free of charge. Otherwise, cars on the black list are not allowed to enter or exit the parking lot.



## **UHF Tag**

There are two kinds of UHF tags in this long distance fixed vehicle access management application.

### Option 1 UHF Anti-Metal Electronic Tag Fixed on the car plate



### Option 2 UHF Anti-Tear Electronic Tag Fixed on the windshield



The distance between the UHF tag and the metal frame shall be 80 mm at least, the checked options in the figure above are recommended.

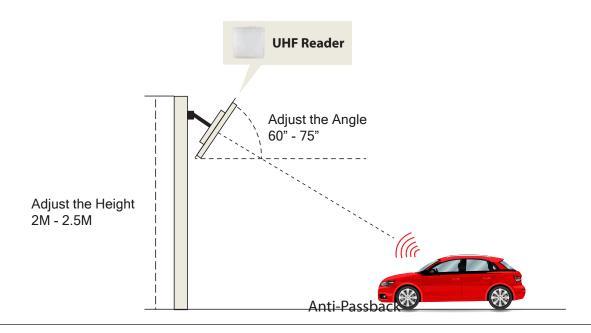
UHF Anti-Tear Electronic Tag is an electronic label which is pasted on the windshield of the car. This tag should be installed in an appropriate place on the windshield inside the car.

For vehicles covered with metal tempered glass protection film, an area of the film equal to the size of the related UHF is required to be removed, for the prevention of the interference to the verification.



## **UHF Reader**

The UHF RFID reader is an RFID long-range proximity card reader which can simultaneously read multiple passive UHF tags at ranges up to 12m. The reader is waterproof and is suitable for use in a wide range of RFID applications, such as transport management, vehicle management, car parking, production process control, and access control.



## **License Plate Recognition (LPR) Camera**

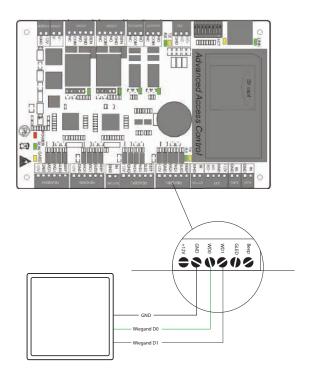
LPR technology is an application of computer video image recognition technology in license plate identification area. This technology through the license plate crawling, image pre-processing, feature extraction, license plate character recognition technology to identify the license plate number, color and other information.



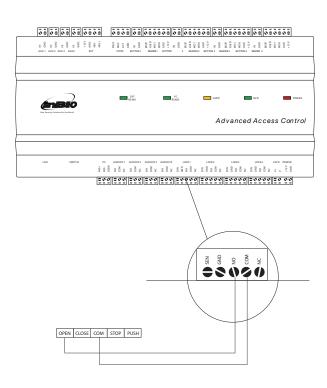


## **Installation**

#### Connect to Controller



#### Connect Parking Barrier with controller





## **Green Label InBio Pro Series**

Hardware Evolution, Professional IP-Based Biometric Access Control Panel is Comprehensive Upgraded!

- Data Storage and Card Capacity Fully Upgraded
- CPU Upgraded to 32bit 1.2GHz
- Flash Increased to 256 MB, RAM Increased to 128MB
- HTTPS Communication Has Been Added
- Web Server Added for Computer Setting and Server Web Configuration







### **UHF Reader Series**

The New Generation Ultra High Frequency RFID Reader

- CE, FCC Certificated
- IP66 Standard Dustproof & Waterproof Features
- Economic Price with Adjustable Long Distance Read Range



### **UHF Tag Series**

UHF Anti-Metal Electronic Tag/ UHF Anti Tear Electronic Tag

- Passive Electronic Tag
- Highly Durable
- AntiTear/ Anti-Metal Embedded Asembly
- Long Distance Fixed Vehicle Access Management





## **LPR Camera**

**Automatic License Plate Recognition Algorithm HD Web video camera** 

- Highest resolution is up to 1920\*1080P
- 2 million pixel wide dynamic CMOS sensor
- IP65 waterproof and dust proof grade design





## **ZKBioSecuroty Parking Lots Management Software**

#### **Personnel Management**



To access the personnel and employee's management interface, on which you can add, edit, delete, import, and export employee information, including Employment Number, Name, Gender, Phone Number, Image...etc

#### **Black And White Lists Management**



Cars on the white list allow the authorised vehicle to enter and exit the parking lot free of charge.

Cars on the black list are not

Cars on the black list are not allowed to enter or exit the parking lot

#### **Real Time Monitoring**



There are totally four monitoring screens. Super user can view the entry/ exit messages of all cars as well as system messages of the parking lot.

#### **Role Management**



The super user must grant different operation rights to new users. Operation rights can be set for users in batches.

#### **Region Linkage Management**



Region linkage setting involves setting the impact of car entry and exit on the number of parking spaces of the parking area.

#### **Provisional Rules**



On the Provisional Rules interface, you can set the charging rules for provisional cars.

#### Shift



Start time and end time of the shift. You can directly enter the time and to select a time period.

#### Report



With the reports function, you can perform statistical analysis for data of the parking lot to implement overall control of the parking lot information.

#### **Financial**



Financial module mainly involves the setting of parking charging rules, flexible and rich rules as much as possible to meet the actual needs of the site project.



## The Leader Of

## **Security And Time Management**

## Solution



Fingerprint Recognition









Finger Vein Recognition



Iris Recognition



**Card Recognition**