



佳捷智能股份有限公司
ABILITY INTELLIGENT CORP.

Driving industrial transformation and smart upgrades
with AI for a comprehensive solution

A Leader in AI-Powered Smart Solutions

ABILITY INTELLIGENT

Blending ABICO Group's manufacturing with Ability Enterprise's AI expertise enables delivery of custom technology solutions. Offerings include smart cameras, control platforms, digital twins, and automated parking for a range of industries.

📍 Smart Parking Operations Solution

This smart parking solution uses AI license plate recognition, sensors, IoT, and cloud services to automate the parking process. It detects vehicle entry and exit, supports touch-free payments, guides drivers to open spaces, enables shared and reserved parking, and provides insights that reduce labor and improve efficiency. The system works for single or multiple sites, offering real-time data sharing and remote monitoring.

Managers can access reports on usage, occupancy, and revenue. Ideal for malls, airports, residential complexes, and public facilities, it delivers a safe and efficient parking experience.



System Architecture

The smart parking system includes license plate recognition, car-finding, vehicle guidance, occupancy detection, and multi-payment modules.



Automatic Number Plate Recognition

AI video recognition quickly captures license plates for accurate vehicle entry and exit in any lighting or angle. Integrated with the parking platform, it enables seamless access, driver verification, automated control, and event tracking to improve traffic flow and safety.

✓ Vehicle Entry – Data Collection

When a vehicle enters the sensor loop, the ANPR camera scans the plate and sends data to the central system (total spaces -1). It identifies vehicle categories: temporary, monthly, accessible, employee, VIP, and others.

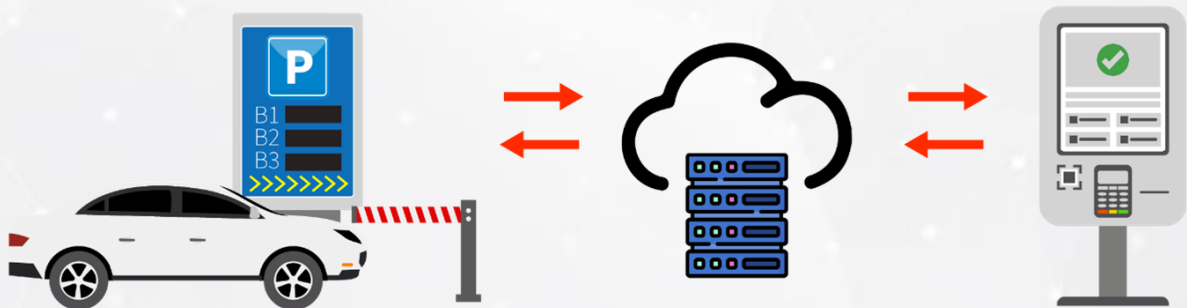
✓ License Plate Recognition – Data Processing

The ANPR display panel can show the license plate, timestamp, vehicle type, and other relevant data.



✓ Vehicle Exit – Data Settlement

Upon exit, the ANPR system sends data to the platform, which checks payment. If cleared, the gate opens, and exit indicators ensure safe departure (total spaces $+1$).



Occupancy Detection System

The occupancy detection system uses video or magnetic sensors to identify available parking spaces and update the management platform and signage in real time. It tracks usage, provides space statistics, issues alerts, and improves overall parking efficiency. Integrated with ANPR, car-finding, and guidance systems, it directs drivers to open spaces using indicator lights, reducing circulation and congestion. Drivers can also search for their vehicle by plate number and receive the best exit route.

✔ **Occupied Space – Red Indicator Light**

Signal lights and displays guide vehicles to the right lanes and show real-time availability. Red means a space is occupied. Employee spaces can be easily assigned, reassigned, or monitored for unauthorized use. Welcome messages improve the entry experience.

✔ **Available Spaces – Green Indicator Light**

The system highlights open spaces, counts full areas, and properly assigns reserved spaces.



Automatic Number Plate Recognition

Use real-time parking info and guidance displays to direct incoming vehicles and help drivers quickly find open spaces. On exit, prompt for a license plate to locate the vehicle and suggest the best exit route, reducing circling and congestion.

✓ Guidance for Reserved Vehicles Entering the Facility

Use the parking guidance system to help drivers quickly find parking spaces. When vehicles enter, use ANPR to identify them and display guidance information at key turning points on each level.

✓ Parking According to Directional Instructions

Install a display board at the entrance to show the number of remaining spaces. Install multiple directional indicators throughout the facility to indicate available parking spaces and guide drivers to the correct parking area.



✓ Smart Car-Finding System

This system helps drivers quickly locate their vehicles using license plate recognition, sensors, touch panels, and navigation. It supports partial searches—such as entering part of a plate number, a space number, or entry time—and provides a route map to guide drivers back to their car, reducing search time and improving convenience.



Vehicle Detection System

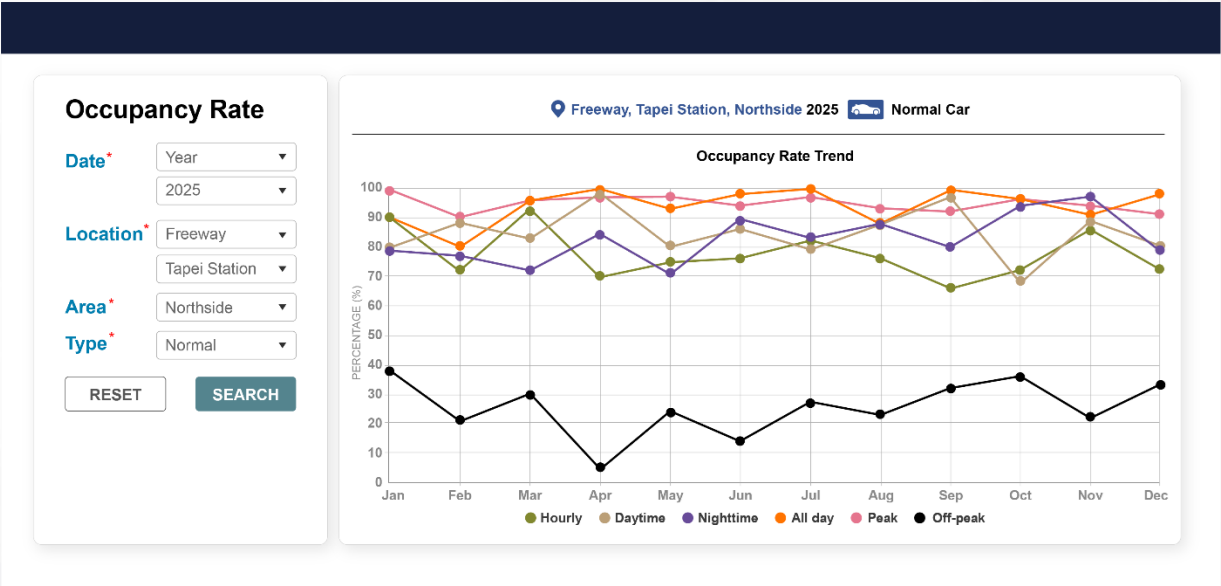
The system supports mobile payments, smart cards, credit cards, and frictionless (ANPR-based) payments. A real-time billing engine handles parking fees, discounts, and monthly plans while providing financial reports and revenue analysis. It integrates with ANPR and entry/exit devices to offer a smooth, low-contact payment experience.

Multi-Payment and Billing Management System

Using ANPR, the system identifies vehicle types at entry and applies the correct rate—hourly, monthly, or special categories (e.g., maternity or disability parking). It supports daily-to-annual reports, split accounting, and analytics on utilization, peak hours, and revenue trends.

Multi-Payment Kiosk

At exit, payment kiosks accept smart cards, cash, credit cards, online payment, and mobile payment. They can also link to the car-finding system to show vehicle location after payment and support QR code discounts for partnering businesses.



Solution Features and Application Scope



Smart License Plate Recognition & Access Management

AI automatically identifies incoming and outgoing vehicles, supporting frictionless payments and automatic gate control to greatly improve traffic flow.



Real-Time Space Guidance & Reservation

Integrated sensors detect available spaces, providing real-time guidance and parking reservations to enhance the parking experience.

Data Integration & Operational Analytics



Aggregates data on vehicle flow, dwell time, and space usage. Cloud-based reports support operational decisions and resource planning.

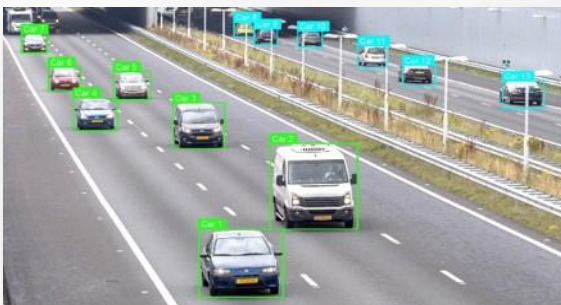
Automated Payment & Management



Supports multiple payment methods to simplify billing and management processes, reducing labor costs and increasing convenience.

Flexible Deployment & Scalability

Supports both centralized and distributed architectures and can integrate with cloud systems and third-party platforms, enabling easy expansion across multiple sites.



Commercial Spaces

Smart parking and analytics for shopping malls, retail centers, and outlets.



Airports & Transportation Hubs

Short/long-term parking, real-time guidance, and automated payment for airports, stations, and metro lots.



Residential Communities

Parking management with reservations, visitor access, and frictionless entry.



Citywide Smart Parking

Citywide parking resource management with analytics, smart guidance, and policy support.



The Key to Smart Transformation Starts with Choosing **Ability Intelligent**

About Ability Intelligent

Ability Intelligent, a subsidiary of Ability Enterprise under the ABICO Group, leverages the Group's manufacturing expertise and advanced AI research to deliver smart technology solutions that drive measurable industrial transformation. Our high-performance smart cameras, command-and-control platforms, digital twins, intelligent warehousing, and smart parking deliver secure, deployment-ready results for large-scale impact.

Our core principles—customer-centricity, innovation, and integrity—guide deep investments in AI, big data, cloud, and information security. Continuous R&D and implementation enable organizations to optimize efficiency and improve decision accuracy.

Together with partners, we enable digital transformation and sustainable growth for smart industries.

- ✓ **Solid Corporate Backing**
- ✓ **Combines different technologies**
- ✓ **Strong AI skills**
- ✓ **Wide range of products**
- ✓ **Strict quality control**
- ✓ **Solutions for different industries**
- ✓ **Cares about the environment**

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