

Milesight

# AIoT INDOOR PARKING MANAGEMENT SUITE

Make Parking Easy and Smart with AIoT



LoRaWAN®

Milesight Technology



# A Smarter Way to Manage Parking Lot

## Introduction

With more and more cars in cities and towns today, the demand for parking continues to grow significantly. Saving drivers' time on parking and saving parking lot owners' costs on managing can be the top concern for a parking solution.

Now, Milesight is introducing a new power of AIoT to provide a new and smarter way to do parking management. The Milesight AIoT Indoor Parking Management Suite creatively combines AI Deep Learning, On-camera LPR, LoRa and dual-ultrasonic technologies to help optimize the parking process and management more efficiently.



Best Quality AI LPR Camera for Gate Control



LoRaWAN<sup>®</sup> Sensor for Occupancy Detection



LoRaWAN<sup>®</sup> Gateway for Data Transmission



Covering Signal Blind Spot with Mini LoRaWAN<sup>®</sup> Gateway



### Best Quality AI LPR Camera for Gate Control

Capture and read the plates accurately when vehicle approaches and further cope with access control system for barrier opening automatically.



### LoRaWAN<sup>®</sup> Sensor for Occupancy Detection

Detect whether the parking space is free or occupied with Dual Ultrasonic Sensor and the status will soon be well transmitted to Milesight gateway.



### LoRaWAN<sup>®</sup> Gateway for Data Transmission

Receive and forward the status data to your parking system and Milesight IoT Cloud. Adopting both gateways will achieve the most cost-effective network reach, as UG65 Gateway can cover a large area and Mini UG63 Gateway can fill the blind spot.



# A Number of Reasons to Choose Milesight Solution

## Benefits



### Accurate On-edge ANPR

Designed for demanding LPR applications, Milesight professional LPR camera can recognize the plates rapidly and precisely as vehicle approaches the gate with the dedicated and embedded AI LPR algorithms.



### Long Battery Life by Lower Power Consuming

LoRa technology enjoys a lower power consuming that allows LoRaWAN® sensors and gateways to operate steadily with longer battery life, greatly saving maintenance costs.



### Flexible and Expandable

Integrating our flexible solution into your existing parking system is much easier than you think. And Milesight in-house solution is easy to expand and customize to suit your exclusive needs with open APIs and versatile protocols.



### Easy Deployment

The solution can ensure the most simplified deployment and least installation labor. Thanks to the LoRa-enabled technology, you'll never bother to wire the network cable for sensors, as the devices communicate wirelessly.



### More Affordable with Low Per-unit Cost

Milesight LoRaWAN® based solution is easy to get started and more affordable because of the low per-unit cost, fitting for more use cases that would like to have parking management solution at lower costs.



### Environmental-friendly

With so many cutting-edge technologies combined, our greener solution optimizes the parking process which reduces air pollution, CO<sub>2</sub> emission and fuel consumption. Thus a more effective as well as environmental-friendly parking facility can be created.



# An Enjoyable Parking Experience with AIoT

Technologies



## AI Together with LPR

Accurate Identification and Automatic Gate Control

### ■ Embedded AI LPR Algorithms beyond Plate Recognition

In contrast to conventional LPR algorithms, Milesight AI LPR algorithm adopts a deep learning neural network model that has been developed specifically for LPR. This allows the camera to recognize vehicles, plates and read characters correctly.

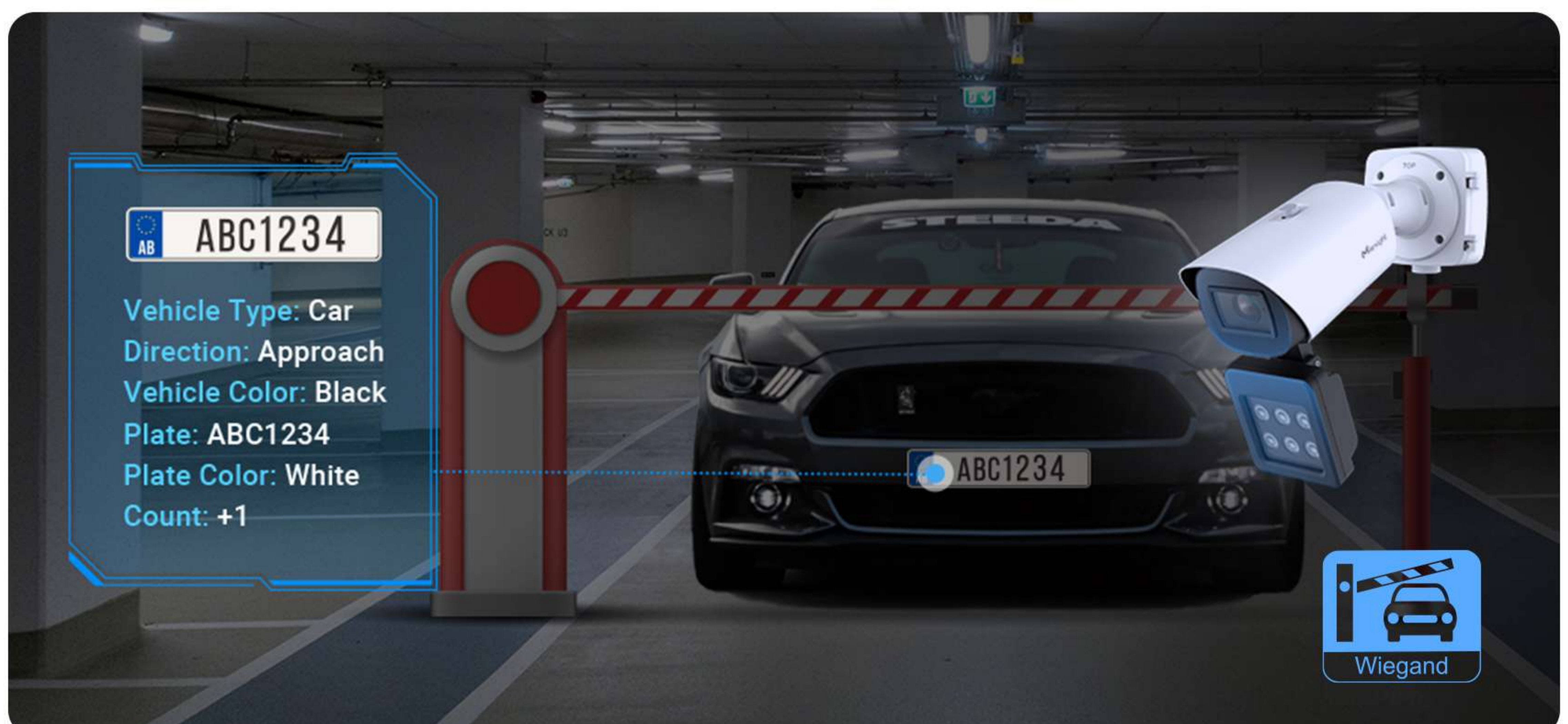
In addition, our LPR camera can realize AI-based attributes recognition such as vehicle type, vehicle color and plate color, providing more insights to grow your parking business.

### ■ Supplement Light for LPR Cameras Provides Better Image Quality

Milesight incorporates White LED or IR LED supplement light to AI LPR cameras that provide more lighting sources to achieve plate and vehicle recognition in the best quality 24 hours a day, 7 days a week round-the-clock operation for gate control.

### ■ Wiegand Protocol Supported for Access Control System Compatibility

Milesight Supplement Light AI LPR Camera can be easily integrated with your existing access control system via Wiegand protocol.







## IoT Empowered by LoRa Technology

Low Power, Long Range and Wireless Communication

### ■ What are LoRa and LoRaWAN®?

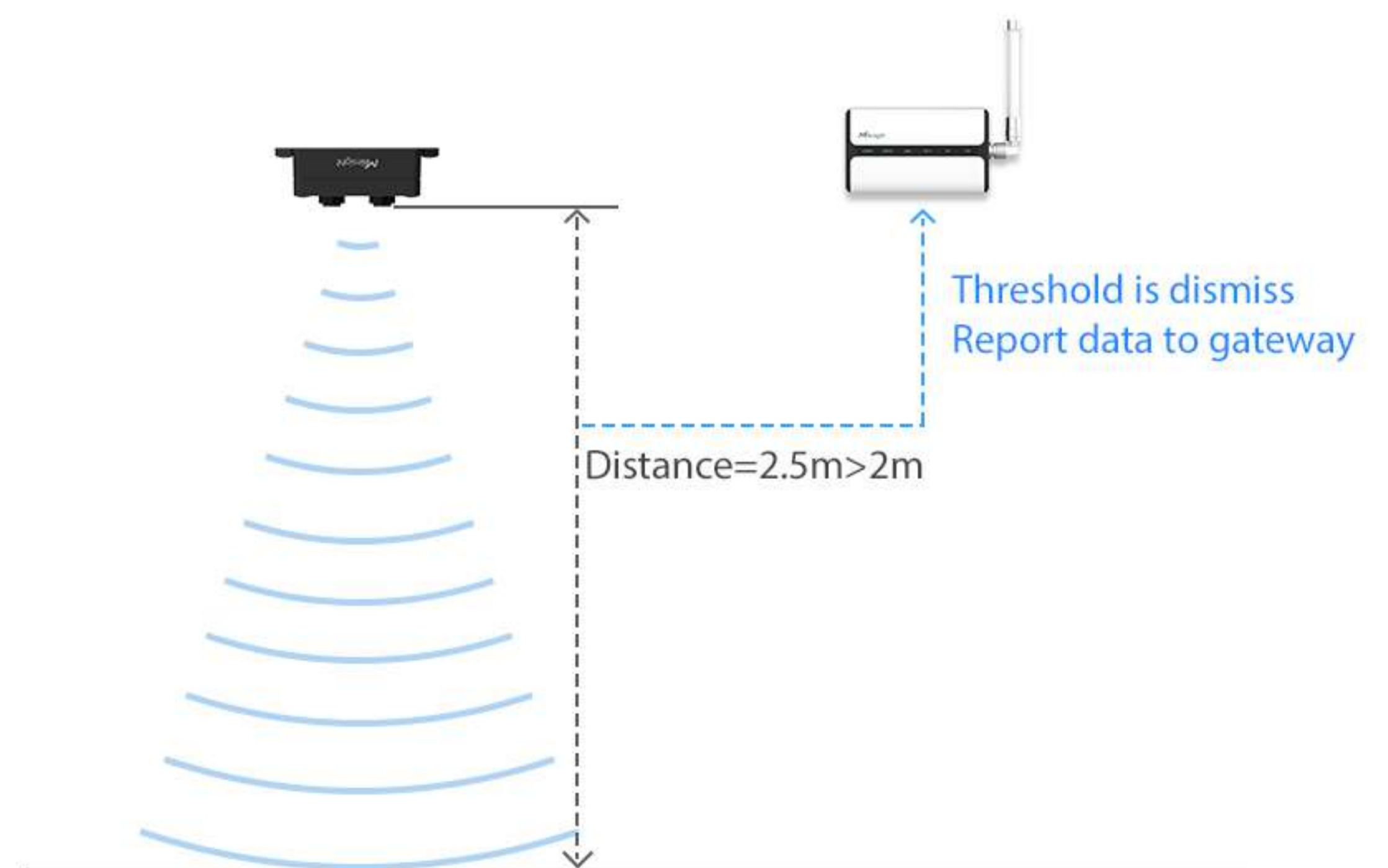
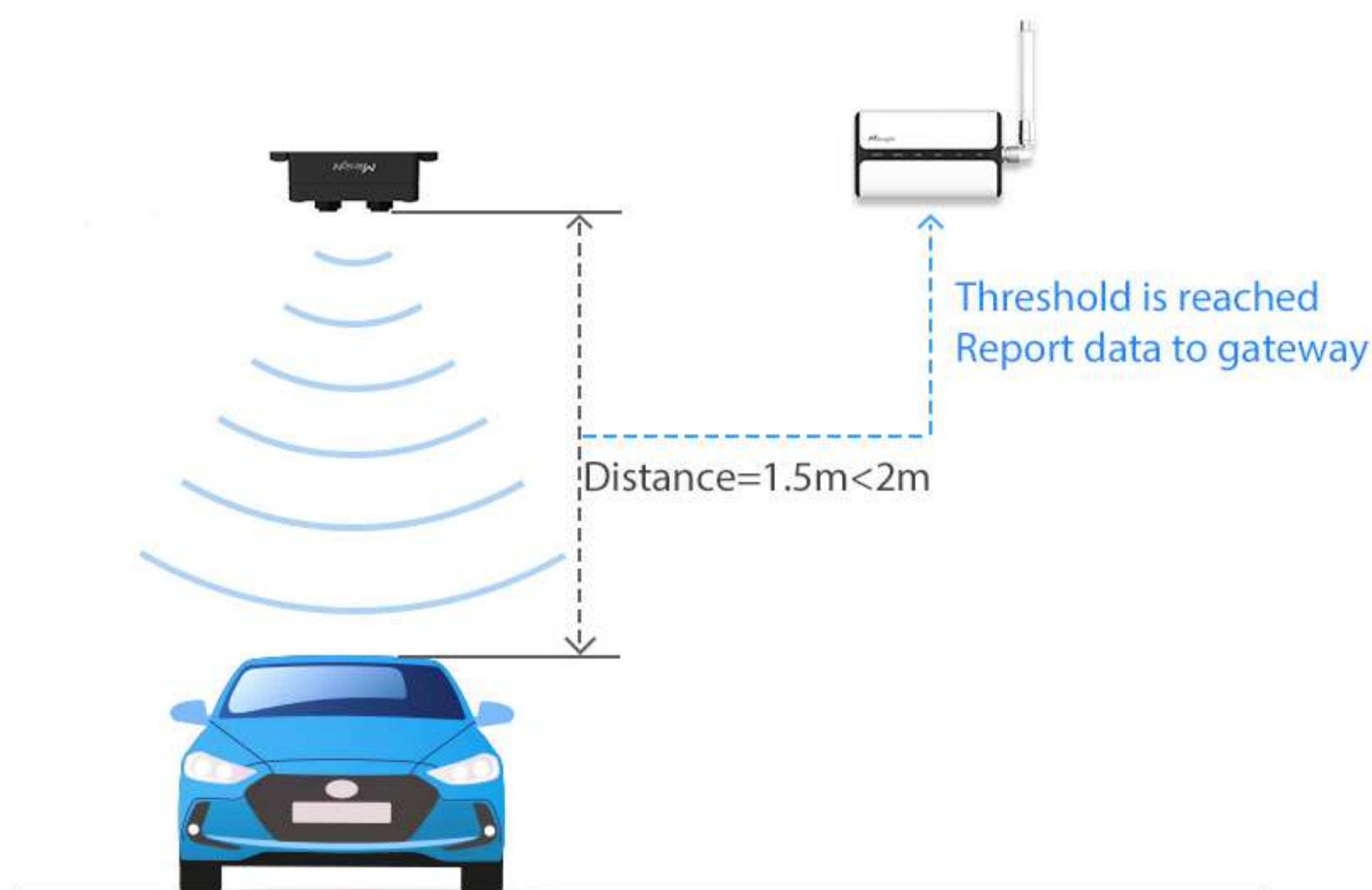
LoRa is a new wireless technology designed specifically for long-range, low-power communications. LoRaWAN® is the protocol built on top of the LoRa modulation, designed to wirelessly connect battery-operated 'things' to the internet.

### ■ How is LoRa Technology Helping Indoor Parking Management?

For indoor parking management applications, LoRa technology allows the occupancy data to be transmitted effectively in the open parking lots and guarantee the least installation and operation costs thanks to the wireless and low power features.

### ■ Dual Ultrasonic Detection LoRaWAN® Sensor

The advanced LoRaWAN® sensor EM310-UDL uses a dual ultrasonic beam with a measurement range from 3cm to 450cm, resulting in an ultra-short blind spot, which provides high-precision parking space occupancy status for parking management systems.





# Discover Our Solution



## On-edge ANPR Camera Supplement Light AI LPR Motorized Pro Bullet Plus Camera

- AI-powered LPR Algorithm
- Integrated Supplement Light
- Clear Capture of Dynamic License Plates
- Superior Image Quality for 24/7 Traffic Monitoring
- Wiegand Protocol Supported
- Versatile Interfaces



## Detect Space Occupancy Wirelessly at Low Power LoRaWAN® Ultrasonic Distance/Level Sensor EM310-UDL

- Dual Ultrasonic Sensor
- IP67 Waterproof
- LoRaWAN® Based
- Easy Configuration (via NFC)
- 3-Axis Accelerometer



## Data Transmission for a Wide Area Semi-Industrial LoRaWAN® Gateway UG65

- IP65 Rating
- Outstanding Performance
- New Generation of LoRa Chip
- Low Power Consumption
- Deep Penetration
- High Capacity
- Multiple Backhaul Connectivities
- Compatible with Multiple Network Servers



## Covering Signal Blind Spot Mini LoRaWAN® Gateway UG63

- Eye-Catching Design
- Massive Connectivity
- Blind Spot Coverage
- Gateway Fleet
- Listen Before Talk
- Low Power Consumption
- High Compatibility

## Upgrade to Smart Parking Management

Upgrade your indoor parking facilities by simply saying hello to us and we will map your needs to tailor the best solution for you!  
Together, let's make Parking Management easy and smart with AIoT!

[Send an Inquiry](#)