



Better Inside, More in Sight 

# UNVEILING MILESIGHT TrafficX CAMERA SERIES

Meet ANPR Game-changer - Milesight TrafficX Camera

MILESIGHT

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TrafficX Series  
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## Versatile Applications

# Company Profile

Founded in 2011, Milesight is a fast-growing and innovation-driven technology company with a focus on 5G, AI, IoT and LoRaWAN. With advanced IoT insights, the company is committed to driving next-level technology innovation and business efficiencies in an actionable and locally adapted way.



**01**

# **MILESIGHT INTELLIGENT TRAFFIC MANAGEMENT**

# MILESIGHT INTELLIGENT TRAFFIC MANAGEMENT

Milesight

## TrafficX Camera Series



TrafficX Camera  
TS5510-GH



TrafficX Enforcement Camera  
TS5511-GH

NEW!

## Road Traffic Management



AI Road Traffic Radar  
Pro Bullet Plus Camera



4G Solar-Powered  
Traffic Sensing Camera



AI Road Traffic 5G Pro  
Bullet Plus Camera

## Parking Management



AloT Indoor Parking  
Management Suite



Indoor Parking  
Guidance Camera



AI Outdoor Parking  
Management Camera



AI Road Traffic Pro  
Bullet Camera



AI Road Traffic  
Supplement Light Pro  
Bullet Plus Camera



AI Road Traffic Parking  
Detection Camera



Entrance & Exit AI LPR  
Bullet Camera



Entrance & Exit AI LPR  
Pro Dome Camera



Entrance & Exit Supplement  
Light AI LPR Pro Bullet Plus  
Camera



AI Road Traffic PTZ  
Bullet Plus Camera



AI Road Traffic PTZ  
Bullet Camera



AI Road Traffic Speed  
Dome Camera

# 02

## MILESIGHT TRAFFICX SERIES

- Why Milesight TrafficX Camera Series?
- What it Entails?
- How it Works

# TrafficX Camera Series

TrafficX Camera TS5510-GH & TrafficX Enforcement Camera TS5511-GH



## PAIN POINTS

| Challenges in Simultaneous ANPR Recognition and Overview Capture

| Time Sync & Reliability Challenges in Dual-Device Forensics

| Insufficient Accuracy in Complex Traffic Scenarios



Insufficient Forensic Evidence



Complex Installation and Maintenance



Limited Scene Adaptability



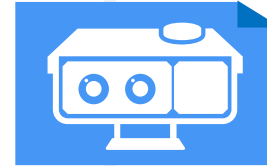
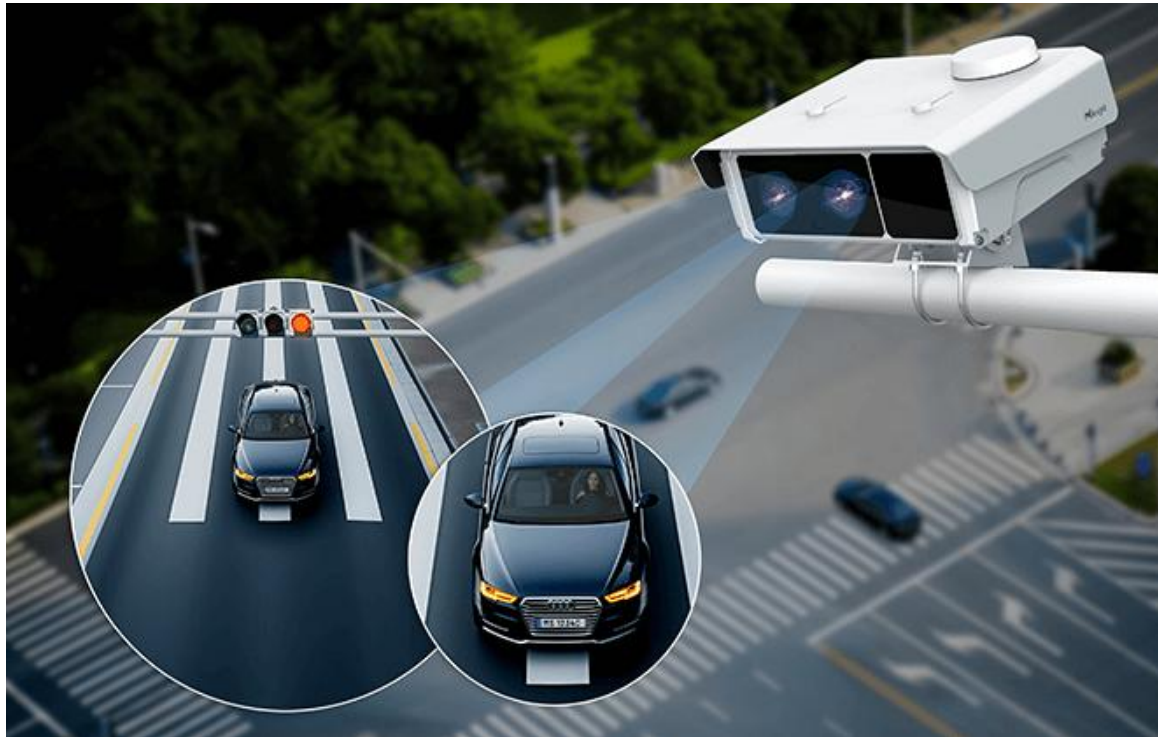
## What it Entails?

# TrafficX

TS5510-GH  
TS5511-GH

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**Double Vision, Double Power:  
Unparalleled Evidence-gathering Capabilities with Dual  
Sensors**



**ANPR+Overview  
Dual-Lens Device**

- ✓ **ANPR Image and Overview Evidence.**  
Seamless Dual-View Monitoring
- ✓ **Consistent Capture of Vehicles/Scenes Over Time**  
Detect and Identify Objects of Interest Simultaneously across both Lenses.
- ✓ **Easy Installation and Maintenance**  
Simplify Installation, Save Cost, and Improve Efficiency with a Single Device

**250km/h**  
High Recognizable Speed

Excels in capturing details in **fast-paced dynamic scenes.**

**24/7**  
High Accuracy

Achieving **99% Capture Rate** and **98% License Plate Recognition Rate** even in Low-light Environments.

**Zero installation inconvenience**

Enhanced Installation Convenience with **4G Module** and Easy Angle Adjustment.



**2\*5MP Auto Focus Lenses**



**Up to 50m ANPR Distance**



**2-3 Lanes Covering**



**IP67 Robust Performance Performance**



**Support 1TB SD Card for Edge Storage**



2

## How it Works?

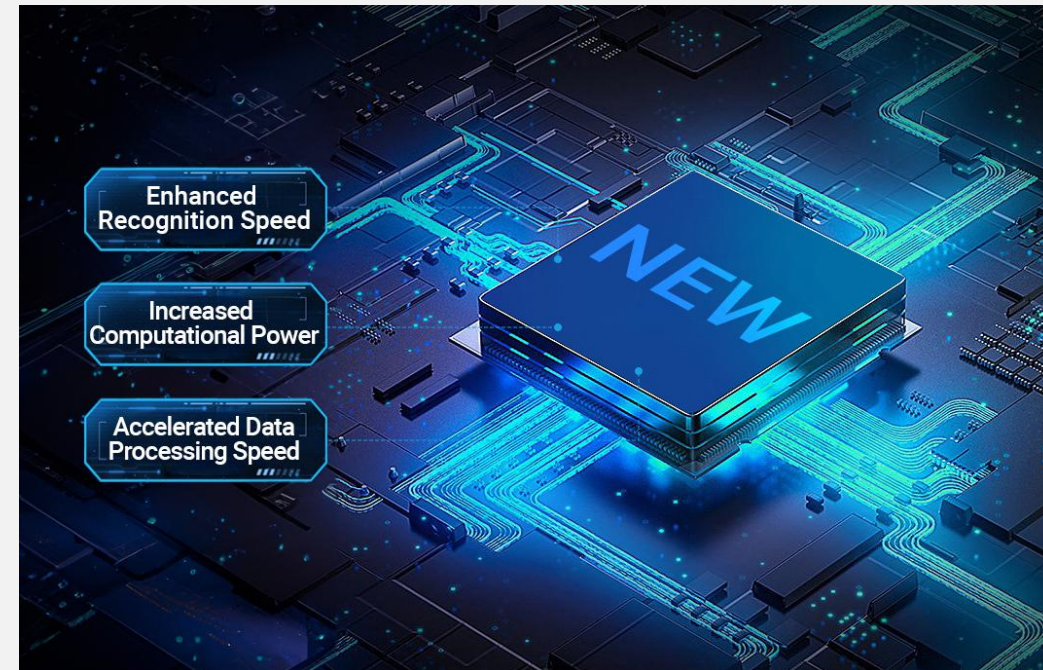
Enhanced Computational Capabilities and Superior Image Quality  
Powered by **Next-Generation Chipset**.

## ➤ Advanced Computational Capabilities

With superior AI processing power, our advanced camera seamlessly handles the demanding requirements of high-resolution cameras, enabling precise and efficient identification of vehicles in high-speed scenarios.

## ➤ Elevating Image Quality with AI ISP

Designed to minimize noise in low-light environments and optimize dynamic performance during nighttime scenarios.

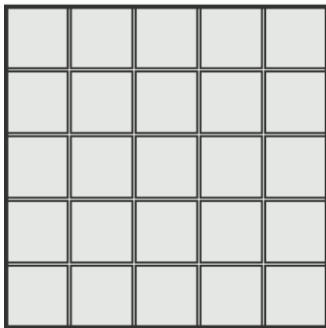


# TrafficX

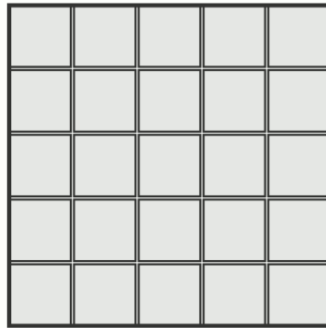
TS5510-GH  
TS5511-GH

**Global shutter** technology enhances surveillance capabilities by ensuring comprehensive coverage with a **high capture rate**. It maintains high-quality images and enables advanced event analysis while reducing the need for manual intervention, improving operational efficiency.

Rolling Shutter



Global Shutter



  
Light Source



## Up to 250km/h Monitoring Speed

Tailor-made for high-speed enforcement.



## Distortion-Free Imaging

Capture fast-moving targets with precision and accuracy, eliminating any distortions.



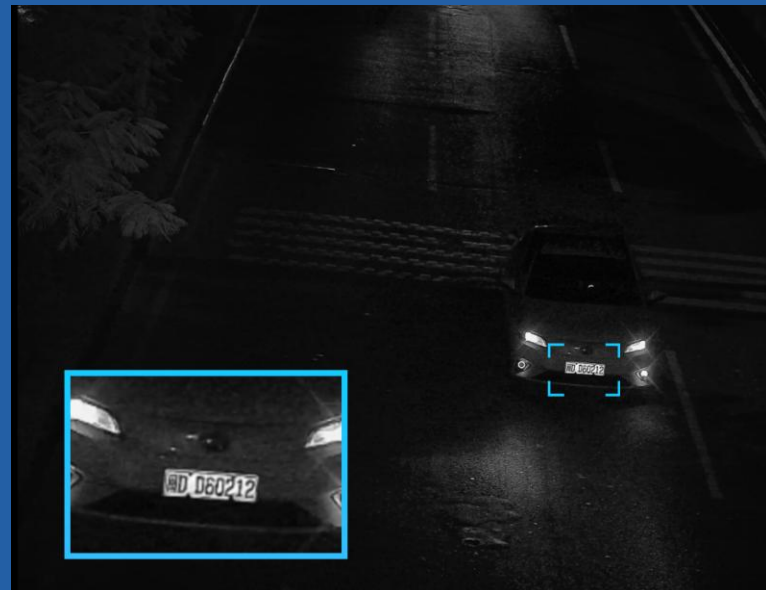
## Night Time Image Excellence

From bright daylight to night-time darkness, it ensures clear and detailed visuals that excel in any lighting condition.

Achieve superior image quality with Frame Parity Flashing and a selection of IR wavelength options for enhanced visual performance.

## Frame Parity Flashing

It excels at capturing intricate details of both the **vehicle** and **license plate**, ensuring enhanced clarity, accuracy, and optimized exposure settings for **reflective** and **non-reflective** license plate scenarios



Capture clear and detailed **vehicle/license plate** details with precision.

Achieve superior image quality with Frame Parity Flashing and a selection of IR wavelength options for enhanced visual performance.

## Dual IR Wavelength Options

Optimize license plate identification by utilizing our optional dual IR wavelengths (850nm and 740nm), enabling precise recognition across different contrast levels and lighting conditions.



740nm IR wavelength: Ideal for **low-contrast** license plate recognition.

# TrafficX

TS5510-GH  
TS5511-GH

Enhanced Connectivity and Data Management:  
Leveraging 4G, GPS, and Efficient Data Transfer.

**4G**

## 4G Module (Optional)

Ideal for challenging deployment scenarios where wired networking is difficult.



## GPS for Precise Location Information

Gain valuable insights into the **camera's location** with GPS integration.



## Real-time Data Transmission

Enable seamless integration with **CGI/APIs** and support for **TCP/HTTP/MQTT** protocols, ensuring effortless connectivity

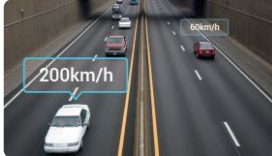


# MILESIGHT INTELLIGENT TRAFFIC MANAGEMENT

## Road Traffic Management



Various Vehicle Attributes Recognition



Speeding Detection



Reverse Driving Detection



Specific Lane Management



Parking Violation Detection



Traffic Flow Management



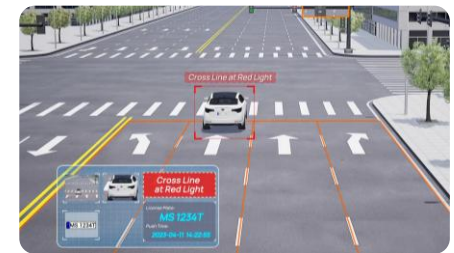
No-Plate Detection



## Red Light Violation Detection



Red Light Running



Cross at Red Line

# 03 RED LIGHT VIOLATION DETECTION

- Why is it?
- What is It?
- How it works?

# WHY RED LIGHT VIOLATION DETECTION?

Enhance road safety by identifying vehicles running red lights. This technology can help prevent accidents, save lives, and improve traffic flow, making roads safer for everyone.



## ➤ Addressing Enforcement Needs

Intersection Violation Management/Timely Alert Handling



## ➤ Meeting Public Expectations

Ensuring Road Traffic Safety/Improving Traffic Flow Efficiency

# WHAT IS MILESIGHT RED LIGHT VIOLATION DETECTION

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Integrated with advanced technology for red light running detection and red light crossing line detection, it enhances road safety by efficiently controlling vehicle movements, minimizing accidents, and ensuring smoother traffic flow.

## > Red Light Detection

Multiple Traffic Light Detection Methods:  
Based on **Image** or **Signal Inputs**.

## > Automated Violation Alerts

Based on Specific Conditions and Regulatory Requirements, the System Generates Alerts for Red Light Violations, Enabling Authorities to Take Prompt Action.

## > Evidence Collection

Accurately Capture Video Evidence of Vehicles that Run Red Lights.



# HOW IT WORKS? --TRAFFIC SIGNALS DOCKING

By integrating external input and image algorithms with traffic signals, it enables more effective and accurate red light violation management.



TrafficX Enforcement Camera  
TS511-GH

## ➤ Traffic Light Signal Input

- 4\* External Input for Multiple Light Status Detection

**Signal Docking**

Docking Mode: External Input

Lane Interface

Lane	Red Light Input No.	Yellow Light Input No.
Straight Lane	1	None
Left-turn Lane	None	None
Right-turn Lane	1	None
	2	>
	3	
	4	

# HOW IT WORKS? --TRAFFIC SIGNALS DOCKING

By integrating external input and image algorithms with traffic signals, it enables more effective and accurate red light violation management.

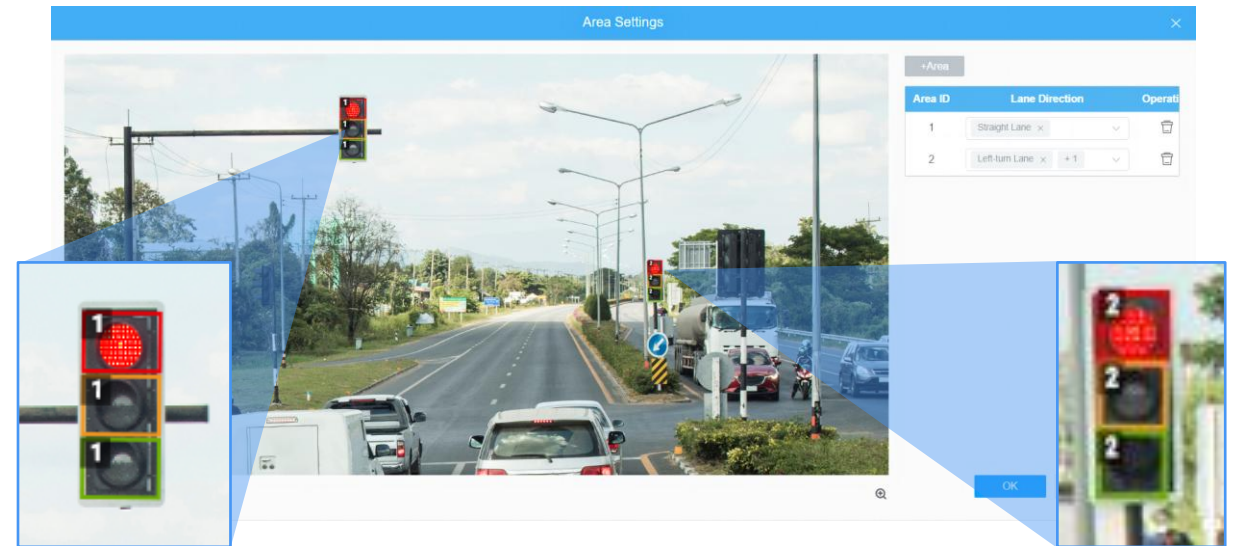


TrafficX Enforcement Camera  
TS5511-GH

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## ➤ AI Analysis

- Image-based Integration Allows Cameras to Precisely Detect the Status of **2 Groups** of Traffic Signal Lights.
- Recognition of Signal Light States that Meet Standards and Include Unique Shapes (such as arrows)
- Pre-calibrated Area Settings for Improved Accuracy.

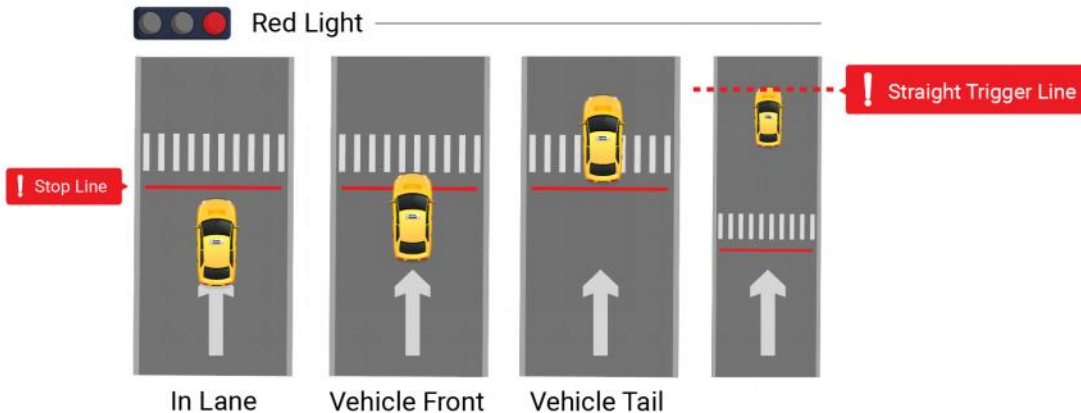


# HOW IT WORKS?

## --EVIDENCE CHAIN OF CUSTODY

### Intelligent Mechanism Meeting Legal Requirements Across Different Countries

- | Support up to 2-3 Lanes Detection
- | Support Customization in Directions of Red-light Running detection Trigger Line  
(Straight Lane/ Left-Turn/ Right-Turn)
- | Tailoring Recording Durations(5-30s) to Suit Your Requirements



### Capturing Pre - and Post-Violation Incidents in Full Video

- | HTTP/Email/External Output, etc. for Abundant Data Transmission
- | Smart Search Enables Centralized Source Management

# HOW IT WORKS?--EVIDENCE CHAIN OF CUSTODY

Milesight



A wealth of data is provided for robust violation documentation and evidence collection purposes.



## Post Type

HTTP TCP MQTT

## Data

- |   |  |   |
|---|--|---|
| <input checked="" type="checkbox"/> Event Type          | <input checked="" type="checkbox"/> Device Information | <input checked="" type="checkbox"/> GPS                       |
| <input checked="" type="checkbox"/> Time                | <input checked="" type="checkbox"/> Detection Region   | <input checked="" type="checkbox"/> License Plate             |
| <input checked="" type="checkbox"/> Country / Region    | <input checked="" type="checkbox"/> Plate Type         | <input checked="" type="checkbox"/> Plate Color               |
| <input checked="" type="checkbox"/> Vehicle Type        | <input checked="" type="checkbox"/> Vehicle Color      | <input checked="" type="checkbox"/> Vehicle Brand             |
| <input checked="" type="checkbox"/> Direction           | <input checked="" type="checkbox"/> Event Data         | <input checked="" type="checkbox"/> License Plate Coordinates |
| <input checked="" type="checkbox"/> Vehicle Coordinates |  |   |

## Snapshot

- |  |  |   |
|--|--|---|
| <input checked="" type="checkbox"/> License Plate      | <input checked="" type="checkbox"/> Vehicle Snapshot | <input checked="" type="checkbox"/> Full Snapshot |
| <input checked="" type="checkbox"/> Violation Evidence |  |   |

## Versatile ANPR Attributes

- License Plate Recognition /Plate Type/Plate Color
- Vehicle Type/Brand/Color
- Country/Region



## Enhanced Red-Light Detection Data Insights

- Event Type
- Time
- Device Information
- Event Data

## Rich Evidence Datasets

- GPS
- License Plate Coordinates
- Vehicle Coordinates

## Full Snapshot Types

- License Plate
- Vehicle Snapshot
- Full Snapshot
- Violation Evidence

# TrafficX

TS5510-GH  
TS5511-GH



01

Powerful AI ISP  
Embedded

02

AI-based Onboard  
ANPR

03

250km/h High Speed  
Capture with Global Shutter

04

Dual-lens for Overview and  
ANPR Image

05

Red Light Violation  
Detection

06

Easy Integration of All Data  
by CGI/APIs

07

Various Vehicle Feature Recognition:  
Vehicle Type, Brand, Color,  
Plate Color and etc.

08

Support 1TB SD Card for  
Edge Storage

## TRAFFICX SERIES

### TRAFFICX CAMERA SERIES

TS5510-GH / TS5511-GH



# 04 VERSATILE APPLICATIONS

# RICH APPLICATIONS OF TRAFFICX CAMERA SERIES



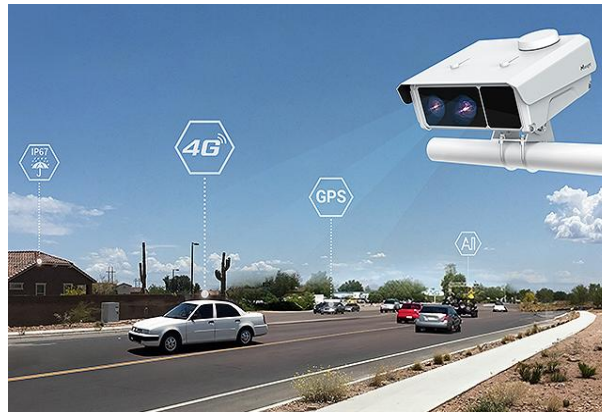
Red Light Violation Detection



Low Emission Zone Monitoring



Free-flow Tolling



Any Type of Traffic Monitoring

## ➤ Red Light Violation Detection

Multiple Traffic Light Detection Methods for Efficient Enforcement

## ➤ Low Emission Zone Monitoring

Dual-lens for **Overview** and **ANPR** Image Brings Smarter Evidence Forensic

## ➤ Free-flow Tolling

**CGI/APIs** Provide Extensive Compatibility with 3rd-party Platform

## ➤ Any Type of Traffic Monitoring

**99%** Capture Rate and **98%** Plate Recognition Rate For Different Monitoring Needs