Milesight Release Note for Intelligent Traffic Camera

Firmware Version: T_47.8.0.4-r9

Applicable Model: DualVision TrafficX Series

Release Date: 27th April, 2026

1. Overview

Milesight, the best-in-class AIoT surveillance solution provider that manufactures products with superior image quality, exceptional flexibility and reliability for the global market, is pleased to announce the release of the new firmware version T_47.8.0.4-r9 of the Milesight Intelligent Traffic Camera.

In this version, we have introduced **Lane Mode** and **Zoom-in and Draw** for more precise LPR configuration. The violation detection has been expanded to include **Illegal Lane Change**, **Special Lane Occupation**, and **Not Following Directional Signs**.

Key technical updates include **Traffic Light Status Detection**, **Radar Video Calibration**, and **Auto Correction** for enhanced sensing accuracy. We have also synchronized **Vehicle Counting** functions across the series.

Usability is improved with **decimal GPS coordinates**, **event-based FTP storage**, and **flexible OSD formatting**. Finally, we have **optimized ONVIF** and added **Third-party VMS configuration** to enhance compatibility with platforms Genetec.

2. Firmware Version Download

For the firmware version, please click the following link to download:

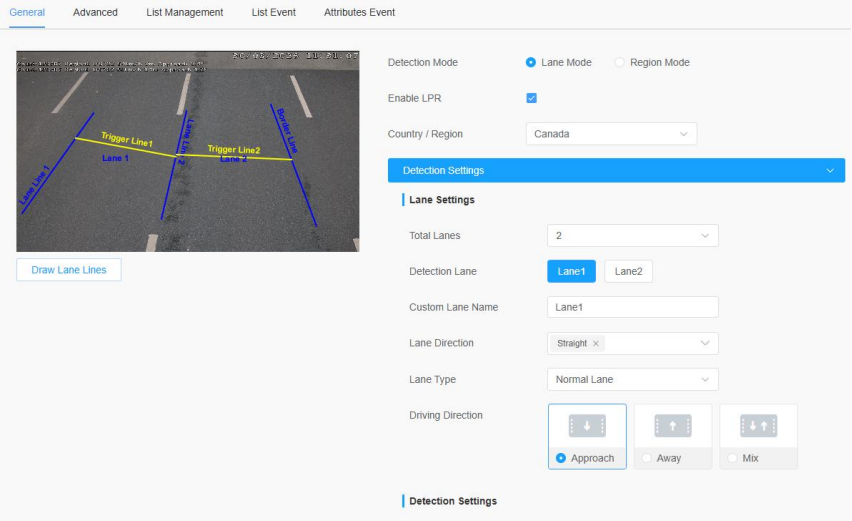
https://www.milesight.com/support/resources/firmware#intelligent-traffic

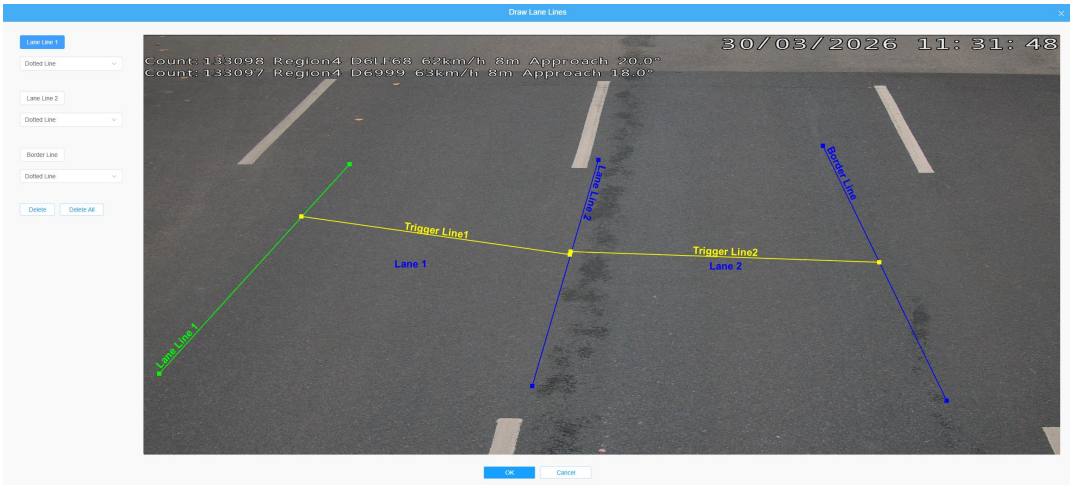
3. What's new

3.1 New Features

1) New Lane Mode for Precise Recognition

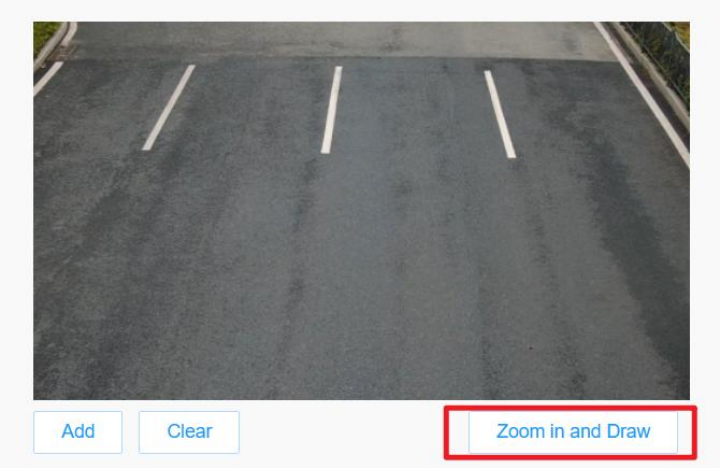
❖ A new Lane Mode is now available, supporting the drawing of dedicated lane lines and trigger lines. This allows for lane-level plate recognition and granular event triggering, which provides the essential foundation for advanced violation detection. This enhancement significantly improves detection accuracy in complex road environments, ensuring more reliable and detailed evidence for traffic management.





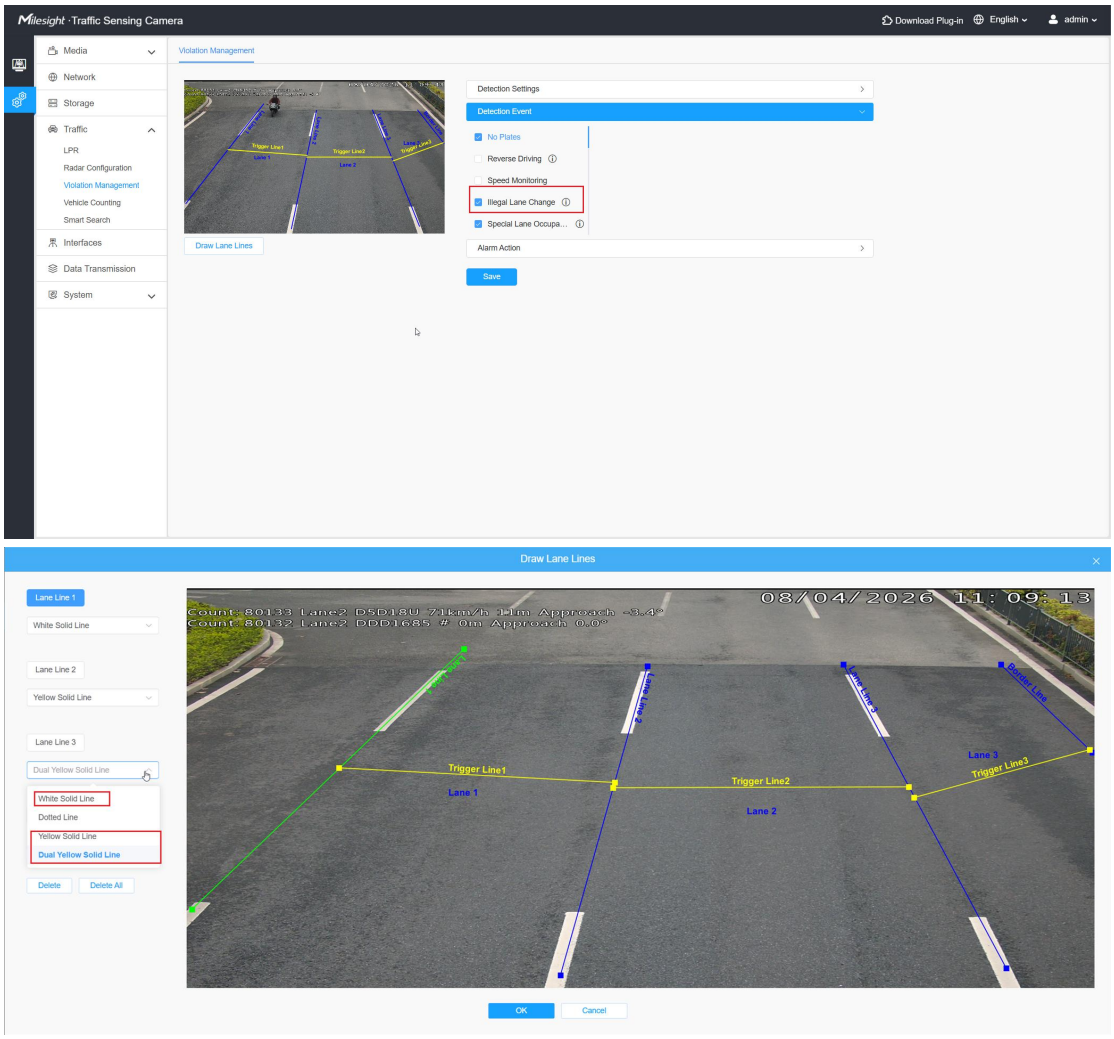
2) Zoom-in and Draw for Configuration Precision

❖ The configuration interface now includes a Zoom-in and Draw function, allowing for the enlargement of the preview area when setting up detection zones. This ensures high precision when positioning lane and trigger lines, effectively resolving the difficulty of manual configuration on small-scale displays. This tool streamlines the deployment process and reduces the risk of missed detections due to improper calibration.



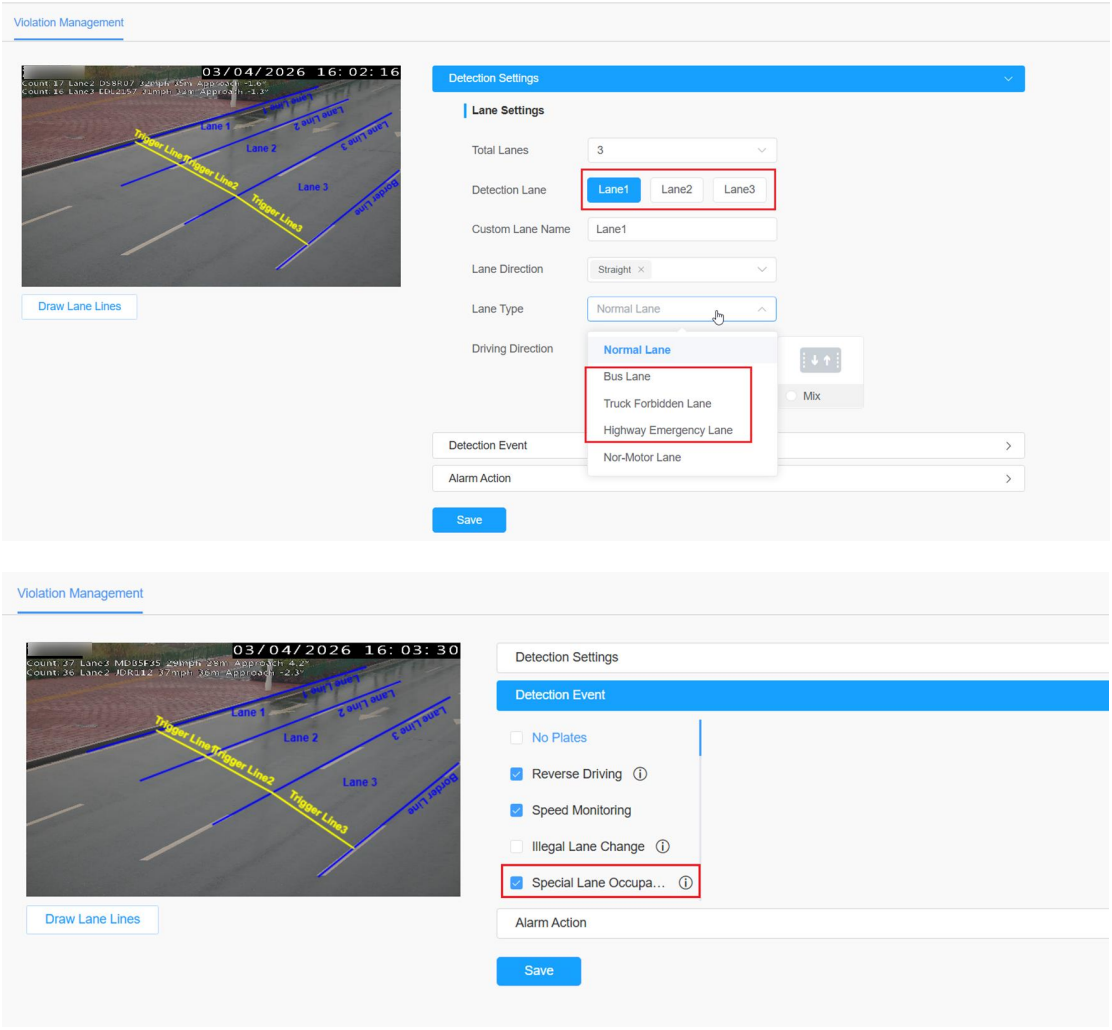
3) Illegal Lane Change Detection

❖ The violation management now includes Illegal Lane Change detection, specifically designed to monitor and capture vehicles crossing solid white or yellow lines. The feature utilizes a multi-image evidence chain to clearly document the vehicle's trajectory before, during, and after the violation. This addition provides a powerful tool for enforcing lane discipline and reducing accidents caused by improper lane changes.



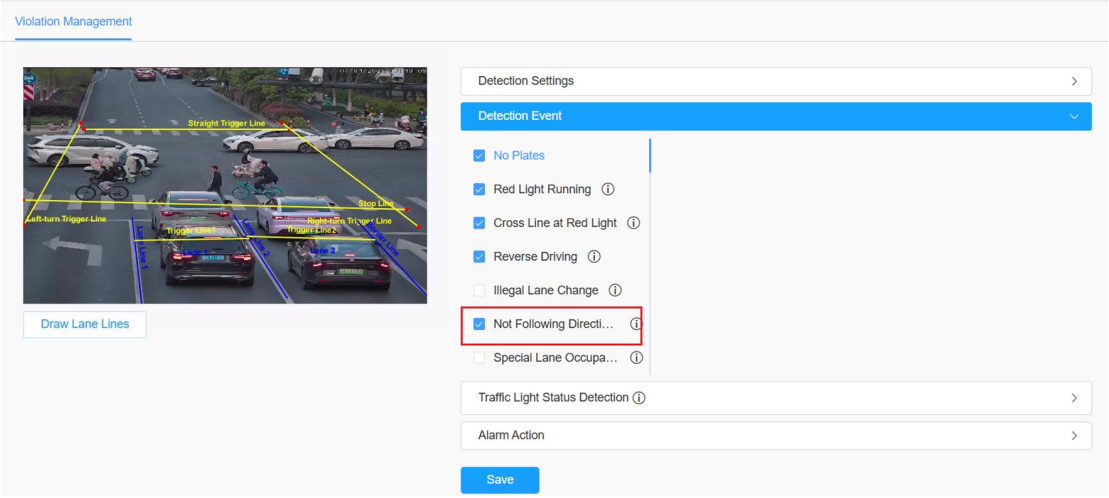
4) Special Lane Occupation Detection

❖ A new Special Lane Occupation feature has been introduced to identify unauthorized vehicles using restricted lanes, such as Bus Lanes, Emergency Lanes, or Truck Forbidden Lanes. By automatically detecting and reporting these violations, the system helps maintain the integrity of dedicated road resources and ensures smoother traffic flow for public transport and emergency services.



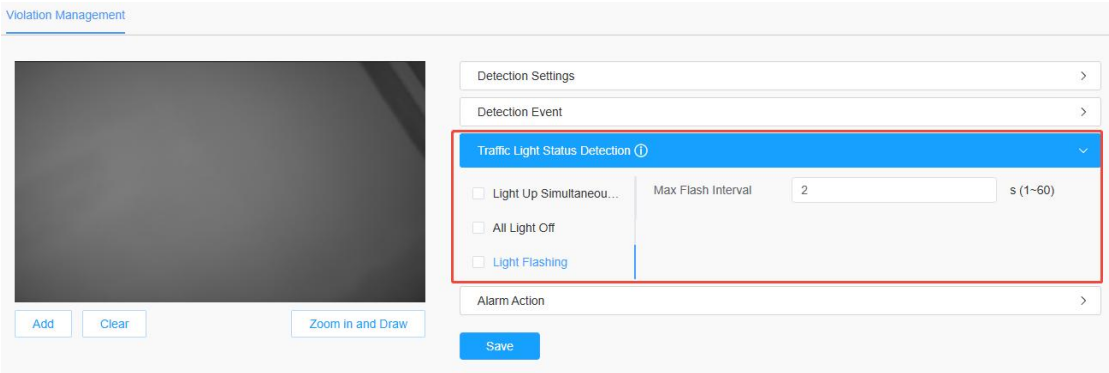
5) Not Following Directional Signs Detection (TS5511-GH)

❖ Designed for traffic light enforcement models, the Not Following Directional Signs feature detects vehicles that fail to follow lane-specific instructions, such as turning left from a straight-only lane or making unauthorized U-turns. This enhancement significantly enriches the identification capabilities of traffic cameras, allowing for comprehensive enforcement at complex intersections.



6) Intelligent Traffic Light Status Detection (TS5511-GH)

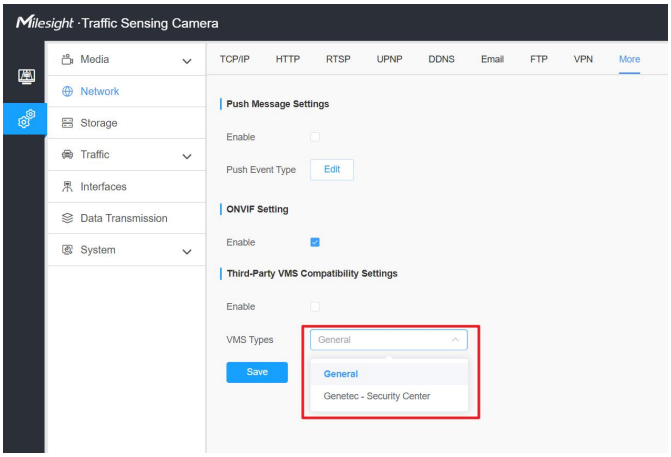
❖ A new Traffic Light Status Detection feature is now available to monitor infrastructure health in real-time. It can automatically identify malfunctions such as All Lights Off, Simultaneously On, or Light Flashing, and trigger immediate maintenance alerts. This ensures the continuous integrity of traffic enforcement systems and helps maintenance teams respond quickly to equipment failures.



7) Third-party VMS Configuration Interface

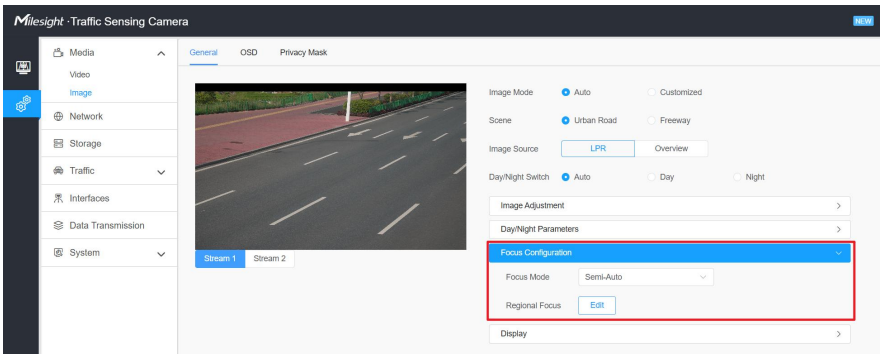
❖ A dedicated Third-party VMS Configuration interface has been integrated to enhance ecosystem compatibility. By optimizing data push fields, this

feature enables seamless interoperability with platform Genetec. This provides users with greater flexibility in managing their devices within existing video management infrastructures.



8) Region Focus for LPR

❖ The Region Focus feature has been integrated to allow for targeted focus adjustments specifically on LPR channels. This enables rapid and precise focusing on designated detection areas, ensuring that the camera maintains peak clarity where it matters most for plate recognition and evidence capture.



9) Expanded Vehicle Brand Recognition

❖ The recognition algorithm has been upgraded to support over 30 additional vehicle brands, with a particular focus on emerging New Energy Vehicle

(NEV) brands. This allows for the capture of richer vehicle metadata, providing more detailed insights and more accurate identification for traffic analysis and security purposes.

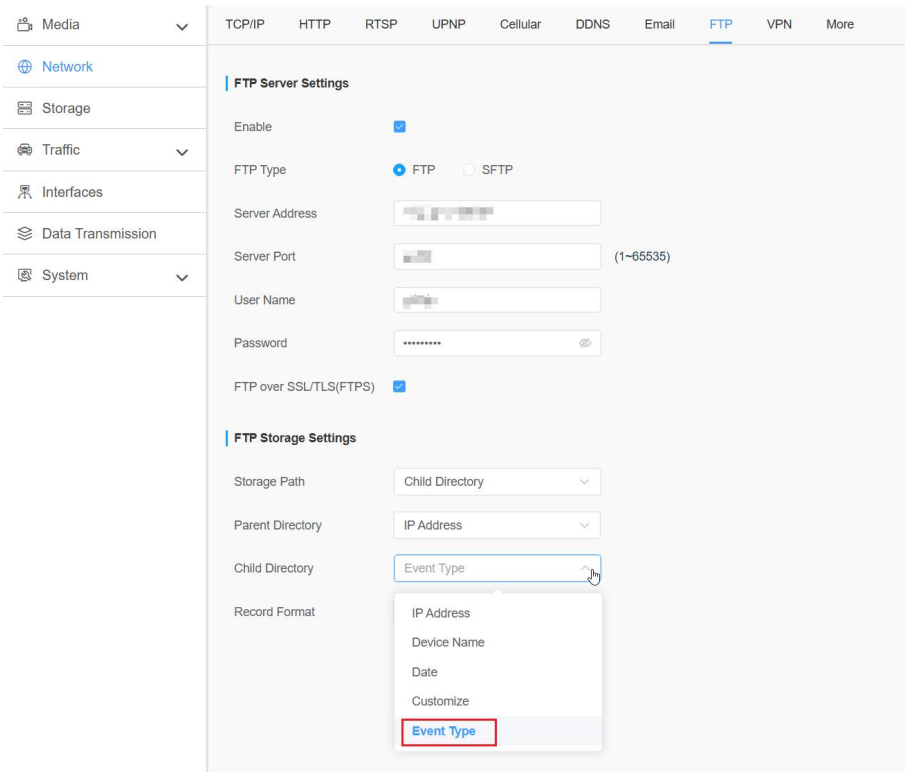
3.2 Optimization

1) Standardized GPS Data for Third-party Integration

❖ GPS coordinates have been optimized into a split decimal format, featuring separate latitude and longitude fields with 6-decimal precision. This update enhances data universality and ensures seamless compatibility with a wider range of third-party GIS platforms and mapping systems.

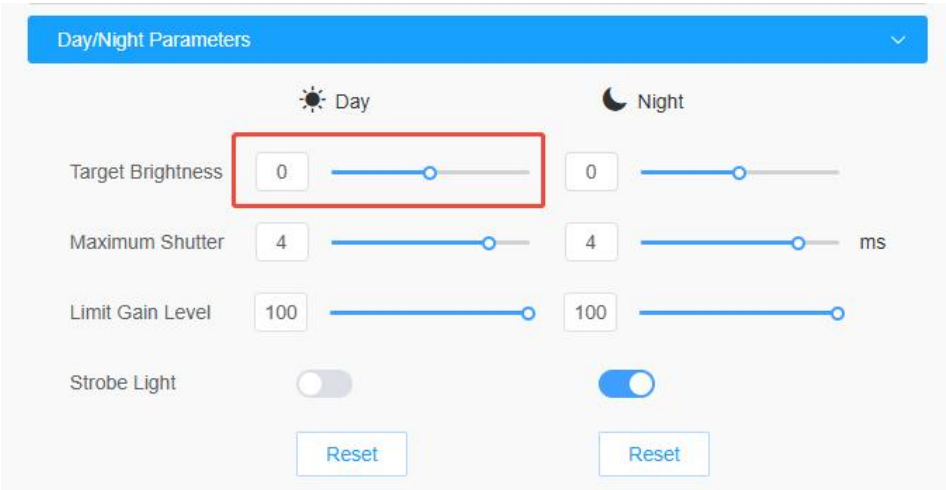
2) Event-based Directory Storage for FTP

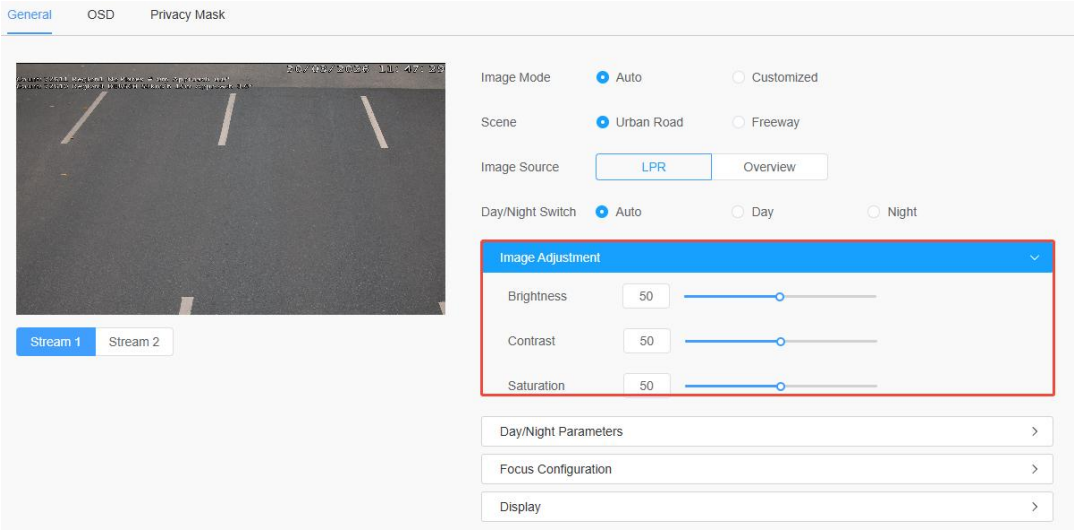
❖ The FTP module now supports Event-based Directory Storage, which automatically organizes snapshots and video recordings into dedicated folders based on the event type. This logic prevents file fragmentation and significantly simplifies evidence management, allowing users to trace and retrieve specific violation records more efficiently.



3) Precise Numerical Controls for Image Tuning

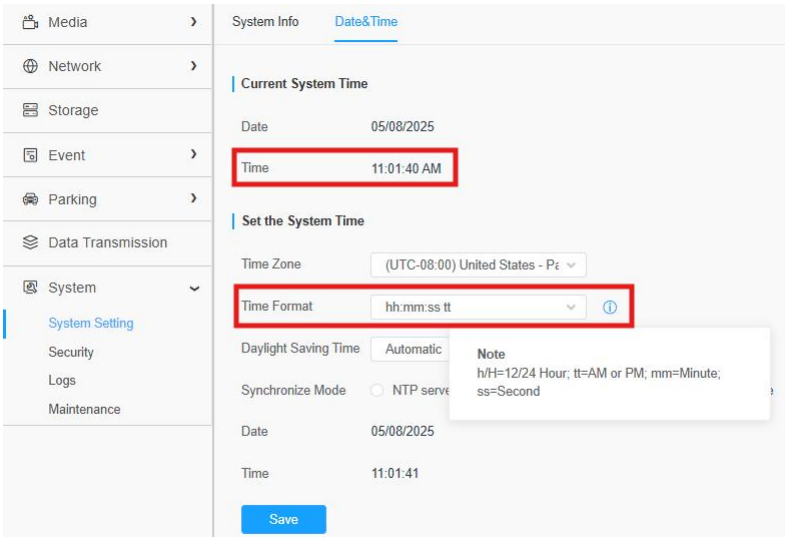
- The image settings interface has been enhanced to support direct numerical input alongside traditional sliders. This allows for professional-level precision when adjusting parameters such as brightness, contrast, and sharpness, ensuring optimal image quality for varied lighting conditions without the need for repetitive manual adjustments.



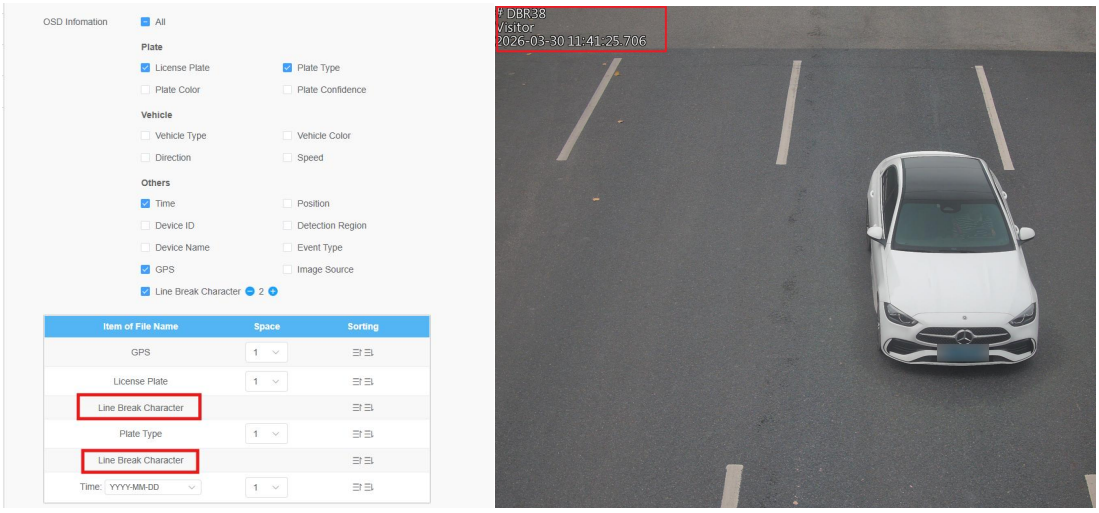


4) Flexible OSD Formatting for Localized Requirements

❖ The OSD overlay functionality has been expanded to support 12-hour time formats and the inclusion of up to six line breakers. This optimization allows for more complex and customized data displays on the video feed, catering specifically to the localized formatting habits and regulatory requirements of regions.



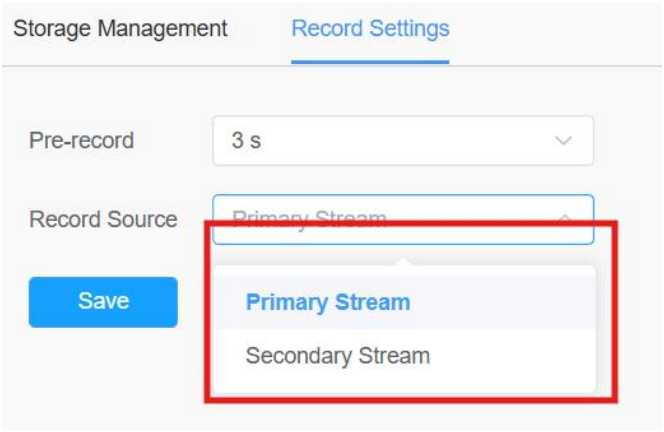
12-hour time formats

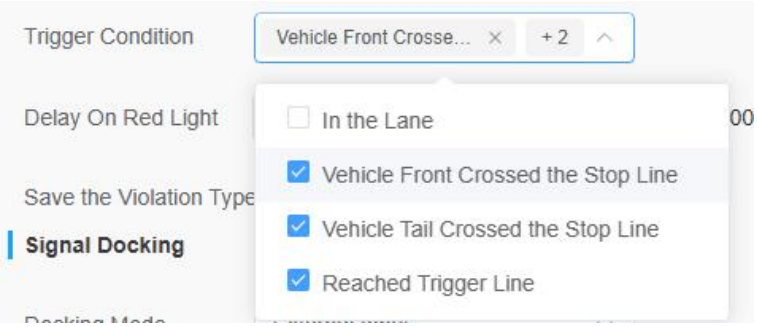


line breakers

5) Optimized Stream Naming and Interaction Logic

❖ Interaction logic has been refined across the system, including stream naming rules for dual-lens models and improved drop-down menu behaviors. These updates make device identification clearer and ensure a more intuitive configuration experience, reducing the time required for system setup and ongoing maintenance.





6) Support for Vehicle Counting

❖ The Vehicle Counting functionality is now synchronized across the entire TrafficX series. This ensures consistent performance in traffic flow statistics and report generation across all models, providing a unified and comprehensive data toolset for large-scale traffic analysis projects.