NIRIKHON

SECURITY & DEFENCE TECHNOLOGY

PRODUCT BROCHURE

TRAFFIC CAMERA

AI Traffic Enforcement Camera

The AI Traffic Enforcement Camera by NIRIKHON (Model TEC-AI-8EJ7Y) delivers real-time, multi-lane violation detection with forensic grade accuracy — capturing wrong-direction driving, lane violations, and illegal parking instantly.Powered by advanced AI analytics, it generates actionable, audit-ready evidence for law enforcement agencies and command & control operations. Built for 24/7 reliability across highways and urban corridors, it delivers fully automated, mission-critical enforcement.



AI Traffic Enforcement Camera

Official Brochure

SOLUTION SNAPSHOT

Wrong Parking Detection	**Wrong-Way Driving Detection**	**Lane Violation Detection**
Vehicle Counting & Statistics	**Real-Time AI Violation Alerts**	**Actionable Evidence Generation**

OVERVIEW

Built for Real Operations 01

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CAPABILITIES

Key Features & Product Modules 02

AI Processing Unit

The onboard AI engine analyzes traffic activity in real time, instantly detecting wrong-direction driving, lane violations, and illegal parking as they happen. This on-device intelligence ensures fast, dependable enforcement without delay.

High-Resolution Image Sensor

Built on a 4MP Sony IMX335, 1/2.8-inch CMOS sensor, this component captures sharp, forensic-grade footage up to 2688×1520 resolution. Every vehicle and violation detail remains clear enough for confident review.

Motorized Varifocal Lens System

Offers flexible field-of-view adjustment to match diverse road layouts, from narrow lanes to wide highway spans. This adaptability ensures optimal framing and consistent detection accuracy at every deployment site.

Infrared Night Vision Module

Combines Smart IR illumination with low-light imaging technology to maintain full detection accuracy after dark. This ensures true day/night operation with zero drop in enforcement reliability.

AI Traffic Analytics Module

Powers real-time vehicle counting, traffic statistics, and behavioral pattern detection across all monitored lanes. This data-driven layer transforms raw footage into actionable operational intelligence.

High-Speed Data Transmission Module

Streams live video at 25/30 FPS using H.265+/H.265/H.264 compression, balancing crystal-clear evidence quality with efficient bandwidth use. This ensures smooth, uninterrupted connectivity to command infrastructure.

Weatherproof Protective Housing

Rated IP67 for full dust and water resistance, this housing performs reliably across an extreme −30°C to +60°C range. It's engineered for permanent outdoor deployment across highway and urban environments alike.

OPERATIONAL VALUE

Software, Benefits & Outcomes 04

Centralized AI Traffic Violation Dashboard

A unified live dashboard that transforms raw camera feeds into instant, actionable intelligence for control center operators.

- View wrong parking, wrong-way driving, and lane violations the moment they occur, no delays
- Automated push alerts route flagged incidents directly to duty operators for immediate action
- Segment live feeds by corridor, junction, or district for faster situational awareness
- Automatically prioritizes high-risk incidents so critical events never get buried in the queue
- Monitor multiple AI Traffic Enforcement Cameras from a single, unified interface

Actionable Evidence & Digital Case Management

Converts every violation into structured, legally sound evidence, ready for institutional review without manual paperwork.

- Auto-generates timestamped photo and video proof for every detected violation
- Stores forensic-grade footage at optimized file sizes, cutting storage costs without losing clarity
- Every case record is time-stamped and tamper-evident for full audit compliance
- Retrieve historical evidence instantly using date, location, or violation type filters
- Package evidence into ready-to-review reports for enforcement and legal follow-up

Advanced Vehicle Analytics & Counting Engine

Delivers precise, real-time traffic intelligence that goes beyond enforcement — powering long-term infrastructure planning.

- Tracks total vehicle volume per lane, per hour, with no manual surveys required
- Classifies traffic by vehicle class for detailed composition analysis
- Identifies congestion trends to guide signal timing and infrastructure upgrades
- Compares traffic data across weeks, months, or seasons to reveal long-term patterns
- Generates clean, structured data ready for urban planning and feasibility studies

Remote Device Control & System Health Monitor

Gives operators full remote command over device performance, ensuring every unit stays mission-ready around the clock.

- Adjust detection zones, sensitivity, and settings across devices without on-site visits
- Fine-tune infrared intensity remotely to optimize night-time image clarity
- Instantly flags offline or malfunctioning units to minimize enforcement blind spots
- Tracks device performance across the full −30°C to +60°C operating range
- Schedules updates and runs system checks across the entire camera fleet from one screen

SPECIFICATION

Technical Details

05

WRONG PARKING DETECTION
✓ Included

WRONG-WAY DRIVING DETECTION
✓ Included

LANE VIOLATION DETECTION
✓ Included

VEHICLE COUNTING & STATISTICS
✓ Included

REAL-TIME AI VIOLATION ALERTS
✓ Included

ACTIONABLE EVIDENCE GENERATION
✓ Included

4MP SONY IMX335
✓ Included

UP TO 2688X1520 VIDEO RESOLUTION
✓ Included

REAL-TIME 25/30 FPS VIDEO STREAMING
✓ Included

H.265+/H.265/H.264 ADVANCED VIDEO COMPRESSION
✓ Included

WIDE DYNAMIC RANGE (WDR)
✓ Included

SMART IR NIGHT VISION
✓ Included

LOW-LIGHT IMAGING TECHNOLOGY
✓ Included

TRUE DAY/NIGHT OPERATION
✓ Included

IP67 WEATHERPROOF PROTECTION
✓ Included

DUST PROTECTION
✓ Included

EXTREME OPERATING TEMPERATURE RANGE (−30°C TO +60°C)
✓ Included

1/2.8-INCH CMOS IMAGE SENSOR
✓ Included

WATER RESISTANT DESIGN
✓ Included

HELMET DETECTION
✓ Included

SEAT BELT VIOLATION DETECTION
✓ Included

STOP LINE VIOLATION DETECTION
✓ Included

PROOF

Case Studies & Client Feedback

06

Case Study

Case Study

Case Study

Case Study

Case Study

Ready to deploy AI Traffic Enforcement Camera?

Talk to Nirikhon for product consultation, installation planning, integration support, and enterprise deployment.

Hotline: 09647 120 120 | Website: www.nirikhon.com