

Ekin SAFE TRAFFIC
Red Light Enforcement
System

Ekin
SAFE CITY TECHNOLOGIES

Leader in Safe City Technologies



A nighttime cityscape featuring several illuminated buildings. In the foreground, a dark blue, trapezoidal text overlay contains white and red text. The background shows a mix of architectural styles, including a classical-style building with a red clock face on its roof and modern skyscrapers with glowing windows. Light trails from vehicles are visible at the bottom of the frame.

Ekin Red Light Enforcement System is a high-resolution video-based number plate recognition technology ensuring continuous traffic safety by automatically detecting the number plates and speed and red light violations of the vehicles in its field of view.



High-Resolution Images

Video images are processed by the high-resolution cameras of Ekin Red Light Enforcement System, so wider areas can be recorded without losing any focus and sharpness during any incident. Thus, even after the digital zoom of an image, the focus is maintained and traffic control is ensured all around the field of view.



24/7 Video Surveillance

Ekin's video-based number plate recognition technology records not only the violation moment but the entire traffic flow distinctively from the conventional photograph-based systems. The system operates uninterrupted, 24/7 providing complete surveillance and ensuring city and traffic safety.



Why Ekin Red Light
Enforcement System?



Simple Integration

Ekin Red Light Enforcement System can be integrated with optional features such as speed enforcement without needing any change in the hardware. Also, Ekin Red Eagle "Safe City Operating System" operates all the traffic systems in the city including Ekin Red Light Enforcement System from a single point. Thus, the existing system offers the maximum benefit without extra infrastructure costs.



Detailed Analysis and Reporting

Date, time, camera, location, and lane information, as well as the type, brand, model, and color of all vehicles in the field of view, can be reported by the system. So that the users can search and get reports based on type, brand, model and color filters easily. Also, Ekin Red Light Enforcement System generates traffic statistics such as number of passing vehicles, average speed information for the road, fastest or slowest vehicles.



Functions



Red Light Enforcement

- High-resolution videos and images of all vehicles violating red light laws
- Automatic, official fine or report containing required violation information
- Ability to work bi-directionally depending on selected hardware that can work on up to twelve lanes, including six lanes for each direction



Speed Enforcement

- Automatic speed measurement for all the vehicles in the field of view
- Different speed limit adjustment for different lanes in order to automatically detect violations of designated speed limits
- Automatic official fine or report issuing containing required violation information
- Different speed limit adjustment for different vehicle types such as buses and trucks
- High-resolution videos and images of speed violator vehicles



Number Plate Recognition

- Automatic number plate recognition simultaneously for moving or parked vehicles
- Ability to recognize license plates correctly under night, day, adverse weather and challenging traffic conditions
- Identification of wanted or stolen vehicles over a specific database
- Type, model, brand and color detection for all the vehicles in the field of view
- Country information detection that plates belong to



Technical Features

! Ekin Red Light Enforcement System creates a dynamic network communicating with all other Ekin Safe Traffic Systems via the wireless communication infrastructure.

! All Ekin products provide a large communication network, ensuring safety and security in wide areas.

! All Ekin products can communicate with each other via a wireless network.

! Ekin Red Light Enforcement System supports long-term operation due to low power consumption and an uninterrupted power supply.

! The system is resistant to adverse weather conditions.

Technical Features

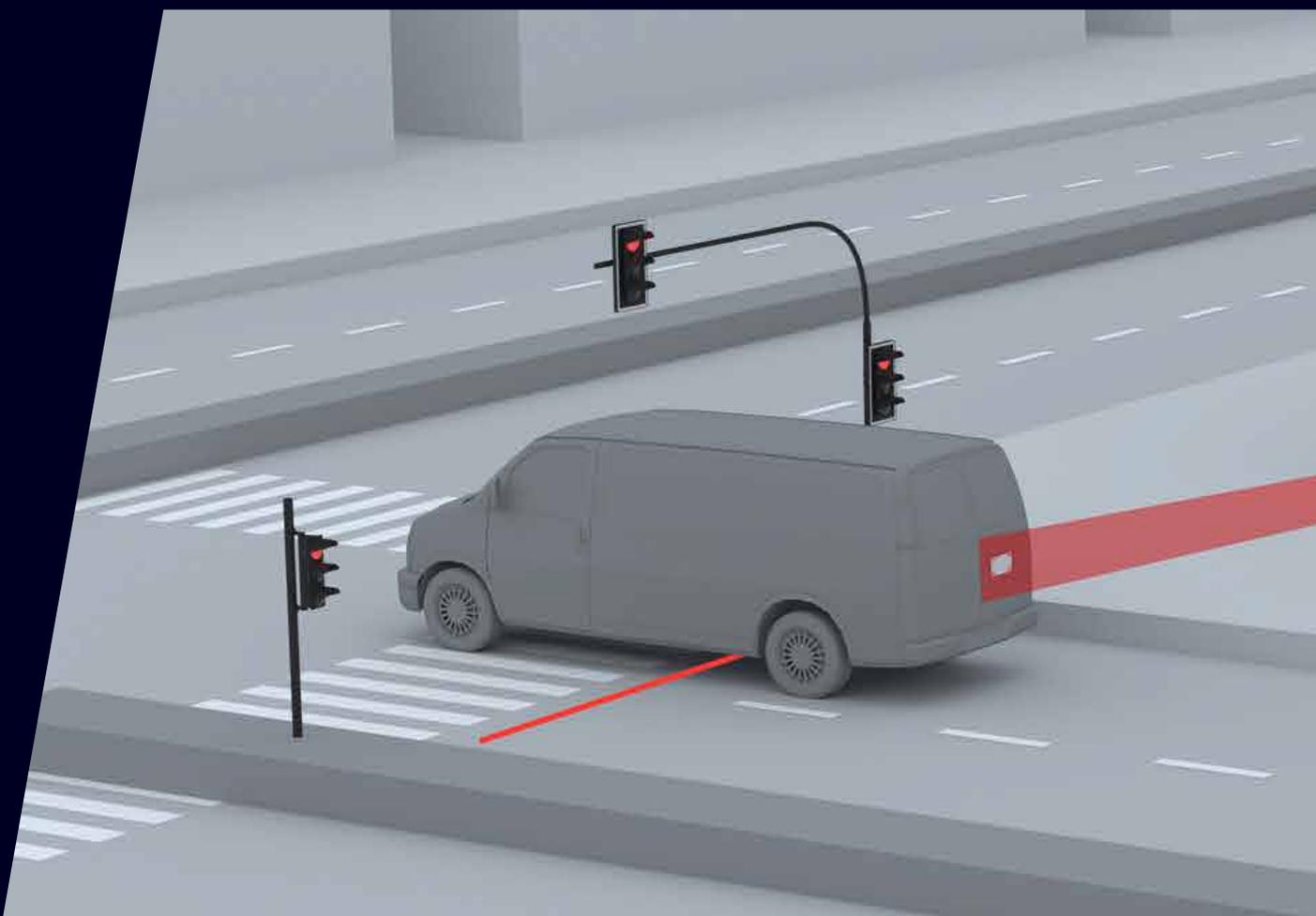
DETECTION

Speed Range	5-320 kph / 3-200 mph
Coverage	Up to 6+6 lanes including approaching and departing vehicles*
Number of simultaneous detected vehicles	Over 100 vehicles

ILLUMINATION

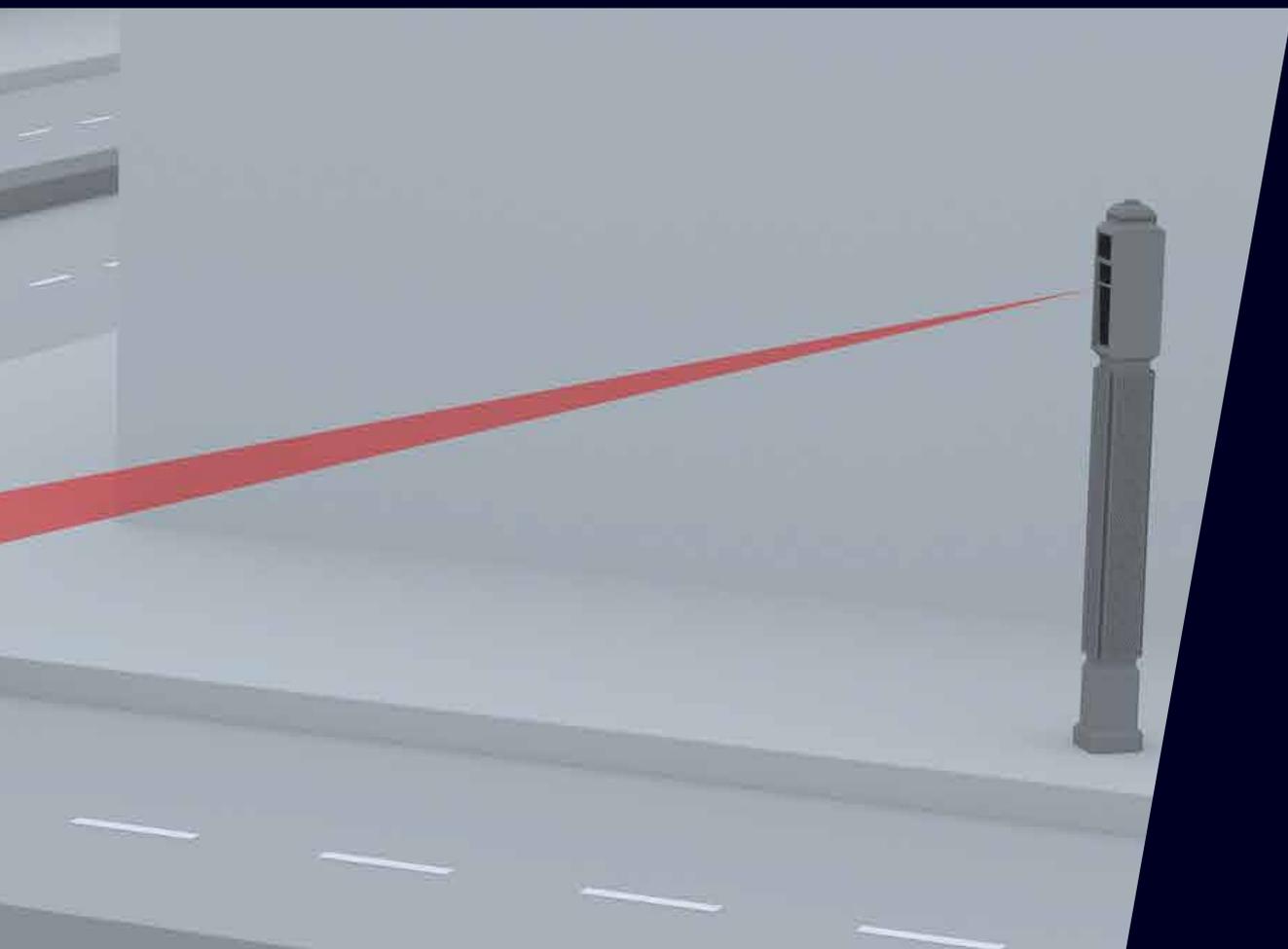
IR Spot	✓
Day and night number plate detection	✓
Flash	Optional

*Ekin Safe Tower is able to work bidirectional.



SYSTEM SOFTWARE

Automatic Number Plate Recognition	24/7 for all the vehicles in the field of view
Web Service	✓
Protocol	TCP/IP, UDP, NTP, FTP, RAW
Various Database Support	✓
Alarm Management	✓
Remote Secure Installation and Access	✓
Violation Video Evidence	✓
Violation Photo Evidence	✓
24/7 Surveillance Record	✓
Watermark	Applied on all photos and videos
Media Local Storage	Up to 2 TB
Vehicle Color, brand, type and model detection	Optional



CENTRAL SOFTWARE

Various Database Support	✓
Customizable Reporting	✓
Integration	3rd party database and software or national inquiry services integration
Traffic Statistics	Detailed Reporting
Graded Authorization	Admin, Supervisor, Users
Customizable fine printing	✓
SMS and Mail Support	✓
Automatic update	✓
Log Record	✓



ELECTRICAL FEATURES

Connection Interfaces	Ethernet
Voltage	110-220 V AC
Power Consumption	Varies depending on configuration

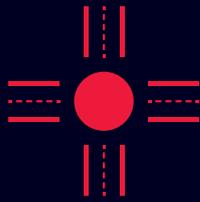
ENVIROMENTAL FEATURES

Operating Temperature	-20°C +60°C
Humidity Rate	%95 non-condensing
IP Class	IP-65





Other Ekin Safe
Traffic Solutions



Smart Intersection Management

- Real time interventions to manage the traffic flow caused by ever-increasing traffic volume
- Instant red light duration regulation considering the results of vehicle-counting units
- Communication between all Ekin Smart Intersection Systems and signal coordination support
- Report generation related to traffic volume, speed, red light duration, and intersection situations





Parking Violation

- ! Detection of vehicles exceeding the parking time in the defined parking zone
- ! High-resolution videos and images of parking violator vehicles
- ! Automatic official fine or report issuing containing required violation information



For more information: [Ekin.com](https://www.ekin.com)

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