A'DESIGN AWARD WINNER 2019 BRONZE

reddot design award winner 2018

Ekin BOX SPOTTER

AI-Powered Data Analytics, Multi-Lane Number Plate Recognition, and Speed Enforcement System

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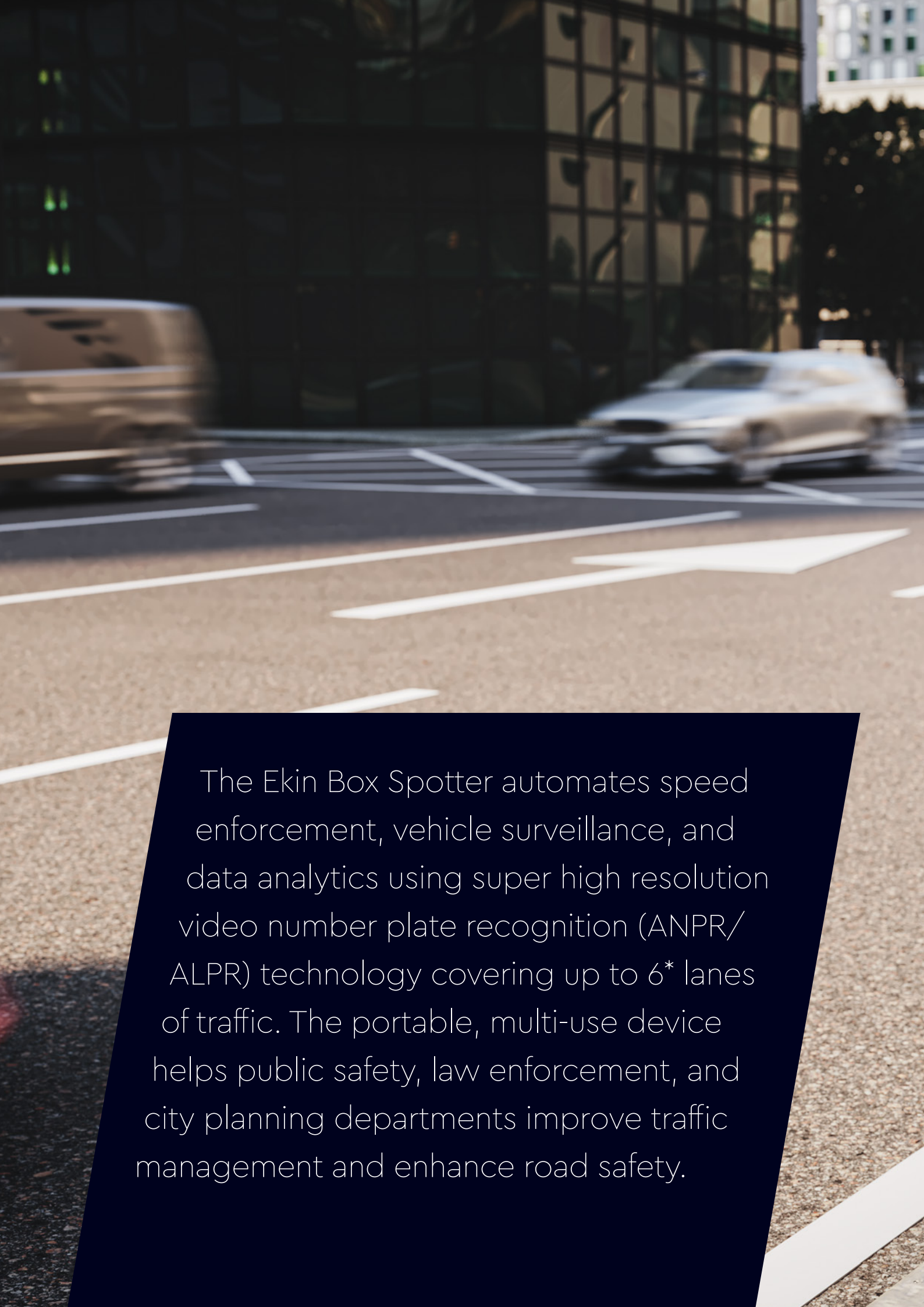
Leader in Smart City Technologies



The Ekin Box Spotter automates speed enforcement, vehicle surveillance, and data analytics using super high resolution video number plate recognition (ANPR/ ALPR) technology covering up to 6* lanes of traffic. The portable, multi-use device helps public safety, law enforcement, and city planning departments improve traffic management and enhance road safety.

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Ekin Box Spotter: A Smart City Tool for Traffic Management

Multi-use Design for Fixed and Portable Surveillance

The award-winning Ekin Box Spotter design delivers multiple smart city technology solutions in one compact device. The portable smart traffic management tool can be pole mounted for long-term, AI-powered traffic analysis in key areas, or deployed using a tripod for quick response, short-term use at specific locations. Powerful multi-lane ANPR/ALPR, speed enforcement, and traffic analytics in one device.

High Resolution Video ANPR/ALPR Capture

Deploy industry leading ANPR/ALPR technology to capture vehicle information across multiple lanes in any condition, day or night. Automated vehicle recognition, speed detection, and ticketing applications help improve smart traffic management using AI-powered data collection and analytics technology.

24/7 Traffic Management and Control

Monitor multiple lanes of traffic 24/7 with automated speed violation detection and continuous number plate recognition at the same time. Collect and analyze data on traffic flow, incidents, and violations to improve traffic safety – a complex data management solution not available with conventional photo-based systems.

Accurate Global License Plate Reader

The Ekin Box Spotter accurately identifies and collects license plate data from multiple countries throughout the globe. Identify country of origin as well as license plate number information for each vehicle in the field of view, with AI-powered data processing on the edge.

Secure Data Management with Ekin Maestro OS

Connect and operate all traffic management and smart public safety tools within one central management system. The Maestro OS provides secure, cloud-based data storage and next-generation data management, analysis, and reporting tools. Compare vehicle data against multiple law enforcement databases in real-time and implement automated push alerts to improve incident response.

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IP 66
E9
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SAE
INTERNATIONAL
J845
MILITARY
STANDARD
US MIL-STD-810G*
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FEDERAL COMMUNICATIONS COMMISSION
USA
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Part 15 Subpart B

BOX SPOTTER:FUNCTIONS

Number/License Plate Recognition

- Recognition of every number plate in the field of view using video-based multi-lane ANPR/ALPR technology
- Simultaneous ANPR/ALPR for approaching, departing, and parked vehicles
- Automated identification of wanted or stolen vehicles with data synched to law enforcement databases
- Correctly identify number/license plates across multiple lanes in dark areas, adverse weather, and challenging traffic conditions

Speed Detection

- Collect information on traffic flow across multiple lanes of view
- Automate speed limit violation detection and enforcement across multiple lanes
- Select individual speed limit parameters for each lane

Parking Enforcement

- Collect and match license plate information to designated parking areas and rules
- Automate parking enforcement, ticketing, and surveillance capabilities
- Detect unregistered and illegally parked vehicles with mobile or fixed smart parking management

Video Surveillance

- Improve traffic and parking management with 24/7 video surveillance, recording, and analysis capabilities
- Capture high-definition video across multiple lanes of traffic, day or night and in adverse weather conditions
- Collect, transmit, and store data from smart technology tools across the city for continuous monitoring and analysis

Application Areas for Public Safety, Law Enforcement, and Private Security

- Shopping Malls & City Centers
- Residential Facilities
- Schools & Campuses
- Hospitals & Healthcare Facilities
- Parking Facilities
- Gated Communities & Private Residences
- Airports

TECHNICAL FEATURES

DETECTION

Speed Range	Up to 320 kph / Up to 200 mph
Coverage	Up to 6 lanes including approaching and departing vehicles
Number of Simultaneously Detected Vehicles	Over 100 vehicles

ILLUMINATION

IR Spot	✓
Day and Night Number Plate Detection	✓
Flash	Optional

SYSTEM SOFTWARE

Automatic Number Plate Recognition	24/7 for all the vehicles in the field of view
Web Service	✓
Protocol	TCP/IP IPv4 and IPv6, UDP, NTP, FTP, RAW
Various Database Support	SQL/NoSQL
Alarm Management	✓
Remote Secure Installation and Access	✓
Violation Photo and Video Evidence	✓
24/7 Surveillance Record	✓
Watermark	Applied on all photos and videos
Storage Capacity	Up to 2 TB
Vehicle Color, Brand, Type and Model Detection	Optional
Communication with Other Smart City Solutions via Ekin Maestro OS	✓

CENTRAL SOFTWARE

Various Database Support	SQL/NoSQL
Customizable Reporting	✓
Integration	3rd party database and software or national inquiry services integration
Traffic Statistic	Detailed reporting
Graded Authorization	Admin, Supervisor, Users
SMS and Mail Support	✓
Automatic Update	✓
Log Record	✓

ELECTRICAL FEATURES

Connection Interfaces	Ethernet, LTE
Voltage of The Device	12 VDC/40 Watt
Power Consumption	<40 Watt/Hour

ENVIRONMENTAL FEATURES

Operating Temperature	-25°C ~ +60°C / -13 °F ~ +140 °F
Storage Temperature	-25°C ~ +70°C / -13 °F ~ +158 °F
Humidity	95% non-condensing
IP Class	IP-67

PRODUCT DIMENSIONS

Dimensions* (Width x Length x Height)	331 × 421 × 197 mm / 13 × 16 × 7,7 inch
Weight**	6.5 kg / 14,33 lb

* Dimensions with sunshield

** Weight may slightly vary upon configuration of Ekin Box Spotter

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Fixed Products	Mobile Products
Ekin Spotter	Ekin Patrol G2
Ekin Box Spotter	Ekin Micro Patrol
Ekin X Spotter	Ekin X Spotter Mobile

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