Ekin SPOTTER
The First and Only Entirely Modular Smart City Furniture

Ekin SMART CITY SOLUTIONS
Next Generation Smart City Solutions
Ekin Spotter is the first and only smart city furniture that satisfies a city's smart needs by using several modules for traffic management, environmental analyses and city surveillance.
Why Ekin Spotter?

Easily Adoptable for Smart City
With its entirely modular design, Ekin Spotter is the first and only smart city furniture which is capable of different functions with different modifiable modules. Allowing these modules to be added or removed easily, Ekin Spotter can be adapted responsive to several needs in the different locations without any infrastructural costs and enables smart cities with several functions.

All Compact Design
Although having the slimmest design among its kind of traffic enforcement products in the market, Ekin Spotter includes all the hardware needed for the best result such as cameras, sensors, powering system inside. There is no need for any external hardware support.

Day & Night First Class Surveillance
With its super high resolution cameras, Ekin Spotter surveils large areas and records videos at the best resolution. It also continues to surveil in during the night with its own illumination without losing any sharpness and focus.

Centrally Managed By Ekin Red Eagle OS
Ekin Red Eagle OS operates all the traffic systems in the city including Ekin Spotter from a single point and ensures actions to be taken on time.

System Care for Environmental Changes
Ekin Spotter inspects environmental circumstances and its own performance by using its sensor. So that it informs the central system if there is an unnatural condition which effects its performance such as increasing temperature, humidity, tampering or attempting a door opening action and precautions can be taken on time.
FUNCTIONS

Number Plate Recognition
- Recognition of every number plate in the field of view with its video based number plate recognition technology
- Automatic number plate recognition simultaneously for incoming, outgoing or parked vehicles
- Identification of wanted or stolen vehicles over a specific database

Speed Detection
- Automatic speed measurement for all the vehicles in the field of view
- Different speed limit adjustment for each lane
- Automatic official fine or report issuing containing required violation information

Parking Management
- Detection of vehicles exceeding the parking time in the defined parking zone
- Automatic official fine or report issuing containing required violation formation

Video Surveillance
- 24/7 surveillance and video recording
- Day and night high definition video recording in adverse weather conditions

Red Light Enforcement
- High resolution videos and images of all vehicles violating red light
- Automatic official fine or report issuing containing required violation information
- No cable connection needed. Using Video analysis technology for detecting redlight status

Advanced Traffic Management
- Tailgating detection
- Bus/truck lane violation detection
- Low speed violation detection
- Emergency lane violation detection
- Lane violation detection for different vehicle classes
- Wrong way driving vehicle detection
- Object detection on the road for parked vehicle or pedestrians
- Accident detection
- Hard brake detection
- Average speed enforcement between Ekin Spotter and any mobile system
# TECHNICAL FEATURES

## DETECTION
- **Speed Range**: 5-320 km/h - 3-200 mph
- **Coverage**: 6 lanes including approaching and departing vehicles (expandable up to 12 lanes)
- **Number of Simultaneously Detected Vehicles**: Over 100 vehicles
- **ANPR Camera**: 12 MP
- **Surveillance Camera**: 5 MP
- **Accuracy**: ±1 km/h speed measurement accuracy

## 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
- **Advanced Traffic Management**: Optional
- **Web Service**: ✓
- **Protocol**: TCP/IP, 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
- **Media Local Storage**: Up to 2 TB
- **Vehicle Color, Brand, Type and Model Detection**: Optional
- **Communication with Other Safe City Solutions via Ekin Red Eagle OS**: ✓
- **Location information of the system via GPS**: ✓

## CENTRAL SOFTWARE
- **Various Database Support**: SQL/NoSQL
- **Graded Authorization**: Admin, Supervisor, Users
- **Customizable Fine Printing**: ✓
- **SMS and Mail Support**: ✓
- **Automatic Update**: ✓
- **Log Record**: ✓

## ELECTRICAL FEATURES
- **Connection Interfaces**: Ethernet, Wi-Fi, LTE, 3G
- **Required Power Supply**: 12 DC min/400 Watt
- **Power Consumption**: Average 100 Watt/Hour

## ENVIRONMENTAL FEATURES
- **Dimensions (h × Ø)**: 3000 × 230 mm
- **Moduls’ Average Dimensions (h × Ø)**: 400 × 230 mm
- **Operating Temperature**: -20°C + 60°C
- **Humidity Rate**: %95 non-condensing
Next Generation Smart City Solutions

Mobile Products
- Ekin Patrol G2
- Ekin Bike Patrol
- Ekin Micro Spotter
- Ekin Phantom
- Ekin In-Car Patrol

Fixed Products
- Ekin Spotter
- Ekin Box Spotter
- Ekin Micro Spotter

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