

# EDS

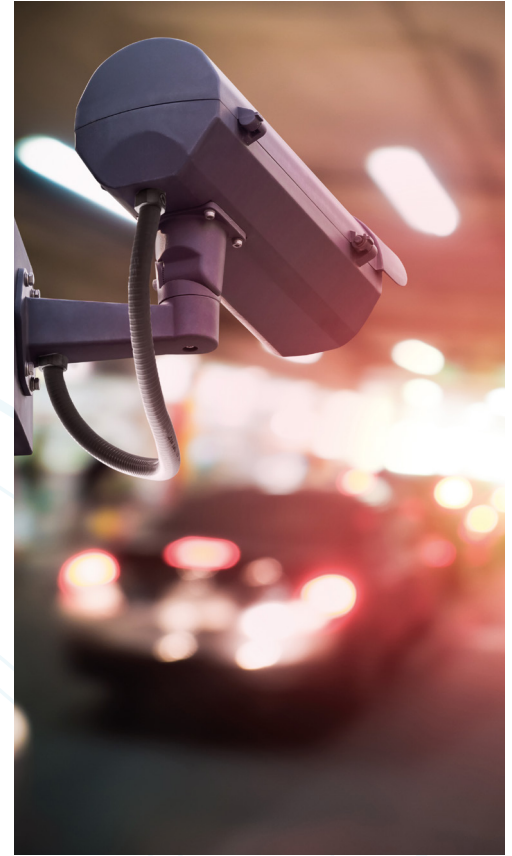
## Electronic Detection Systems

The electronic detection system has been developed to ensure that transforming cities are safer and livable for citizens. This system is a secure, modular and intelligent solution where the evidence necessary to detect the vehicles violating the rules by sensors and video analysis. EDS 3.0, which allows 12 separate violation detection systems to be managed and used by a central system by cloud technology, is Turkey's unique domestic traffic violation detection system certified by international standards and accredited organizations.

- Electronic detection system® EDS 3.0 is an application for detecting traffic violations.
- Electronic detection system® EDS 3.0 in terms of its scope aims to rehabilitate driver behavior.
- The system creates awareness that individuals' defective behavior is constantly monitored and detected.
- At the points where the system is applied, it is observed that rule violations decrease by 90% instantly.

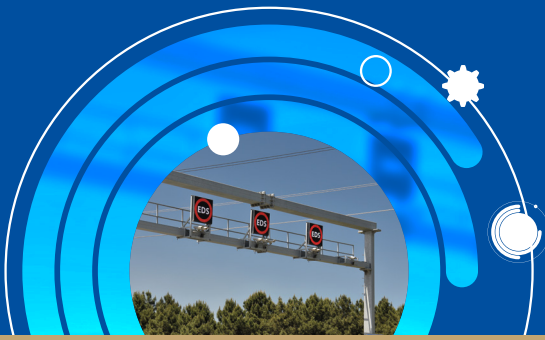
### STANDARDS - DOCUMENTS - SECURITY

- **IP / Ingress Protection**  
EDS products have IP55 and IP65 protection class certificates separately.
- **EMC / Electromagnetic Compatibility**
- **Function Verification Test Reports**  
Secure measurement has been registered with function verification test reports obtained by accredited institutions for the EDS product.
- **LVD / Low Voltage Directive**  
ISBAK EDS product has successfully completed LVD tests.
- **Radar Calibration and FCC Documentation**  
Documents indicating radar calibration accuracy.
- **Dongle Application (Optional)**
  - It is operated under protection through special software and hardware in order to prevent the field software from being moved to different places.
  - Software piracy is prevented with powerful algorithms.
  - Effective protection against attacks such as anti-debugging and reverse engineering is provided.
  - 1024-bit private signed license updates
- **Secure Communication Backbone**  
All EDS system points are carried out via a wired and private network over the EDS Center. (VPN-Virtual Private Network)



### TYPES OF EDS

- Average speed EDS
- Red light EDS
- Emergency lane EDS
- Parking violation EDS
- Pedestrian crossing EDS
- Offset scanning EDS
- Wrong way EDS
- Yellow box EDS
- Tram line EDS
- Wrong turn EDS
- Mobile EDS
- Instant speed EDS
- Oversize EDS



# EDS

## Electronic Detection Systems

### GENERAL SPECIFICATIONS

- Renewable and expandable software and hardware architecture
- Innovative design; compact, modular and lightweight body structure, ease of installation and transportation
- User-friendly software interface; ability to make necessary settings for the application within a few minutes
- Ability to manage all EDS applications from a single center
- Ability to track penalty violation records by smart mobile technologies
- Issuing invoice according to the type of violation with reporting such automatic fine bill, etc.
- ANPR-Automatic Number Plate Recognition over the central application
- Development of application-specific software such as user interface, database management software, communication system
- Ability to store images of violations in the center and local area
- Interoperability with all communication systems
- Violation video recording time in the desired time range
- 24/7 uninterrupted video storage
- Ability to view high-quality images using high-resolution camera technology
- Ability to apply virtual detector or magnetic detector using image processing technique
- Automatic license plate recognition with 95% success rate
- Ability to obtain information such as vehicle counting, vehicle classification, pedestrian detection, average speed with a high accuracy rate
- Ability to ensure the security of images of violations using digital signature techniques
- Ability to take color and quality violation photos at night and in low light conditions
- Ability to transmit violation images by MPEG4, H264, etc. to the center by coding methods
- Ability to query vehicle, address information by automatically connecting to the security database as the necessary access rights are provided (POLnet integration)
- Ability to query and report in connection with each other in accordance with plate, intersection, date, region, etc.
- Ability to recognize and identify plates manually, automatically, by movement and using sensors





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### TECHNICAL SPECIFICATIONS

Proof pack	Different photos for each system (1 High Resolution) - 3 different scenes, video recording before and after moment of violation
Camera technology	GIGE or DSLR
Material, body	Aluminum cab and stainless steel construction pole
Detection and measurement technology	Magnetic loop, 3D radar or virtual loop
License plate recognition success	95%
Protection class	IP65-IP55
Temperature range (operating)	-25°C to 55°C
Operating principle	12VDC based
Vehicle detection	Ability to track multiple lanes, multiple vehicles by 3D radar technology and measure vehicle speeds, positions, distances.
Video recording	24/7 local video recording
Remote monitoring	√
Industrial cabin	√
Operation calendar	√
Modular software support	√
Color violation photo at night	√
Automatic penalty record issuance	√
7/24 detection in any light and weather condition	√
Managing all EDS by a single center	√
Vehicle classification	√
Vehicle counting	√
Pedestrian detection	√
Innovative design	Compact, modular and lightweight body construction, ease of installation and transportation
Cameras	High-precision and resolution photo camera, high-precision video camera taking 25 frames per second
Strobe	- 5 shooting per second - 25m lighting - 200,000 flash shooting life
Compatibility and product documentation	- IP / Ingress Protection (IP55-IP65) - EMC / Electromagnetic Compatibility - LVD / Low Voltage Directive - Radar Calibration Documents - Verification Report by Accredited Organization - Certificate of Conformity