### EDGE-S

Hardware and software system for automatic traffic violations recording



### Recorded violations types



The system detects the following violations types:

- exceeding the vehicle speed in the control zone;
- exceeding the vehicle average speed;
- stopping or driving on the lane for route vehicles;
- driving in the oncoming traffic lane;
- movement on the roadside, sidewalks and footpaths;
- road signs and markings violation;
- red light running;
- stop bar crossing;
- entry and movement through a railway crossing rules violation;
- stopping and parking rules violation;



#### **EDGE-S:** Certificates

#### Fully meets the Ukraine legislation requirements:

- Certificate for compliance with the requirements of DSTU 8809:2018
  - (Certificate of Ukrmetrteststandard UA.TR.001 85-20 Rev.0)
- Expert opinion of the State Special Communications Service Administration of Ukraine
  - (Opinion No. 1140 dated 16.07.2020)
- Positive decision of the MIA Informatization Department of Ukraine on integration with the SFAP (system for recording administrative violations)

(decision No. 34421 / 16-2020 dated 12.10.2020)





### EDGE-S: Security

#### Firmware protection

The software metrologically significant part protection is carried out by the method of generating a checksum using the MD5 algorithm. Checksum verification is performed in automatic and manual modes.

#### Protecting files from modification

When fixing the passage and events with signs of traffic violations, the system forms an information file (IF), which contains information regarding this event (type of violation, type and serial number of the system, vehicle number, direction of movement, etc.) and the corresponding set of multimedia (photo and video information) to confirm it.

All IFs are protected by the generating a checksum and digital signature using cryptographic information security hardware.

#### IF transmission loss protection

All IFs with media data are stored in the built-in memory and are transmitted to external systems. In case of connection loss, all data is stored locally and after its restoration can be transmitted in automatic mode or upon request.



## EDGE-S: exceeding the speed limit

Vehicle speed is measured in two independent ways:

- radar method
  Doppler effect
- optical method
  Estimation of vehicle speed by video

The violation detector allows you to set several speed limits, depending on the week day, day time and lane.





## EDGE-S: public transport lane driving

EDGE-S determines the coordinates of the vehicle position, its make and model. The violation detector allows you to specify which vehicles types in the specified area are prohibited.

For each detection, a complete data set required to proof violation is saved, including 3 overview shots with vehicle's trajectory marks.









## EDGE-S: driving in the oncoming traffic lane (reverse)

EDGE-S determines the vehicle movement direction, its coordinates and the exact time at each point with trajectory. The violation detector allows you to set the monitored area, week days and the operation time and the vehicle movement direction, which is prohibited.

Depending on the settings, this detector also identifies following violations types: movement on the wayside, sidewalks, footpaths, the road signs and markings requirements violations.







## EDGE-S: red light running and stop bar crossing

EDGE-S fixes the vehicle's position coordinates and determines the traffic light active phase for each point of the vehicle's path.

For each violation, at least 3 overview shots are saved.





### EDGE-S: level crossing

EDGE-S fixes the vehicle's position coordinates and determines the traffic light active phase for each point of the vehicle's path.

When a vehicle is detected in a designated area with a simultaneous active prohibiting traffic signal, a violation is recorded.







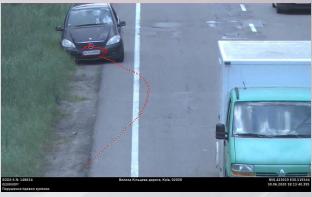


## EDGE-S: stopping and parking rules violation

EDGE-S fixes the coordinates of the position of the vehicle and the exact time for each point of the trajectory of the vehicle.

Violation is recorded in case of exceeding the time spent by the vehicle in the specified zone.









#### Contacts

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