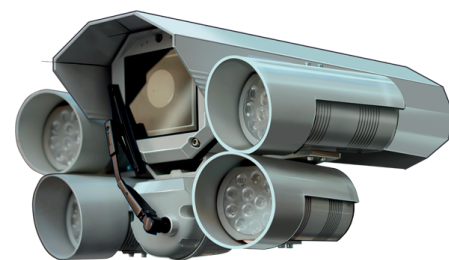


STRELKA PLUS

Multifunctional traffic enforcement system

STRELKA PLUS is fully automated non-intrusive multifunctional enforcement system designed to detect the major traffic regulation violations in any weather and lighting conditions.

STRELKA PLUS is a real-time stationary enforcement solution to detect various types of violations in extensive control zone. The system comprises the following units:



The video detection module with high-resolution camera and powerful infrared illumination guarantees high quality video detection and pictures in any weather and lighting conditions. Viewing angle and camera settings can provide traffic enforcement in the control zone up to a width of 16 m and a length up to 350 m. Particular control zone configuration with maximum distance of detection points depends on the road section topology and on the type of roadside equipment.

The built-in high-performance computer based control unit with integrated SW and innovative tracing algorithm allows detection of traffic violations simultaneously in several lanes within the configured control zone. The ANPR detection of each vehicle along the path regardless of its track and speed and even in heavy traffic. The system captures high quality close-up pictures to attribute violation to the vehicle and to register evidence for further enforcement.

The radar module provides speed measurement with higher accuracy and reliability compared to the video-based detection in the most extreme weather conditions and at maximum distance of up to 500 m. The radar allows for simplifying and to reducing significantly the time of the equipment setup during the installation and excluding periodical system examination and tuning for speed enforcement during its operation.

The control unit performs synchronization of operation for different system modules and violation data packaging with encryption for later or continuous transmitting to a specified law enforcement center through external communication channels. It provides also the operation status monitoring and diagnostic function in automated mode.

Embedded safety module with GPS is to detect and to inform about unauthorized access attempts. GPS is using to synchronize the time and to allocate the real position coordinates of the device after installation.

Parameter	Value
Transmitter carrier frequency*¹, GHz	24,150
Allowed relative error of the carrier frequency*¹	1,25·10⁻⁷
Bandwidth @ -3dB*¹, MHZ, not more than	40
Antenna beam angle @ -3dB*¹:	
In E-plane, grade	10 ± 0,1
In H-plane, grade	10 ± 0,1
Range of measured speeds of upstream and downstream vehicles, km/h	20 ... 300
Limits of the allowed speed measurement absolute error, km/h	± 1
Speeding threshold resolution, km/h	1
Limits of the allowed instrumental error at system GPS coordinate estimation*³, m	± 1,5
Limits of the allowed error of the internal timer in comparison with UTC(SU), s	
With the GLONASS/GPS unit	± 10⁻⁶
With NTPc	± 2
Length of the control zone, m	50 ... 500
Minimum distance between two systems when measuring speed with the point-to-point system*⁴, m	

Parameter	Value
Width of the control zone, m	Up to 16 (up to 5 lanes at the distance of over 42 m)
Continuous operation time per day, h	24
IP rating:	
Camera unit	IP65
Radar unit	IP65
Operating temperature range, °C	-40 to +50
Power supply voltage, VAC	198 to 253
Mains frequency, Hz	49 to 51

Notes

- *1 – for the radar-based supply package
- *2 – for the camera-based supply package
- *3 – for the GLONASS/GPS-based supply package
- *4 – for the point-to-point-based supply package