

# intellisection® Soteria

Traffic flow analysis and incident management platform.



## Technology Overview

**Intellisection® Soteria** is a web application designed for traffic flow analysis and incident management. It collects and processes data on all road users, their behavior, and their interactions. Real-time alerts enable immediate response to emergencies, enhancing road safety and ensuring smooth traffic operations.

Leveraging advanced video analytics, Soteria continuously monitors camera feeds to assess traffic data and detect incidents in real time. It also enhances operator efficiency through a suite of intuitive, high-performance tools – including interactive dashboards, incident management modules, analytical tools, and customizable reporting features.

Operators are equipped with real-time traffic data and alerts, enabling immediate response to critical events. They can also perform comparative analysis using historical statistics, generate tailored reports, and make informed, data-driven decisions to improve traffic management.

### Users



Traffic systems engineers



Road safety specialists



Toll road operators



Traffic management centers



Road-side assistance service and first responders

### Basic Incident Processing Scenario

<b>Confirmation</b>	Viewing the data recorded by the system and incident confirmation.
<b>Verification</b>	Verification of incident type that was assigned by the system automatically and capability to expand the incident description if necessary.
<b>Assigning tasks</b>	Selecting the service for incident troubleshooting and sending the incident card to the assigned agent(s).
<b>Support</b>	Information support for the troubleshooting service during incident processing.
<b>Report</b>	Validation of the performance report's accuracy and logging of the results.

# Key Features

## MONITORING



Receive real-time data on incidents and values of various traffic flow parameters from multiple cameras, filtered by vehicle types and sorted by time periods.

## INCIDENTS



Real-time incident alerts, incidents displayed on a map, and incident processing with recorded processing time and operator's actions.

## STATISTICS



Capability to compare data from different road sections, different cameras, different time periods, and by other parameters.

## REPORTS



Ability to generate reports of various types based on parameters of traffic flow or incidents.

# Solution Benefits

## Improving Road Safety

- Reducing the duration and impact of traffic incidents.
- Improving the safety of road users, individuals involved in a crash, and incident responders.
- Reducing the rate of secondary crashes.

## Traffic Flow Optimization and Efficient Infrastructure Management

- Reducing the number and length of traffic jams.
- Optimized traffic routing through the system's ability to dynamically reroute vehicle flows.
- Capability to communicate real-time traffic data to drivers via Dynamic Message Signs (DMS).
- Minimizing impact of incidents on travel reliability, commercial activity, and overall transportation system performance.
- Efficient roadwork planning.

## User Convenience

- Access to data in real time; timely notifications.
- GIS-oriented User Interface delivers a broader perspective on traffic conditions.
- Automated report generation helps to resolve the incident quickly and efficiently.
- Transparent order of action for an operator with highlighting of the next steps.

## Economic Benefits

- Improved road capacity.
- Mitigating traffic incident damage.
- Attracting investments to development and modernization projects.

## Development Prospects

- IoT device support: sensors and information displays.
- Integration with other ITS systems for integrated management of the road infrastructure.

# Solution Specifications

## ISS Platform Support

Operating System	Windows 11 Pro Windows Server 2019/2022 Linux Debian
SecurOS® platform edition	SecurOS® Enterprise
Supported web browsers	Google Chrome Microsoft Edge Mozilla Firefox

## Additional Technical Data

Object classifiers	Person, Vehicle (by type)
System output	Camera Name, Camera ID, Detector Name, Event Name, Event Description, Timestamp of Event, Snapshot of Entire Frame (with the coordinates of the entity that caused the event)

## Ordering Information

IF-INT-SOT-FLOW	Intellisession® Soteria v1.0 - Flow Bundle (per camera).
IF-INT-SOT-AIDE	Intellisession® Soteria v1.0 - AIDE Bundle (per camera).
IF-INT-SOT-FULL	Intellisession® Soteria v1.0 - FULL Bundle (per camera).
IF-INT-SOT-WEB-SER	Intellisession® Soteria v1.0 Web Server Software (per server).
IF-INT-SOT-API	Intellisession® Soteria v1.0 API (per integrated system).
SOS-GIS-BASE	SecurOS® GIS Map Module - Base License + 100 Entity Pack (per system).
SOS-GIS-E0500	SecurOS® GIS Map Module - 500 Entity Pack (servers, cameras, SIP devices, and ACS devices).
SOS-GIS-E2000	SecurOS® GIS Map Module - 2,000 Entity Pack (servers, cameras, SIP devices, and ACS devices).
SOS-GIS-EULIM	SecurOS® GIS Map Module - Unlimited Entity Pack (servers, cameras, SIP devices, and ACS devices).

