

# SecurOS<sup>TM</sup> UVSS

# Enterprise Level Under Vehicle Surveillance System



SecurOS<sup>™</sup> UVSS is a hardware-software based system for remote under-vehicle surveillance, providing high quality images of the vehicle's undercarriage. It can be organically integrated into any security system based on the SecurOS VMS.

This allows to design a distributed monitoring infrastructure, combining UVSS scans with LPR/ANPR data and access control.

SecurOS UVSS is a cost-effective compact solution for visual inspection of all types of vehicles: from passenger vehicles to trucks. It is perfect for government, military, corporate, and transportation facilities – wherever visual inspection has to be performed.

SecurOS UVSS has a wide range of applications including detection of explosives and dangerous objects, detection of smuggling of prohibited items, searching the vehicle's undercarriage for damages and anomalies.

### **KEY ADVANTAGES**

#### High quality undercarriage scanning

- Image quality is not affected by changes of a vehicle's speed, nor by vehicles coming to a complete stop.
- Supports vehicle speeds up to 10 mph (15 km/h).
- Advanced 12bit-HDR processing and automatic gain system, provides images with even illumination in different lighting conditions.
- Patented technologies for correction of distortion and composite image stitching.

#### Advanced data handling

- Undercarriage images are saved together with respective recognized vehicle license plates allowing for later searches and analysis.
- Operators can save undercarriage scans of a particular vehicle as a reference image to use for comparison when this vehicle appears again.

#### Easy installation and maintenance

- Compact UVSS-platform does not require heavy construction work to deploy and is easy to maintain.
- No need for physical sensors to detect vehicle presence thanks to build-in video analytic detectors.
- Highly durable construction is capable of resisting a vehicle accidentally running over the UVSS platform with its wheels.

#### **SecurOS Eco-System**

- Built-in SecurOS<sup>™</sup> Auto license plate recognition system.
- Ability to display real-time and archived video from all cameras: scanning camera, LPR/ANPR camera, and surveillance cameras.
- Wide range of APIs to support integration of traffic lights, X-Ray scanners, automatic road barriers and bollards, informational displays, and other devices.

#### **SECUROS UVSS PRIMARY APPLICATIONS**













#### **SYSTEM ARCHITECTURE**

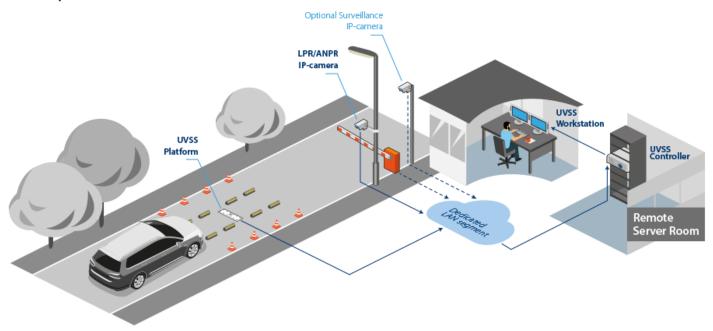
#### **Hardware**

- SecurOS UVSS Platform IP68 scanning system with area scan machine vision camera and fish-eye lens (mounted on the roadway).
- SecurOS UVSS Controller processing server with data storage and integrated video management platform SecurOS Enterprise.
- LPR/ANPR camera.
- Operator workstation.

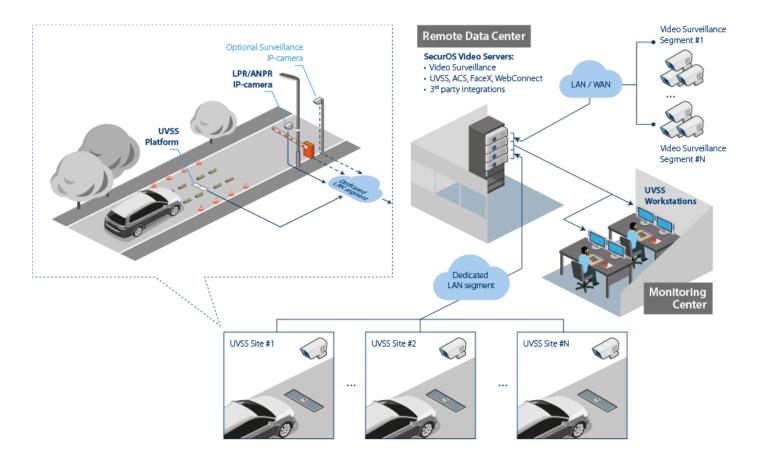
#### **Software**

- SecurOS VMS providing video monitoring, video recording, and hardware-software system management, allowing surveillance of the undercarriage of vehicles and cross-referencing with video archive.
- SecurOS Auto providing license plate recognition, advanced search and watchlist capabilities, etc.
- Customizable professional SecurOS UVSS operator Graphical User Interface.
- Interoperability and integration with 3rd-party devices and systems via embedded SecurOS APIs.

#### **Base System Architecture**



#### **Distributed System Architecture**

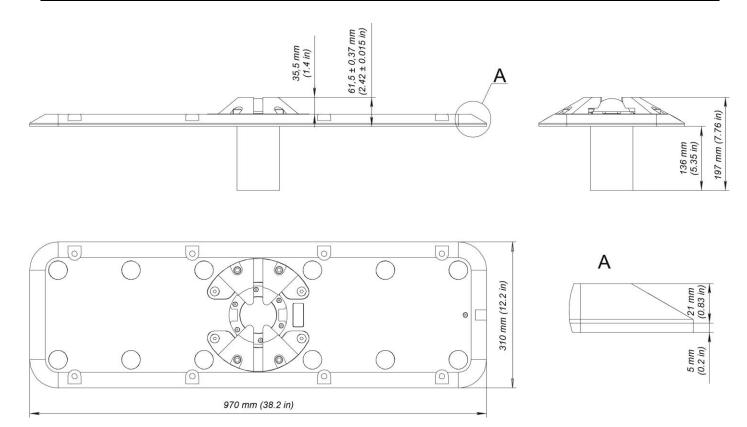


A distributed system architecture provides additional benefits:

- Ability to manage the data of any UVSS Controller or Video Server from any workstation of the security system.
- Extended functionality in combination with other ISS SecurOS software modules: Facial recognition (SecurOS FaceX),
  Access Control and Fire Alarm (SecurOS ACS), 2D and 3D maps, situational awareness analytics (SecurOS Tracking
  Kit), and more.

# **UVSS PLATFORM SPECIFICATIONS**

Scanning camera	2MP Area scan machine vision camera
Pixel density	9 pixels/cm (with a ground clearance of 5.9 inches / 150 mm)
Maximum vehicle speed	10 mph (15 km/h)
Minimum vehicle clearance	4.7 inches (120 mm)
Maximum vehicle width	Up to 8.5 ft / 2.6 m (if ground clearance is 5.9 inches / 150 mm or above)
Maximum vehicle length	Up to 72.18 ft (22 m)
Minimum pause between scans	3 sec
LPR/ANPR coverage	More than 90 countries supported worldwide
Lighting system	8 white-light LEDs (strobe mode, synchronized with active camera shutter)
Image processing time	Up to 3 sec (for passenger vehicle)
Load capacity	Up to 40 tons
Protection Rating	IP68, IK10
Operating temperature	-40°F +140°F (-40°C +60°C)
Power	24 V DC / (50 W – average; 100 W – peak)
Electromagnetic immunity & emissions	FCC Part 15, Subpart B / EN 55032:2015 / EN 55024:2010 /
certifications	IEC 61000-6-3:2007+A1:2010 / IEC 61000-6-2:2005
Dimensions (LxWxD)	38.2 in x 12.2 in x 7.7 in (970 mm x 310 mm x 195 mm)
Dimensions of camera protection body	D = 3.5 in, H = 5.4 in (D = 90 mm, H = 137 mm)
UVSS platform weight	up to 55.1 lbs. (25 kg)
Mounting configuration	Semi-hidden installation (road drilling only for camera protective body)
Warranty period	1 year



**UVSS Platform Illustration** 



**UVSS Platform** 



**High Resolution Undercarriage Image Produced by SecurOS UVSS** 

## **ORDERING INFORMATION**

ISS-UVSS-H	SecurOS <sup>™</sup> UVSS Scanning Platform. Includes Power supply - 24 VDC output (120 W).
	** Cannot be purchased separately without SecurOS UVSS Module Software (ISS-UVSS-S).
ISS-UVSS-S	SecurOS <sup>TM</sup> UVSS Module Software license (1 license required for each UVSS Scanning Platform).
	** Cannot be purchased separately without SecurOS UVSS Scanning Platform (ISS-UVSS-H).
ISS-UVSS-HS	SecurOS <sup>™</sup> UVSS Scanning Platform PLUS SecurOS UVSS Module Software BUNDLE.
	Includes Power supply - 24 VDC output (120 W).
ISS-UVSS-CON-R	SecurOS <sup>™</sup> UVSS Controller (Server). Includes 5 Year Next Business Day KYHD Warranty.





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