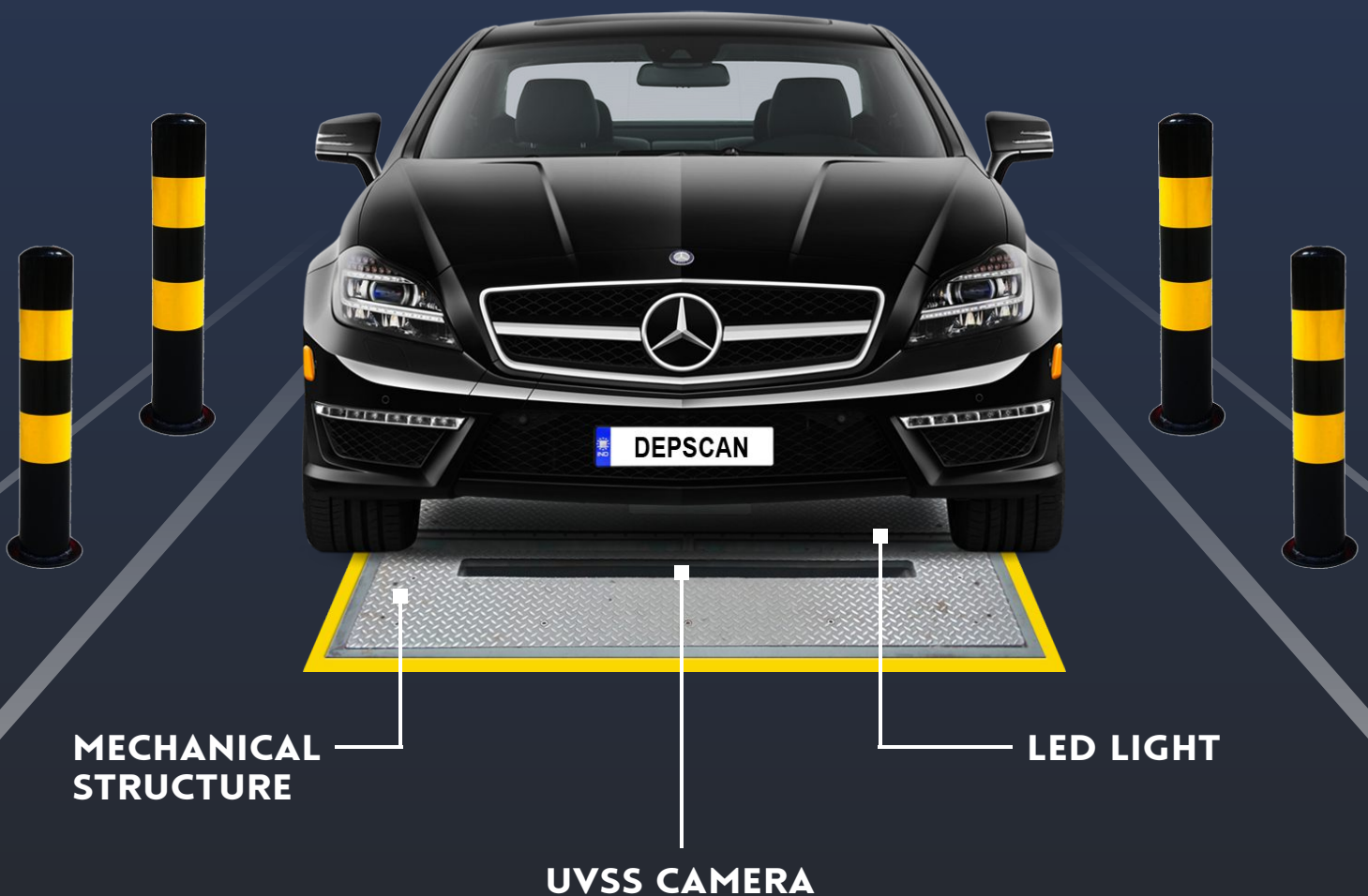# DEPSCAN®
STEREOSCOPIC AUTOMATED UNDER VEHICLE SCANNING SYSTEM

MECHANICAL STRUCTURE

LED LIGHT

UVSS CAMERA

"enVISIONing a secure world"
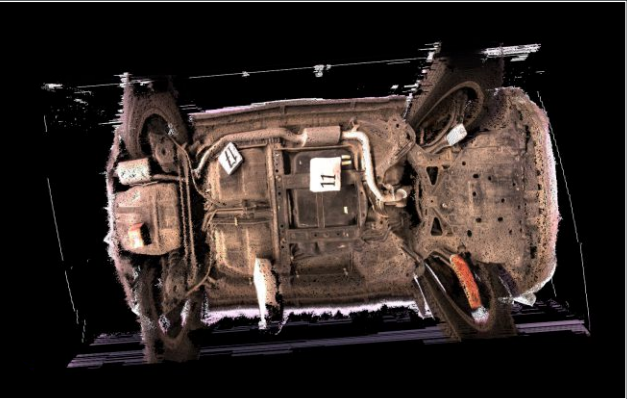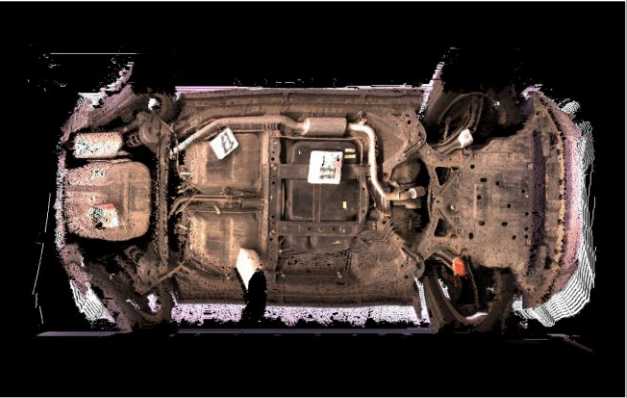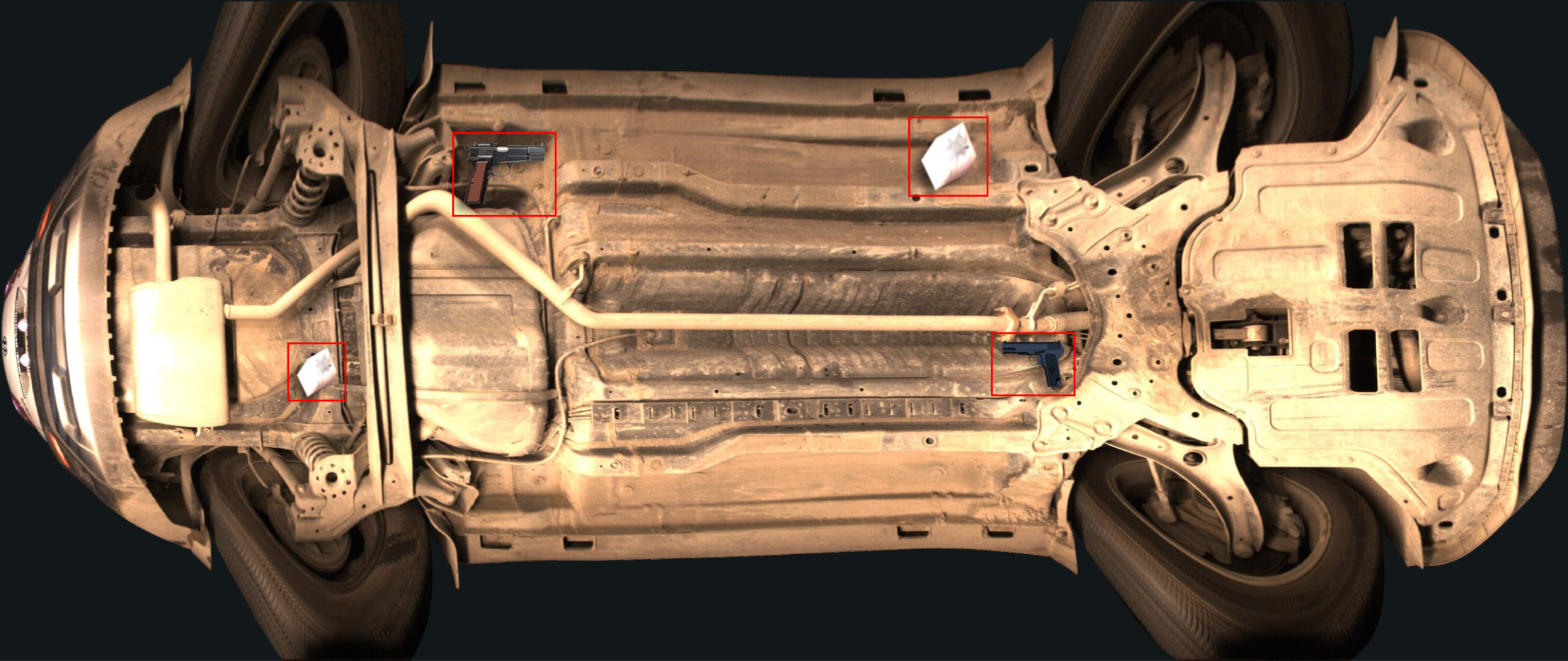
About Vehant Technologies

Vehant Technologies is a leading Artificial Intelligence focused company that develops state of the art Security Screening Solutions, Smart & Safe City Solutions and Enterprise Analytics Solutions that match the global standards. All our solutions are continuously leveraging towards technological innovations to solve various safety & security related issues. All of our products are designed, developed & manufactured in India & Europe to meet international standards, features and quality.

Why Vehant ?

"Technological innovation and advancement is the core strength of Vehant and our highly efficient team of researchers is impelled to offer clients with products and solutions which are crafted to perfection."

Our state of the art solutions are continuously leveraging technological innovations in Artificial Intelligence, Machine learning, Deep Learning etc.

Vehant boasts worldwide sales, service and manufacturing facilities based out of India & Netherlands that can quickly respond to customer needs and deliver products & solutions anywhere in the world. Since 2005, our products have saved life & property across multiple countries across the world. With our extensive experience and dedicated team, we are ready to offer tailored solutions for your need, backing them with global service support.

About DepScan™

Vehant's DepScan UVSS is the next-gen game changing technology for the evergrowing realm of security tech with better efficiency level. Using advanced stereoscopic vision technology, DepScan does depth based comparison using 3D cameras, which are placed side by side to obtain multiple different views of the underbelly of any vehicle. The system generates a colored point cloud based 3D model which helps to get the relative depth information in the form of a disparity map.

This technology is highly similar to human binocular vision. In the traditional UVSS, the underbelly scanning included inspection of 'x-y' axis, but in this new advanced technology, a third dimension 'z' axis is also obtained that helps in differentiating the usual underside with any foreign object by studying the depth of the object. DepScan is equipped with advanced and user friendly GUI.

System Architecture

License Plate
Camera

Driver Camera   UVSS

Boom Barrier

Control System   Server
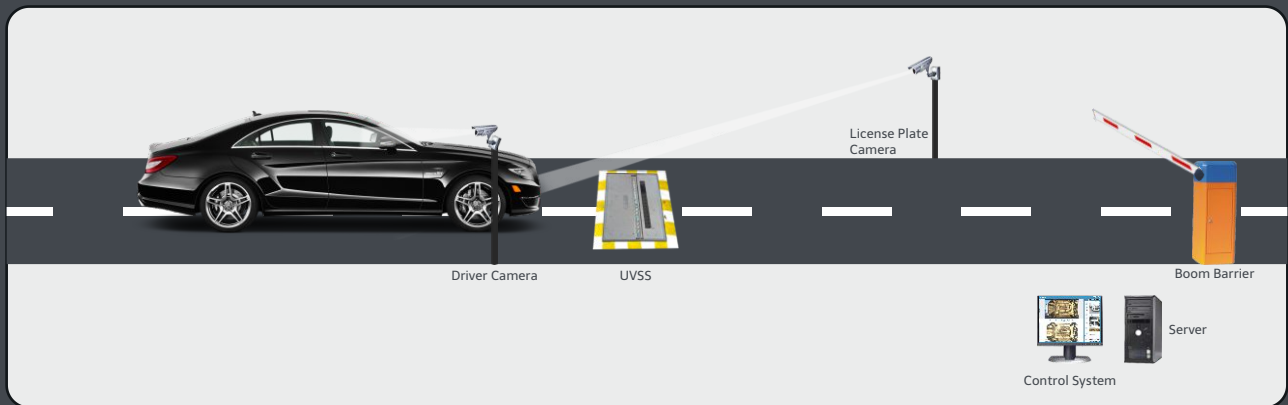
Optional Integration

Automated License Plate Reader (ALPR)

Automated license plate reader (ALPR) is high-speed, computer-controlled camera system that is typically mounted on poles. ALPR automatically captures all license plate numbers that come into view, along with the location, date and time.

Driver Camera

The Driver camera captures the image of the driver approaching towards UVSS. The image of the driver is stored in the database with check-in date & time punched along with the license plate number for future reference.

Central Monitoring System (CMS)

The central monitoring system is a smart system that connects a series of child monitors together and further connects them back to a central monitor.

Worldwide Installation

Vehant Technologies has installed its innovative products in more than 15+ countries around the world. Partnering with top tier organizations and government agencies, we have developed and customized solutions for different regions. Our service and support network is robust and provides global coverage. With our manufacturing facilities in Netherlands and India, we are all set to respond to any of your demands.

Point cloud based 3D model in real time

High resolution color image with synchronised depth

High resolution depth profile using stereo imaging technology

3D model of vehicle underbelly for effective visualization

Clear image capture even with high speed vehicle

360° view of vehicle underside

Technical Specifications

Main Camera

- Imager   Dual high resolution CMOS sensor
- Resolution   1920x1200 pixels
- Video Format   Dual GigE
- Certifications   CE
- Power   12 V to 24 V DC

License Plate Camera

- Imager   CMOS color area scan sensor
- Resolution   2 MP/1920x1080 or better
- Power   12 V DC

Mechanical Structure

- Material   Structural steel with checkered stainless steel on top

Environmental Protection

- Underground Camera & Light Enclosures   IP 67

Control Unit

- Processor   Intel core i7 3.2 GHz
- RAM   8 GB or better
- Hard Disk Capacity   1 TB or better
- PCI/PCIe Slots   2 PCI/PCIe Slots
- Display Monitor   24" color TFT or better

Sensor Unit

- Type   Inductive loop sensor
- Power Requirements   220 V AC
- Output   NO/NC relay type

Lighting Unit

- LED Light Unit   Input voltage 220 V AC

Unit dimensions (lXbXh)

- 1820 X 850 X 750 (in mm)

Installation and Mounting

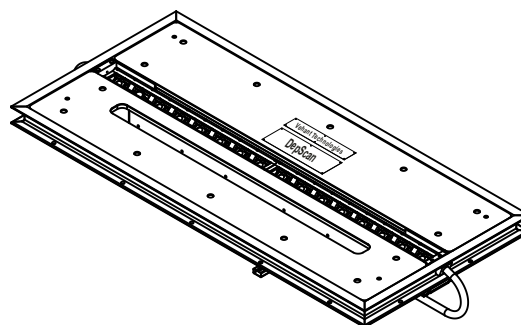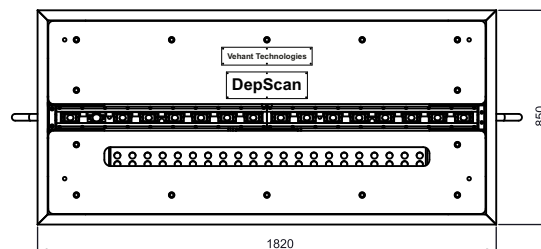- Fixed: Installed underground

Speed Limit

- Upto 35 kmph

Load bearing capacity

- 40 tonnes (GVW)

Operating Temperature

- -20°C to 60°C (with suitable heating & cooling facility)

*specifications are subject to change without prior notice