



UV300M

Portable type Under Vehicle Scanning System Line scan

UV300-M portable under vehicle scanning system is composed of Under Vehicle Scanner, License Plate Recognition Camera, Mobile Server Cart, Speed Ramp and so on. All components can be packed into the Mobile Server Cart and very easy to move to the security check point. There are rugged battery installed in the Mobile Server Cart as well, which provides up to 8 hours of work time.

UV300-M can effectively scan and inspect the chassis of vehicles to search and analyze for suspicious objects or contraband such as drugs and weapons. The system is ideal for government, military, transportation and corporation facilities requiring security checkpoints for vehicles such as vans, tractor trailers, buses and passenger vehicles.

Except chassis, the LPR Camera and optional Surrounding Cameras in the system can capture video clips of vehicle in different direction, provide all-round surveillance.

Advantages



Line scan technology scanner, generate Line scan images



High resolution imaging, output 4096P color images



Real time imaging, scanned parts of chassis will show up on display in real time



Support vehicles with different height of chassis, no limitation for vehicle length



Embedded bi-directional triggers, support bi-directional scan



Bi-directional LPR function can capture and recognize both front and rear license plate



Built rugged with stainless steel, designed to withstand harsh environments



Provides all kinds of ISP functions, such as Brightness adjust, Saturation, Color Balance etc



Support high vehicle speed, up to 45km/h



27 inch IPS 1080P monitor, help inspection details of chassis

Specification

Under Vehicle Scanner

Line Scan Speed	Forward: 0 – 20 km/h, Backward: 0 – 20 km/h
Height Limit	80 – 2000 mm
Width Limit	< 4500 mm
Length Limit	No limit
View Angle	> 180°
Resolution	> 10000 x 4096
Capture Rate	> 99.9%
Imaging Time	Real time

Auto Exposure	Support
Protector Material	304 stainless steel
Load Bearing	40 tones (vehicle weight)
Dimension	590mm x 300mm x 69mm
Weight	22 KG
Working Temperature	-40°C - 70°C
Protection Level	IP68

Mobile Server Cart

Server	CPU: i3-N305, Memory: 8G, Hard disk: 512G SSD + 1T HDD
Monitor	27 inch, IPS, 1080P
POE	2 channels 10/100/1000M RJ45
POE Standard	IEEE802.3af/at
ETH	1 port 10/100/1000M RJ45

Power Supply	AC 100V - 240V
Working Temperature	-10°C - 50°C
Dimension	750mm x 666mm x 450mm
Weight	40 KG

License Plate Recognition Camera

Sensor	1/2.8 inch CMOS
Resolution	1920 x 1080
Video Codec	H264, H265
Image Codec	JPEG
De-noise	3DNR
Dynamic Range	96db

Aperture	Fixed aperture
Capture Rate	> 99.5%
Power Consumption	< 24W
Working Temperature	-10°C - 50°C
Protection Level	IP65

Product Introduction

Introduction

Dual mode under vehicle scanning system, which use area scan technology and line scan technology simultaneously to effectively scan and inspect the undercarriage of vehicles to search and analyze images for suspicious objects or contraband such as drugs and weapons. The system is ideal for government, military, transportation and corporation facilities requiring security checkpoints for vehicles such as vans, tractor trailers, buses and passenger vehicles.

Item List



Control Panel Layout

LPR Camera should connect to one of the POE RJ45 port.



Layout of Portable UVSS System

- Open the Mobile Server Cart Cover; take out LPR Camera, Tripod, Combine Cable, Keyboard, Mouse, UVSS Camera and Speed Bumper.
- Put UVSS Scanner in the middle of lane and put Speed Bumper at both sides of UVSS Scanner. Connect Combine Cable between UVSS Scanner and Mobile Server Cart, and make sure Combine Cable go beneath Speed Bumper.
- Mount LPR Camera on Tripod and rise the LPR Camera to about 1.2 meter high, LPR Camera should be around 4 meters in front of UVSS Scanner along the road side. LPR Camera connects to Mobile Server Cart by Net Cable, and the LPR Camera should point to 0.5 meter above UVSS Scanner.
- Power on.



Setup Steps

Setup License Plate Recognition Camera

Take out tripod from mobile server cart, set it up along road side.



Mount License Plate Recognition on tripod.



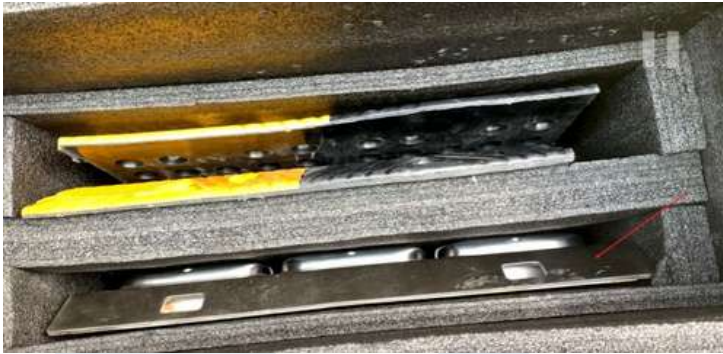
Use Ethernet cable connect LPR camera to mobile server cart, connect to one POE port.



Setup Under Vehicle Scanner

Take out Under Vehicle Scanner from the mobile server cart, and then put it in the middle of entrance.

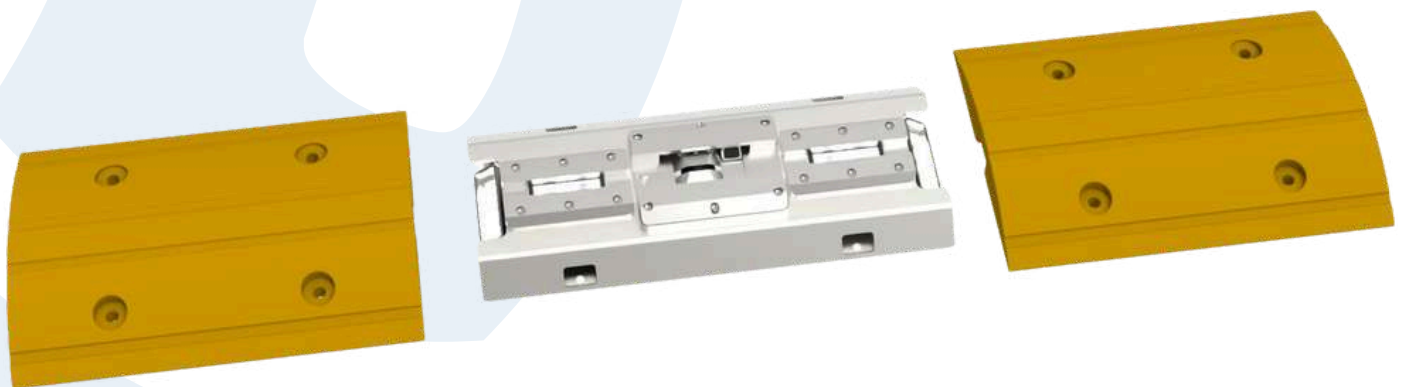
Attention: Under Vehicle Scanner is very heavy, make sure wear glove before operation.



Take out Combine Cable from the mobile server cart, and then connect one side to the Under Vehicle Scanner, another side to mobile server cart.



Put two Speed Bumpers on both sides of Under Vehicle Scanner, align them together.



Power on Server

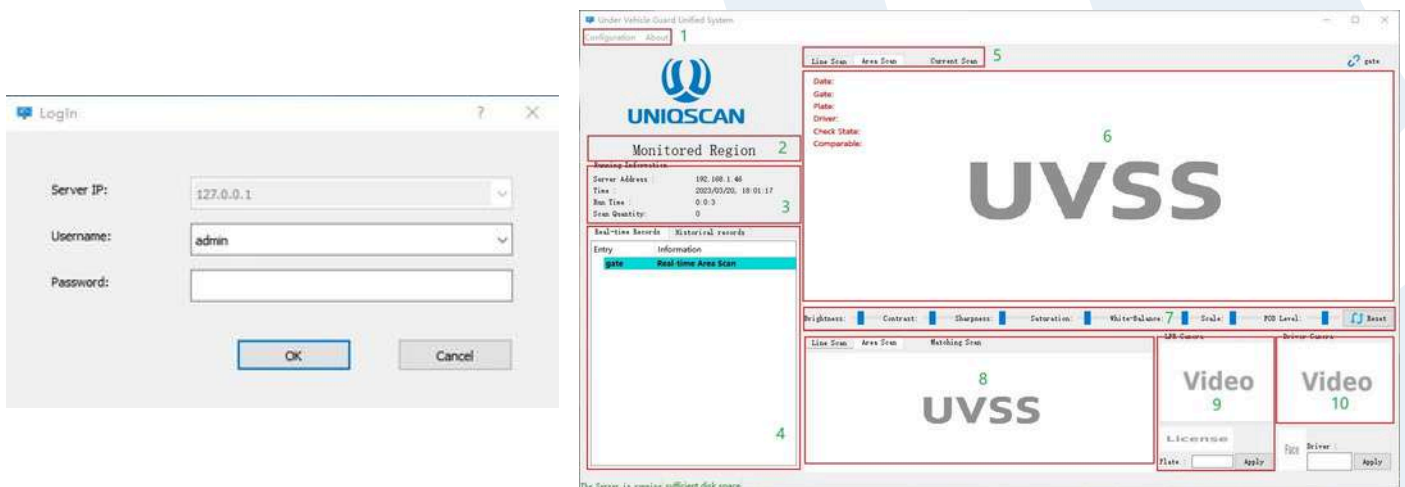
Push down Power Bottom, Server will boot up automatically.



Double-click the icon and enter the login interface.



Input password, start UVSS Guard.
Attention: Initial password if 123456



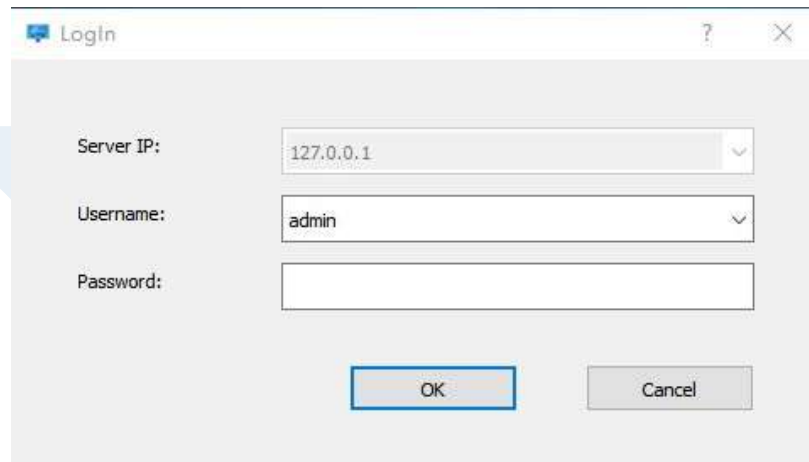
Done setup, can start to inspect vehicles now.

Software Operation

Software Interface

UVSS Guard Unified Version integrates the server and the client together into single software. This Unified version used for standard working scenario, which only use single computer for database and user interface in close range to the Under Vehicle Scanner, such as Portable UVSS system.

Open UVSS Guard Unified by double-clicking the icon and enter the login interface.

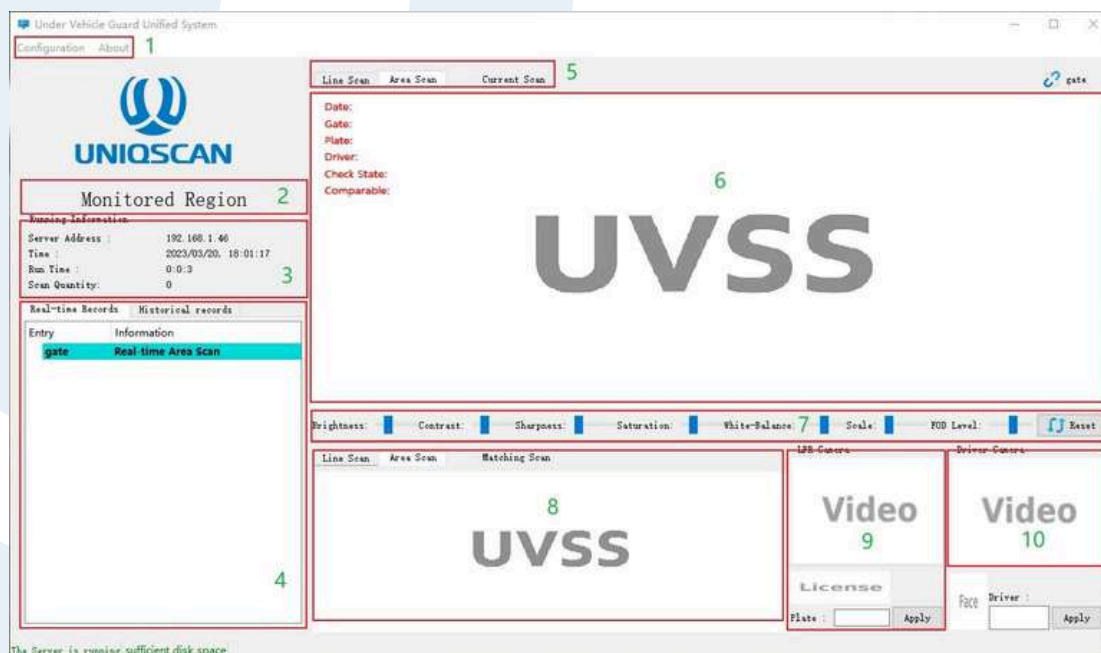



The Login dialog box contains the following fields and buttons:

- Server IP: 127.0.0.1 (dropdown menu)
- Username: admin (dropdown menu)
- Password: (empty text field)
- Buttons: OK, Cancel

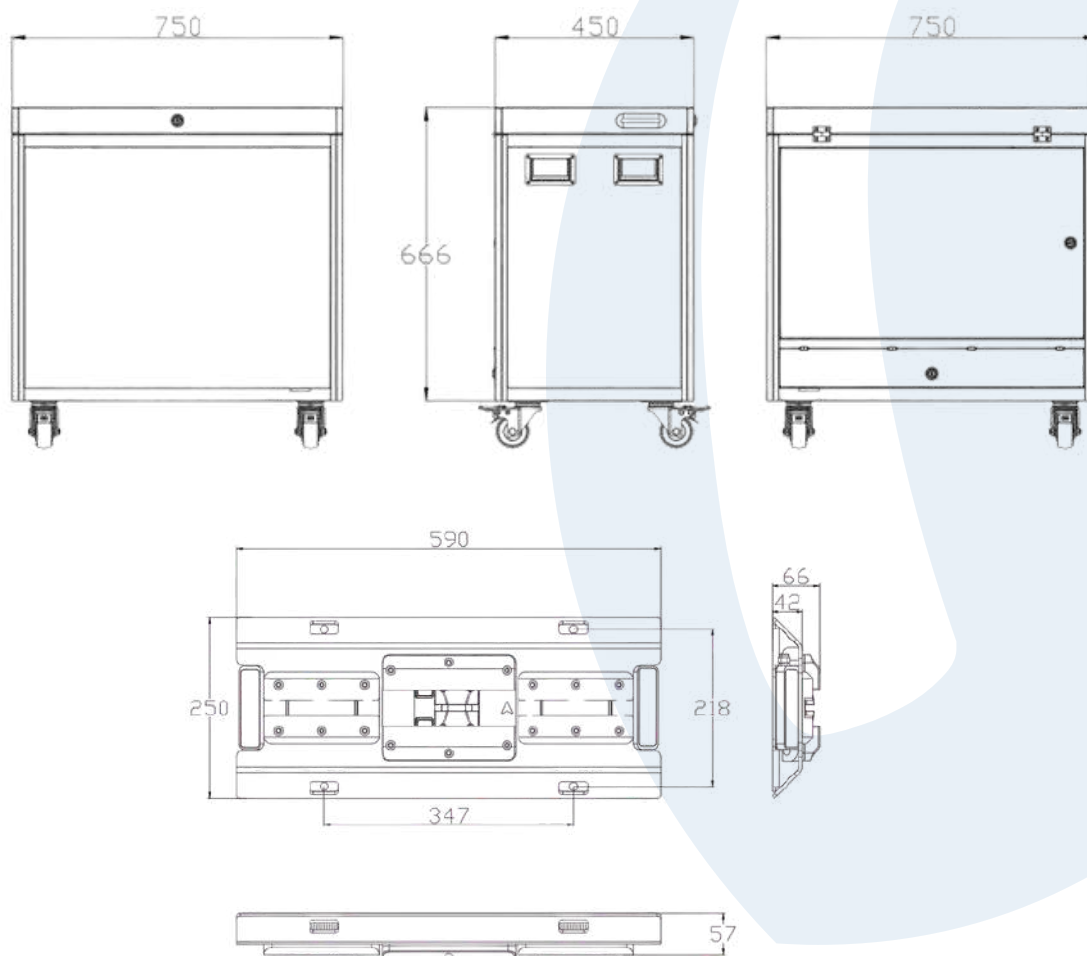
Login instructions:

- Server IP: The server IP address that is currently logged on.
(Unified software no needs to input IP manually)
- Username: Input Username in Username bar or select a user in the drop-down box.
(default username is admin)
- Password: Input the correct login password.
(the initial password is 123456)



1. General configuration entry (Configuration button)
2. Name of Inspection Area
3. Running Information
 - Server Address: The IP address used by the server (namely the native IP address)
 - Scan Quantity: Number of inspected vehicles after login
4. Inspected vehicle list
5. Line scan mode/Area scan mode switch
6. Current inspection image display
7. ISP adjust area
8. Matching inspection image display
 - From compare database, this image with a certain similarity to the current under vehicle inspection image. If this image is now shown up, please verify that there are similar under vehicle inspection images in the compare database.
9. LPR Camera display area
10. Side Camera display area
11. Manual note input area

Dimension Drawing



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