Stationary Under Vehicle Scan System

HuaRay UVSS (Under Vehicle Surveillance System) uses machine vision technology to grab the full and high resolu-tion image of under vehicle to provide a high level security solution.Stationary UVSS is an ideal system for fixed applications to prevent illegal items from entering places such as prisons, milltary base, hotels and airport etc. PC-based client software provides an easy-to-use GUI which can review clear images of vehicle chassis, live video and image records.

Key Features

Clear and Sharp Image
- High resolution with 2K per line, max image resolution up to 20MP
- Low image distortion, high image grey level up to 11

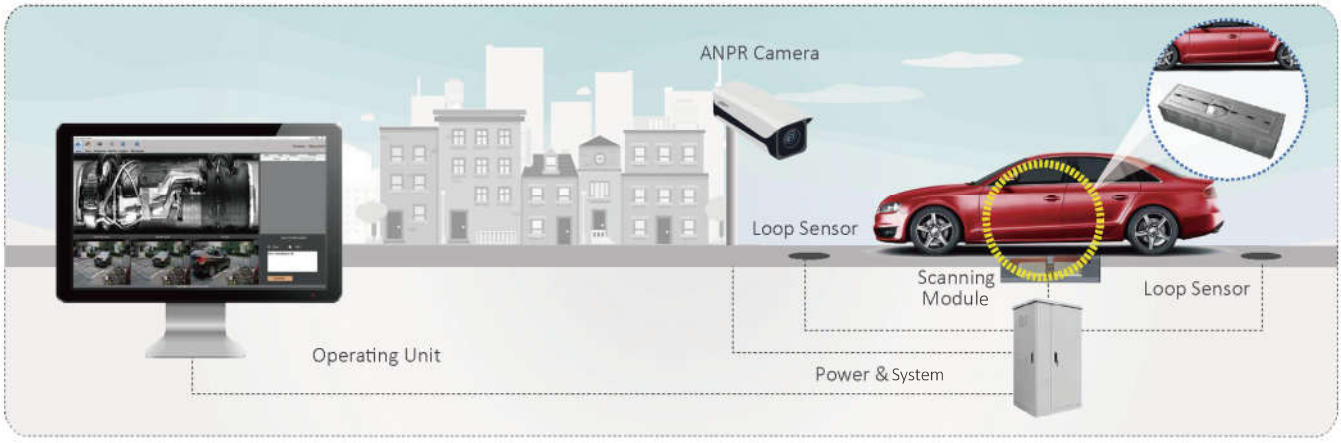
High Efficiency
- Supports max 80km/h vehicle speed
- Less than 1s to synthesize a whole image

Full Integration
- Supports automatic number-plate recognition for various countries with ANPR camera
- Supports barrier integration and centralized management system(optional)

High Reliability
- Wide working temperature -35°C ~ + 70°C(Scanning Module)
- IP68 dustproof and waterproof (Scanning Module)

Stationary Under Vehicle Scan System

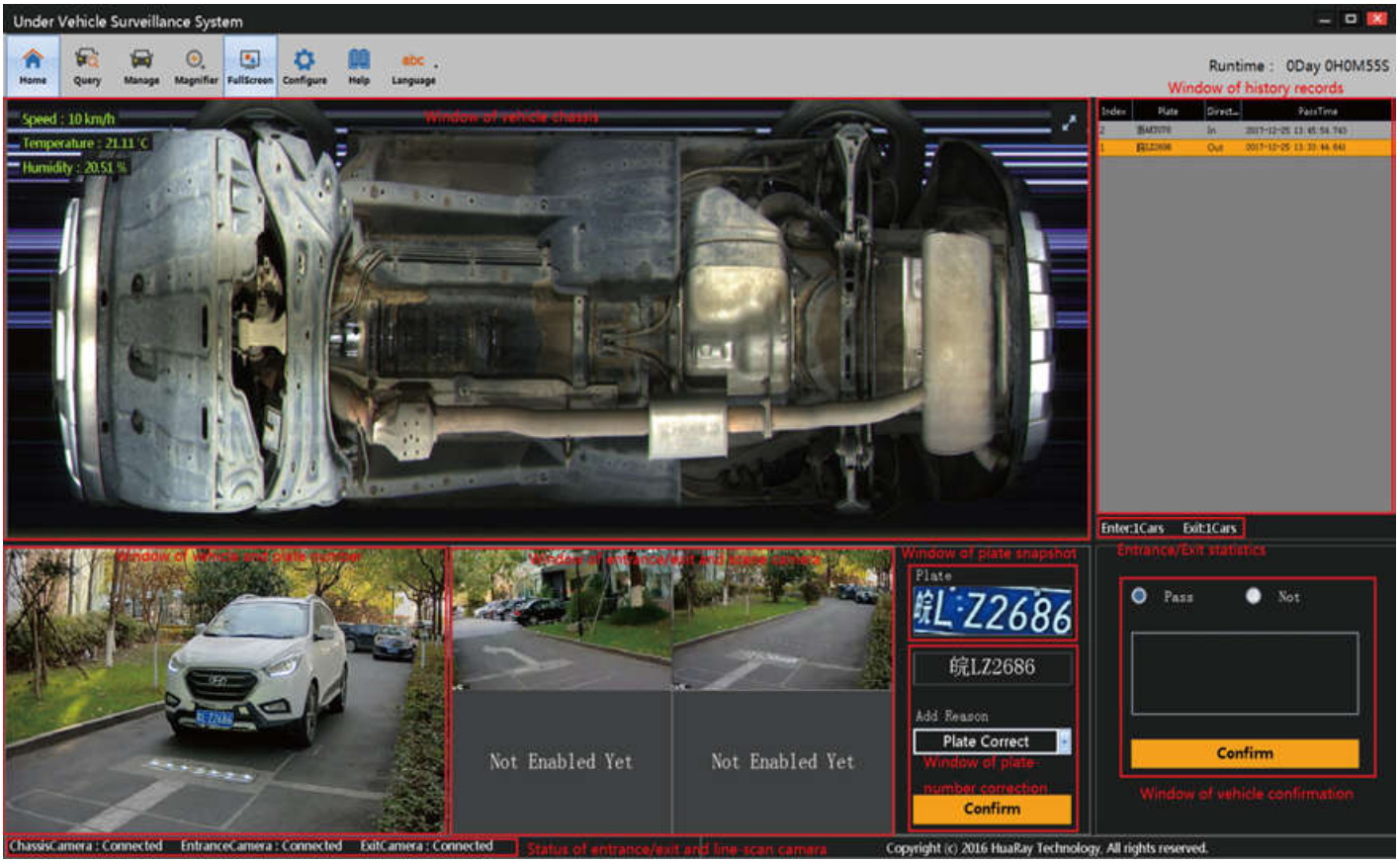
System Topology



- Loop sensor detects the moving vehicle.
- The image of the vehicle classis and the license plate will be captured at the same time then transferred to computer.
- The UVSS client presents the stitched image of full chassis and recognizes the license plate automatically.

UVSS Software

PC-based software with an easy-to-use GUI provides linear image stitching, plate number integration and live video on the home page.It supports quick retrieval of the history records and checking the under vehicle image details.

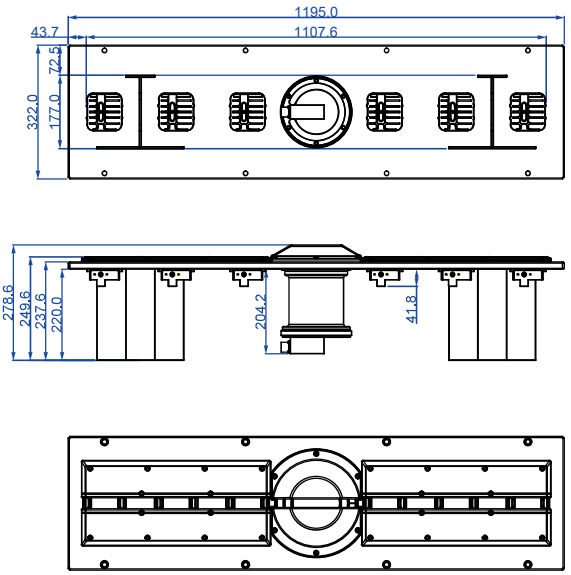


Stationary Under Vehicle Scan System

MV-VDB5020CE-00

UVSS-Scanning Module

Dimensions(mm)



UVSS| VDF5020CE-00

Technical Specifications

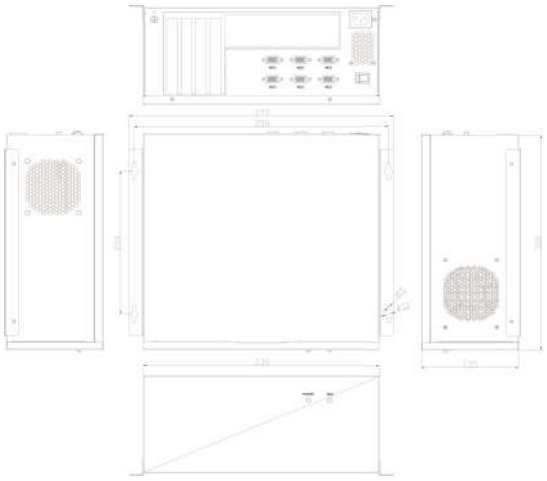
Resolution	2K
Field of View	180°
Imaging Time After Exit Trigger	<1s
Max Vehicle Speed	80km/h,49.7mph (recommendation<50Km/h,31mph)
Compatibility	Chassis height： ≥60mm(0.19ft) Chassis width:≤4500mm(14.8ft)
Load-Bearing	50T(110000lb)
Case Material	Stainless steel
Power Supply	100-240V AC
Illumination	480W dynamic LED array
Weight	50kg(110lb)
Dimensions	1195mm*322mm*278.6mm（47“*12.7”*10.9“）
Operating Temperature	-35°C ~ +70°C(-31°F ~ 158°F)
Protection	IP68

Stationary Under Vehicle Scan System

ARC-3600-G3-00A5

UVSS-Computer

Dimensions(mm)



UVSS| ARC-3600-G3-00A5

Technical Specifications

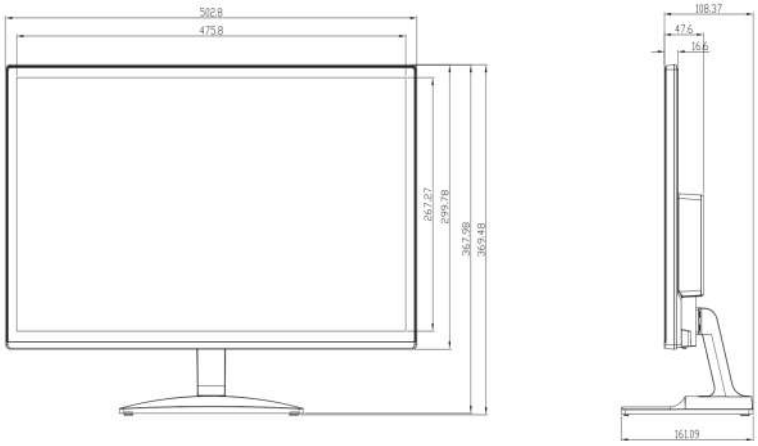
Processor System	CPU : Intel CoreI5 - 4570, 3.2GHZ System Chipset : Intel H81 BIOS : AMI 64 MB SPI BIOS
Memory	8G DDR3L
Storage	1TB SATA HDD+128GB SSD
Graphics	VGA&HDMI supports max resolution 1920x1200@ 60hz
Ethernet	2*10/100/1000Mbps. 1*10/100 Mbps
Audio	Realtek HD Audio with Line - IN Line - OUT Mic-IN
IO	Seral:2* RS232 USB:4*USB3.0+2*USB2.0
OS	Win Pro7 SP1 64-bit EN
Expansion Slot	1*PCI
Power	Great Wall Switch Power Supply AC input:100-24V~5-3A 60/50HZ
Dimensions	330mm*135mm*300mm(W*H*D)
Environment	Operating Temperature:0°C ~ 60°C Storage Temperature:-20°C ~ 80°C Relative Humidity : 95%@40 ℃ (non-condensing) Vibration : 1Grms Shock : 10G(with 11ms duration ,half sine wave) EMC :CE/FCC Class A

Stationary Under Vehicle Scan System

DHL22-F600

UVSS-Display

Dimensions(mm)



UVSS| DHL22-F600-S

Technical Specifications

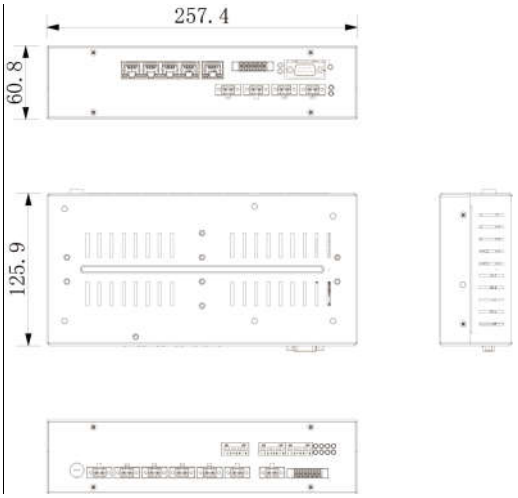
Diagonal	21.5''(16:9)	
Resolution	1920*1080(FHD)	
Backlight	LED	
Brightness/Luminance (Standard)	200 cd/ ㎡	
Display Colors	16.7M	
Contrast	1000:1	
Angle of view	178°/178°(vertical/horizontal)	
Response time	5ms	
Input	Standard	VGA(D-Sub)*1/HDMI*1/Audio*1
	Optional	-
Output	Standard	Speaker*2
	Optional	-
Consumption(Standard)	25W	
Consumption(Standby)	≤0.5W	

Stationary Under Vehicle Scan System

VDC5641E-00

UVSS-Controller

Dimensions(mm)



UVSS| VDC5641E-00

Technical Specifications

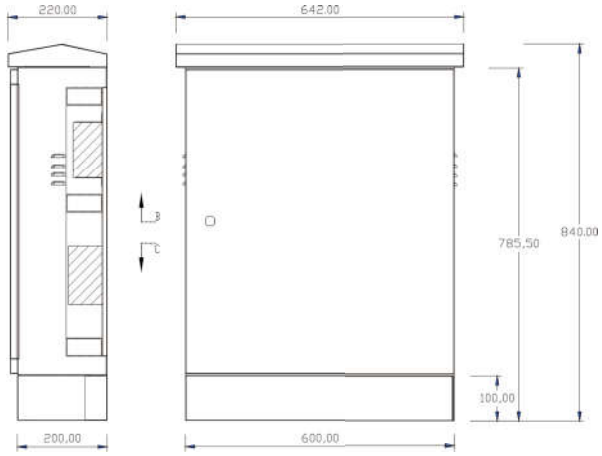
Power in		36V/600W
Power out	Scan Camera	36V
	LED modules	32V/2.8A/80W
Trigger	Input	Two isloate channels signal of photoelectric input via loop sensor
	Output	Scan Camera
		ANPR Camera
		LED modules
Communication	Scan Camera	GIGE&RS485
	ANPR Camera	GIGE
	Host PC	GIGE
Certifications		CE/FCC/UL
Operating Conditions		-35℃~+60℃(-31℉~+140℉)/Less than 95% RH *Start up should be done at above -35℃(-40℉)
Storage Conditions		-40℃~+70℃(-40℉~+158℉)/Less than 95% RH
Dimensions		257.4mm*125.9mm*60.8mm（10.1”*4.96”*2.39”)

Stationary Under Vehicle Scan System

VDCA50E-00

UVSS-Power System

Dimensions(mm)



UVSS| VDCA50E-00

Technical Specifications

Swith Power-HRP-600-36

Voltage input	85~264V ; 120~370V
Power Frequency input	47~63Hz
Altemating current input	7.6A/115VAC ; 3.6A/230VAC
Voltage output	DC 36V
Rated Current	17.5A
Current Output Range	0 ~ 17.5A
Voltage Output Range	28.8V ~ 39.6V
Rated Power	630 W
Leakage Current	<1.2mA/240VAC
Power overload	105% ~ 135% rated power
	Protection mode: current-Limiting
Voltage overland	41.4 ~ 48.5V
	Protection mode: switch off output
Over Temperature	Protection mode: switch off output
Operating Conditions	-40℃ ~ +70℃(-40℉ ~ +158℉) Less than 95% RH
Storage Conditions	-40℃ ~ +85℃(-40℉ ~ +185℉) Less than 95% RH

Stationary Under Vehicle Scan System

Technical Specifications

Air Switch-IC65N-2P-C10

Power Input	400V /230V
Rated Current	10A
Breaking Current	6000A
Thermal Release Temperature	30 ℃
Insulation Voltage	500VAC
Impulse Resistance Voltage	6KV
Electrical Life	10000 Times
Mechanical Life	20000 Times
Operating Conditions	-35 ℃ ~ +70 ℃ (-31 ℉ ~ +158 ℉)
Storage Conditions	-40 ℃ ~ +85 ℃ (-40 ℉ ~ +185 ℉)

Technical Specifications

Lightning Preventer-DXH06-FCS/1+1R40

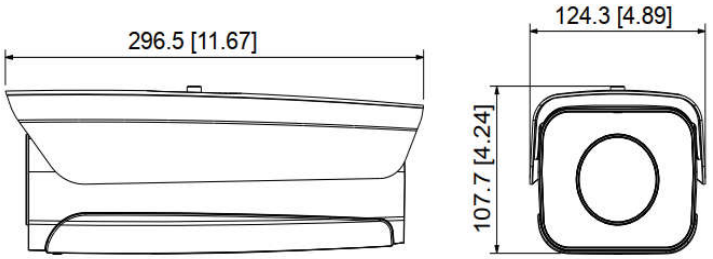
Max Continuous Working Voltage	385V
Nominal Discharge Current	20KA(8/20 μs)
Max Discharge Current	40KA(8/20 μs)
Protection Mode	L-N,N-PE
Protection Level	≤1.8KV
Response Time	<20ns
Grounding Resistance	≤4Ω
Operating Conditions	-40 ℃ ~ +70 ℃ (-40 ℉ ~ +158 ℉)/Less than 90% RH

Stationary Under Vehicle Scan System

DHI-ITC215-PW6M-IRLZF

UVSS-ANPR

Dimensions(mm)



UVSS| DHI-ITC215-PW6M-IRLZF

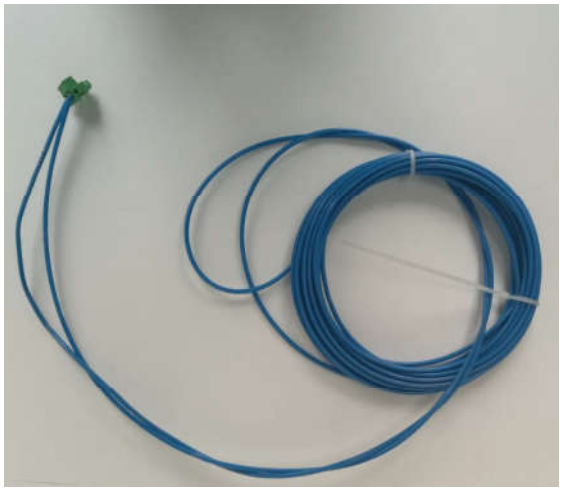
Technical Specifications

Items	Specification
Image Sensor	1/2.8" CMOS
Effective Pixels	1920 × 1080 (OSD black strip excluded)
Trigger Mode	Video detection; I/O coil; video detection and I/O coil
Illuminator Number	6 IR illuminators, brightness adjustable
Focal Length	3.2 mm–10.5 mm
Vehicle Detection	Vehicle capture rate ≥99%
Exposure Mode	Full auto, customized auto, customized
Video Compression	H.264B/H.264M/H.264H/H.265/MJPEG
Video Frame Rate	PAL: Main stream (1920 × 1080@25fps, 1280 × 720@25fps), sub stream (1280 × 720@25fps, 704 × 576@25fps, 352 × 288@25fps) NTSC: Main stream (1920 × 1080@30fps, 1280 × 720@30fps), sub stream (1280 × 720@30fps, 704 × 408@30fps, 352 × 240@30fps)
Network	1 100/1000M Ethernet port (RJ-45)

Stationary Under Vehicle Scan System

FVN1.5

UVSS-Loop Sensor



UVSS| Loop Sensor-FVN1.5

Technical Specifications

Cross Section	1.5mm²
Working Voltage	≤AC250V/DC500V
Flame Retardant Rating	105℃
Protective Cover	FVN
Operating Condition	-60℃ ~+80℃/Less than 98% RH

Ordering Information

P/N	Model Name	Description
1.0.01.36.10382	DH-MV-VDF5020CE-00	Classic UVSS Kits, including of UVSS scanning module, ANPR, industry computer, controller power system,loop sensor and related accessory.
1.0.01.36.10945	DH-MV-VDF5021CE-03	Lite UVSS Kits, including of UVSS scanning module, industry computer, controller power system,loop sensor and related accessory.