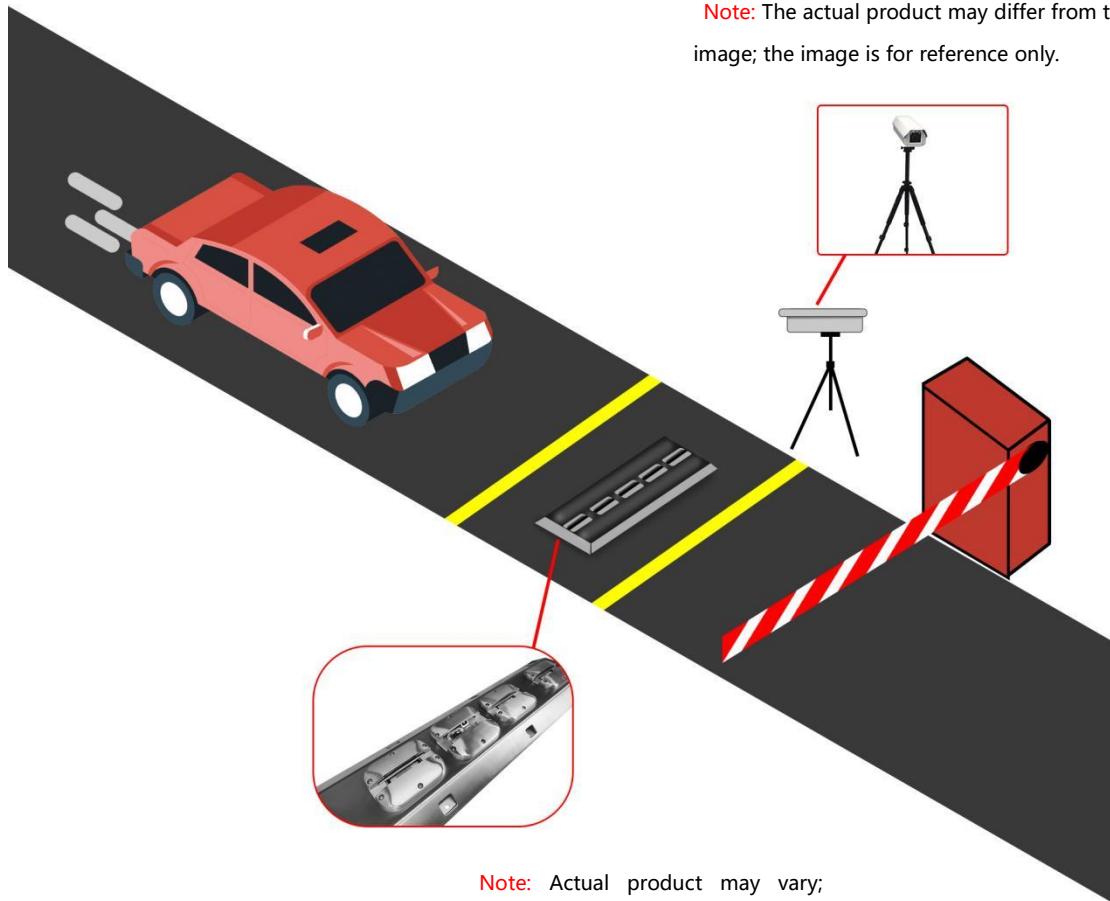


Fixed Under-Vehicle Scanning System

The Fixed Underbody Scanning System utilizes an industry-leading, ultra-high frame rate intelligent line-scan camera developed in-house to monitor the undercarriage of all passing vehicles in real time, effectively preventing incidents such as underbody bombs, human smuggling, drug concealment, hiding of escape tools, illegal modifications, and oil leaks. In addition to underbody inspection, the system simultaneously provides additional features such as license plate recognition, vehicle body image recording, facial recognition, and automatic comparison of underbody images upon vehicle entry and exit, ensuring comprehensive and seamless inspection and documentation of all details for every vehicle entering or exiting. The system's real-time video output is compatible with standard IP surveillance systems, enabling seamless integration with video surveillance infrastructure. It automatically adapts to vehicles with varying chassis heights, including sedans, trucks, buses, and trains.

This system is widely applicable to government agencies, the military, customs, border control, high-end hotels, toll stations, prisons, and critical industrial facilities. It is suitable for all vehicle types, including trucks, sedans, sports cars, buses, as well as extra-long vehicles such as trains and subways.

Note: The actual product may differ from the image; the image is for reference only.



Note: Actual product may vary;
images are for reference only

System Component

II. Industrial Computer Host

3. Central Wiring Unit



IV. License Plate



I. Undercarriage Scanning Unit

Product Advantages

- **Comprehensive Leadership:** As China's first ultra-high frame rate smart integrated camera, it uses a built-in processor to independently collect data and intelligently analyze it to generate high-definition undercarriage images.
- **4K High-Definition Camera:** Equipped with imported 4K high-definition lens sensors, offering a vertical resolution of up to 4096 pixels.
- **No Installation Required:** With an overall thickness of just 69 mm, no installation is required, saving significant installation time and capital investment, and making maintenance more convenient.
- **Remote Management:** Supports remote management and viewing via client software.
- **Camera Integration:** Supports multiple scene cameras, license plate cameras, and facial recognition cameras, with white list and black list management

capabilities.

- **Auto-Comparison:** Automatically retrieves historical images for comparison when a vehicle passes through.
- **Auto Exposure:** Automatically adjusts exposure intensity based on ambient light and chassis height, producing high-quality scanned images without the need for manual adjustments such as contrast.
- **Stable and Reliable:** The production process strictly adheres to the ISO 9001 quality management system. The product has passed rigorous high- and low-temperature tests, waterproofing tests, humidity and heat tests, and vibration tests, ensuring trouble-free continuous operation for over 10,000 hours.
- **Management Software:** A powerful yet user-friendly software solution that meets both basic and advanced requirements. In addition to standard device management for regular users, it offers numerous optional advanced intelligent features, such as landing gear recognition, vehicle type recognition, facial recognition, and license plate recognition (LPR).
- **Robust Mounting Frame:** Constructed from 10 - 15 mm thick 304 stainless steel in accordance with international standards and incorporating advanced industrial technology, the frame features a stable and sturdy design that is pressure-resistant, rust-proof, and corrosion-resistant.
- **Image Processing Functions:** Supports brightness, saturation, contrast, white balance, sharpening, local zoom, and full-screen zoom.
- **System Functions:** Power-on self-test, multi-level user management, multi-device management, system and device information, device information query, quick language switching, USB flash drive software updates, remote real-time image viewing, and database import/export.
- **Secondary Development:** Open data interfaces support secondary development and free integration into smart management systems.

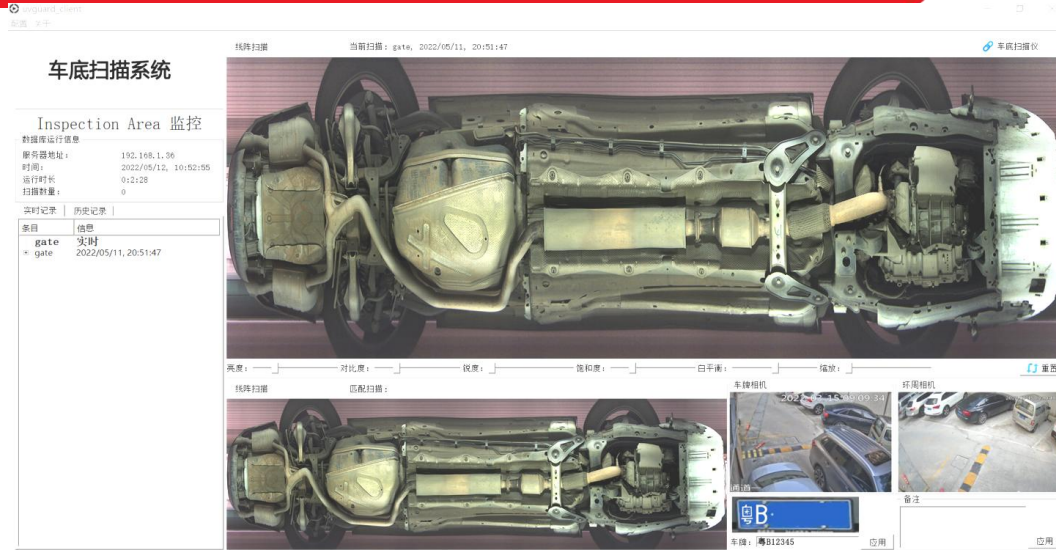
Technical Specifications

Product Model		
Series System Pipe Managem ent Softwar e Softwar e	Imaging Method	Dynamic imaging using line-scan CCD technology
	Scanning Method	Linear scanning
	Triggering Method	Supports bidirectional infrared triggering and loop detector triggering
	License Plate Recognition	Supports license plate recognition, blacklist, and whitelist management (Note: Comes standard with a camera for domestic license plates)
	Face Recognition	Supports facial recognition, facial blacklist and whitelist management (Note: Facial recognition camera is optional)
	User Group Management	Supports multi-user group management
	Multi-device management	Can connect to multiple devices; supports centralized or group-based device management with no limit on the number of logged-in users
	Image Upload Time	<1 second
	License Plate Recognition	Automatic recognition with an accuracy rate of up to 99%
	User Control	Manual
	System Language	Supports multiple languages (customizable)
	Image Data	Image auto-save, delete function, and overwrite feature; configurable storage duration and automatic deletion of expired images
	Image Display	Wide-format landscape display
	Image Retrieval	Ability to retrieve stored undercarriage and license plate images by date, time, license plate number, and other criteria
	Image Format	Standard color BMP or JPEG
	Data Interface	Standard network RJ45
	Scene Image Display	Supports connection of multiple scene cameras
	Image Adjustment	Color; supports brightness, saturation, contrast, white balance, sharpening, FOD sensitivity, local zoom, and full-screen zoom.

Electrical	Storage	128GB SSD	
	Power	DC 12V	
Industrial Mother	Power consumption	28W	
Industrial			
Vehicle Plate Recognition	Sensor Type	1/2.8-inch CMOS	Specifications
	Image resolution	1920 x 1080	
	Video encoding format	H. 264, H. 265	
	Image encoding format	JPEG	Standard
	Noise Reduction	3D Noise Reduction	
	Wide Dynamic Range	96 dB	
	Aperture Control	Fixed Aperture	China In-car
	Vehicle Detection	Vehicle detection rate > 99.5%	
	Power consumption	< 24 W	
	Operating temperature	-10° C to 50° C	Vehicle Domestic matches Camera
Camera	Water resistance	IP65	
Camera			
Person Face	Resolution	6-megapixel high-definition camera	Options
	Smart Codec	H. 265+ & H. 264	
	Image Sensor	High-performance CCD, high color fidelity, high sensitivity	Optional

Recognition Photo Camera	Optical Filter Module	Built-in polarizing filter switching module, clearly displays the driver's facial image	
	Operating temperature	-30° C to +80° C	
	Operating Humidity	10% - 90%	
	Protection Rating	IP67	

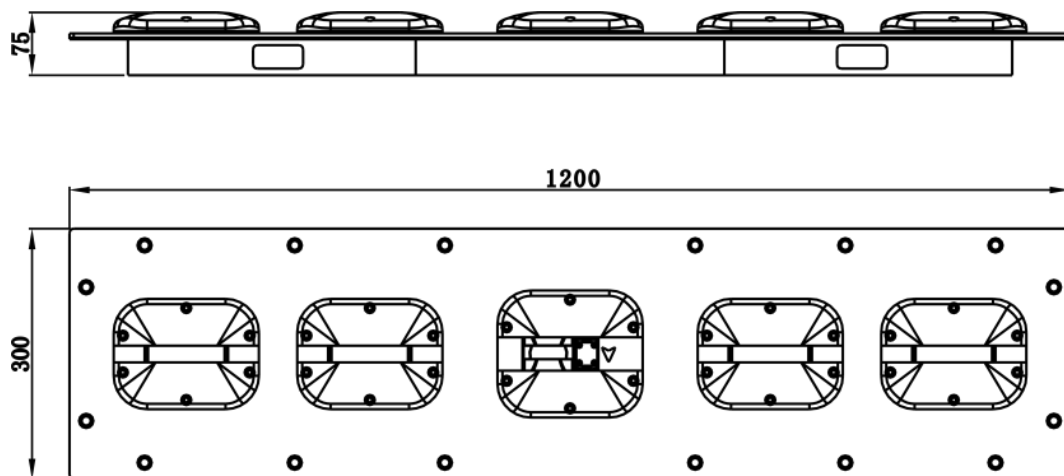
Underbody Scan Inspection Rendering

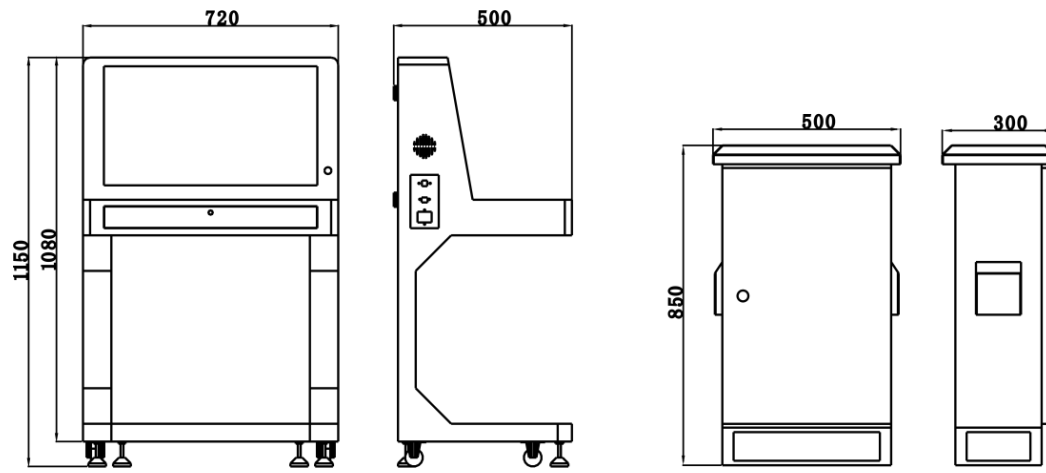


Dimensions Diagram

Unit: millimeters

(mm)





Packing List

No.	Item	Specifications and Parameters	Unit	Quantity	Remarks
1	Undercarriage Scanner	1200 x 280 x 69	Set	1	
2	Industrial Computer	CPU: i5, RAM: 4GB	Set	1	
3	Integrated Wiring Chassis	263 x 150 x 78 (mm)	Set	1	Main Components: 1. Vehicle detector (2-wire coil) 2. Switch (8-port PoE) 3. Power Module
4	License Plate Camera	Resolution: 1920 ×1080	Set	1	Domestic License Plate Recognition
5	Inductive Loop Detectors	100 meters	units	1	
6	Speed bump	500 × 340 × 44 (mm)	units	2	
7	Combined Line	10 meters	each	1	
8	Ethernet cable	3 meters	pieces	1	
9	Power adapter		pcs	1	China Standard Version
10	Power cord	3 meters		1	National Standard

			pieces		Version
11	Lens cloth		pieces	1	
12	Brush		pcs	1	
13	Spare ball cover		pcs	1	
14	Socket wrench		piece	1	
15	Allen wrenches	M5	each	1	
16	Expansion screw	M8*80	pieces	10	