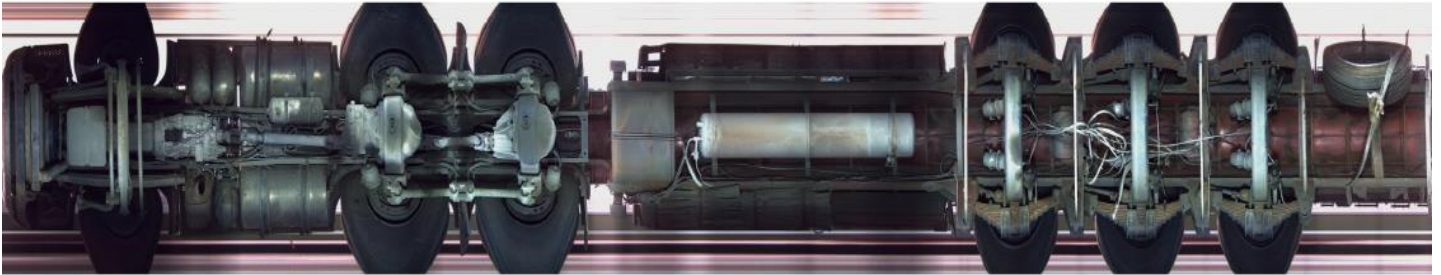


UNDER VEHICLE SURVEILLANCE SYSTEM



CW-UVS-PF650 Dual-mode Line Scan/Area Scan Under Vehicle Surveillance System

The global security situation continues to be volatile, and the threat of terrorism is the number one risk in many regions, and the detection of explosives and weapons has become a key element of risk reduction. Experienced security personnel understand that the chassis of a vehicle is an important threat vector that needs to be addressed when it comes to preventing terrorist activities. Manual inspections of guards have long been the norm, but new technologies have brought new and more efficient options for chassis inspections.

Integrated solution for vehicle safety

CHENGWEI TECHNOLOGY UVSS CW-UVS-PF650 is an efficient hardware and software-based system for remote monitoring of chassis, automatically generating high-quality images that allow operators to easily identify objects that are not part of the vehicle chassis.

CW-UVS-PF650 provides solutions for customs control, border management, rail infrastructure and logistics, and is an indispensable tool for maintaining safety and security.

Advanced Dual-mode scanning innovative solution

CHENGWEI TECHNOLOGY UVSS CW-UVS-PF650 supports both area scanning and line scanning dual working modes, meeting users' needs in any scenario.

Key features

HIGH QUALITY UNDERCARRIAGE SCANNING

- Built in ISP SPEED DETECTOR (ISD), there for no strict requirement for the speed of the vehicle. The image quality will not be affected no matter vehicle changing speed, or even stop and move. The system provides a complete colored image of the vehicle's undercarriage.
- Supports speeds up to 60 km/h.

Suitable for harsh environments

The scanning camera is designed with an all-aluminum heat dissipation housing and built-in heating device, which can operate stably in harsh environments from -40 to 70 degrees Celsius.

Proprietary FOD (Foreign Object Detection) algorithm

The system is capable of automatically identifying and highlighting any change or difference between a newly scanned vehicle's undercarriage and the undercarriage of the reference image of the same or similar car without the intervention of a system operator.

Photos of the main components



under vehicle surveillance camera system



ANPR camera



Face camera



Computer



LCD Display



Control Host

Specifications of the main components

	Item	Spec
Fixed under vehicle surveillance camera system	Camera	24MP
	Vertical resolution	4K
	Image resolution	4096*15000: 80 million pixels
	Scan model	Dual-mode (Area scan / Line scan)
	View angle of lens	180°
	Speed limit	0~60km/h
	Height of Vehicle chassis	40~3000mm

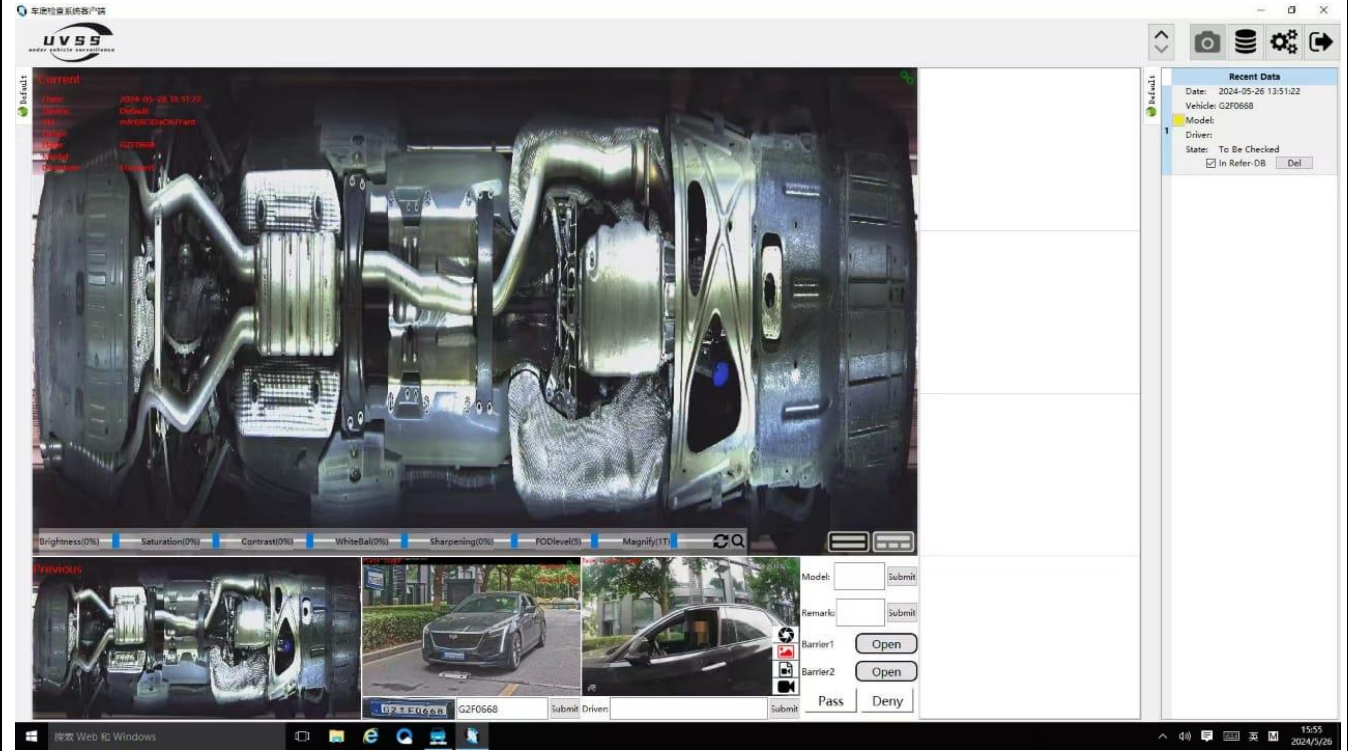
	Width of Vehicle Chassis	≤4500mm
	Operating Temperature	-30℃ ~ + 70℃
	Power Consumption	24V 150-watt
	Power Supply	160-240 VAC
	Load Bearing Capacity	50 tons
	Changing speed scanning	Support
	LED	480W * 4 sets
	Protection level	IP68

Number plate recognition camera	Operating Temperature	-40℃ ~ + 70℃
	LED	20W * 4 sets
	Image Sensor	1/1.8" CMOS
	Image Resolution	2688 (H) × 1520 (V) (OSD black edge is not included)
	Electronic Shutter Speed	Auto/Manual 1/25 s–1/10,000 s
	Max. Detection Speed	60 km/h
	Scanning System	progressive scanning
	Focal Length	2.7 mm–12 mm
	Field of View	H: 98.1°–46.1°; V: 54.0°–26.0°; D: 114.6°–52.8°
	Focus Control	Auto, area focus, manual
	Lens Type	Motorized vari-focal
	Illuminator Number	3 (White LED illuminator with IR light)
	Illuminator Color Temperature	3000 K
	Illumination Distance	8 m (26.25 ft)
	Infrared Wavelength	850 nm
	Image Encoding Format	JPEG
	Image Setting	Brightness; contrast; saturation; gamma; sharpness; gain; white balance
	Day/Night	IR filter, support three modes: color, B/W, auto
	WDR	140 dB
	White Balance	Auto; Regional Custom; Manual; Outdoor; Natural; Street Lamp

	Digital Detail Enhancement (DDE)	Yes
	OSD Overlay	Supports overlay of time; address (position of channel), lane (number/direction), plate (number and color), vehicle (color and type)
	Capture Distance	2.5 m–6 m (8.20 ft–19.69 ft)
	Detected Width	3 m–4 m (9.84 ft–13.12 ft)
	Capture Rate	In the recommended installation and lighting condition, the vehicle capture rate $\geq 99\%$
	Power Supply	12 VDC, 2 A, PoE 802.3at; max 20 W

	Power Consumption	Power consumption in different conditions:
		No lighting < 10 W
		Lighting <20 W
	Product Dimensions	380.9 mm × 154.1 mm × 104.3 mm (15.00" × 6.07" × 4.11")
	Net Weight	2.28 kg (5.03 lb)
	Storage Humidity	≤95% (RH), non-condensing
	Storage Temperature	–40 °C to +70 °C (–40 °F to +158 °F)
	Operating Temperature	–30 °C to +65 °C (–22 °F to +149 °F)
Face camera	Compression	H.265/H.264M/H.264H/H.264B
	Resolution	1080P(1920*1080)
	Frame Rate	1080P(1~25/30fps)
	Bit Rate Control	CBR VBR
	Bit Rate	H.264:80kbps~10Mbps
	Day/Night	Auto(ICR)/Color/B/W
	BLC Mode	BLC,HLC,WDR(140db)
	White Balance	Auto/Manual
	Gain Control	Auto/Manual
	Power Supply	POE+(802.3at)
	Power Consumption	17W
	Operating Conditions	-30°~+60°,Less than 95% RH
	Protection level	IP66

Computer	Housing material	Aluminum alloy
	CPU	Intel i5 5200U
	Graphics Card Type	Intel HD Graphics 5500
	Display resolution	2560x1600@60Hz
	RAM	16G
	ROM	1T SSD（Support dual hard drives）
	Network	RJ45*2
	PW-on After PW-Fail	Support
	USB	USB3.0*4, USB2.0*2
	COM	RS-232*6
	HDMI	1
	VGA	1
	Power supply	12VDC, 5A
	Operating Temperature	-10~ +60 centigrade
	Shock-resistant	5-19HZ/1.0mm amplitude; 19-200HZ/1.0g acceleration
	Dimension	213*140*52MM
	Weight	About 2KG
LCD display	Panel Size	23.8 inch
	Panel Type	IPS
	Brightness	300 cd/m ²
	Response Time	5ms
	Refresh Rate	100Hz
	Widescreen	Yes
	Interface Type	HDMI, VGA
	Display Ratio	16:9
	Resolution	1920*1080
	Contrast Ratio	1000:1
	Power Supply	12VDC, 2A
	Power Consumption	24W
	Weight	2.8KG



Management software	System linkage	Support barrier control
	Image processing	Support image zoom function, magnification ≥ 32 levels
	Multiple surveillance cameras	Support 4 cameras, real-time preview recording of vehicle passing video
	Image comparison	The system will automatically retrieve the historical database for comparison and analysis