

SCANNERS

AI-Powered Under Vehicle Inspection System for High-Security Checkpoints

Drive-over undercarriage imaging system that captures a full-resolution panoramic scan of every vehicle's underside in under 2 seconds, with AI-powered anomaly detection that flags improvised devices, foreign attachments, and structural modifications.



[Under Vehicle Inspection System](#)

[Official Brochure](#)

SOLUTION SNAPSHOT

<p>SCAN SPEED</p> <p>< 2 s at 10 km/h</p>	<p>IMAGE RESOLUTION</p> <p>0.5 mm/pixel</p>	<p>VEHICLE WIDTH</p> <p>Up to 3.5 m</p>
<p>LOAD RATING</p> <p>20 tonnes axle load</p>	<p>CAMERA ARRAY</p> <p>Linear CCD, colour + IR</p>	

Built for Real Operations

01

Embeds a high-resolution line-scan camera array into a flush-mounted floor unit that withstands the weight of heavy vehicles. The integrated AI engine compares each scan against a reference library of clean undercarriages and highlights deviations in real time, dramatically reducing the time operators need to review images at busy checkpoints.

APPLICATIONS

Where This Product Fits

03

Embassies & Government Perimeters

Screens every entering vehicle for vehicle-borne improvised explosive devices (VBIEDs) and hidden contraband without slowing convoy access.

Military Bases & Checkpoints

Provides a fast secondary check layer at base entry points, supplementing guard patrols with objective, recordable evidence.

Ports & Border Crossings

Detects undercarriage modifications and smuggled payloads on trucks, buses, and passenger vehicles in high-traffic lanes.

SPECIFICATION

Technical Details

05

Scan Speed	< 2 s at 10 km/h
Image Resolution	0.5 mm/pixel
Vehicle Width	Up to 3.5 m
Load Rating	20 tonnes axle load
Camera Array	Linear CCD, colour + IR
Lighting	LED array, auto-compensated
Storage	1,000,000 scans on-board
Interface	Gigabit Ethernet / TCP-IP
Operating Temp	-30 °C to +60 °C
Warranty	3 years hardware

"The AI anomaly engine flagged a suspicious attachment that our guards missed during a manual sweep. That single event justified the entire procurement."

Base Security Commander, Allied Forces Logistics Hub

Chief of Access Control

RESOURCES

Media & Questions

Q. Does installation require excavation?

A. Flush-mount installation requires a shallow trench cut of approximately 80 mm depth. Our team handles civil works and commissioning as part of the delivery package.

Q. What is the mean time between failures?

A. The floor unit is rated for MTBF > 50,000 hours. There are no moving parts in the drive-over array.

Q. Can scans be searched retrospectively?

A. Yes. All scans are indexed by date, time, and ANPR-captured plate number, allowing investigators to retrieve historical images in seconds.

Ready to deploy Under Vehicle Inspection System?

Talk to Nirikhon for product consultation, installation planning, integration support, and enterprise deployment.

Hotline: 01712345678 | Website: www.nirikhon.com