



A PROUD MEMBER OF FARD GROUP INTERNATIONAL

FARD GROUP INTERNATIONAL

Established in 1958, FARD GROUP INTERNATIONAL is the first in the field of weighing and measurement systems and has proudly remained the leading manufacturer of technologically advanced static and dynamic weighing solutions. Applying the latest technology merged with the wisdom of industry experience, FARD GROUP INTERNATIONAL has positioned itself as a key player in the world of weighing and measurement systems and aspires to maintain its contribution as a leader in the future of the weighing industry.



65 Years of Experience in Weighing & Measurement Technology

110

**HIGH SPEED
WEIGH-IN-MOTION
INSTALLED**

19500

**INDUSTRIAL TRUCK
SCALES INSTALLED**

65

**YEARS OF
EXPERTISE**

498

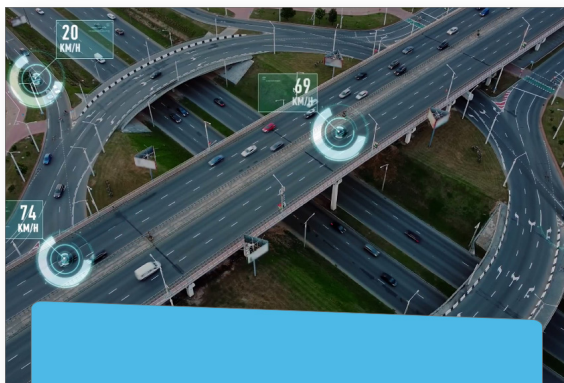
EMPLOYEES



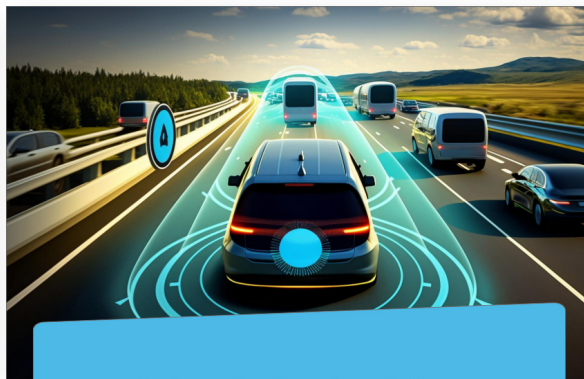
High Speed Weigh-In-Motion



High Speed Track Weighing



**Police Assistance Speed
Detection System**



**Automatic Number Plate
Recognition (ANPR) System**



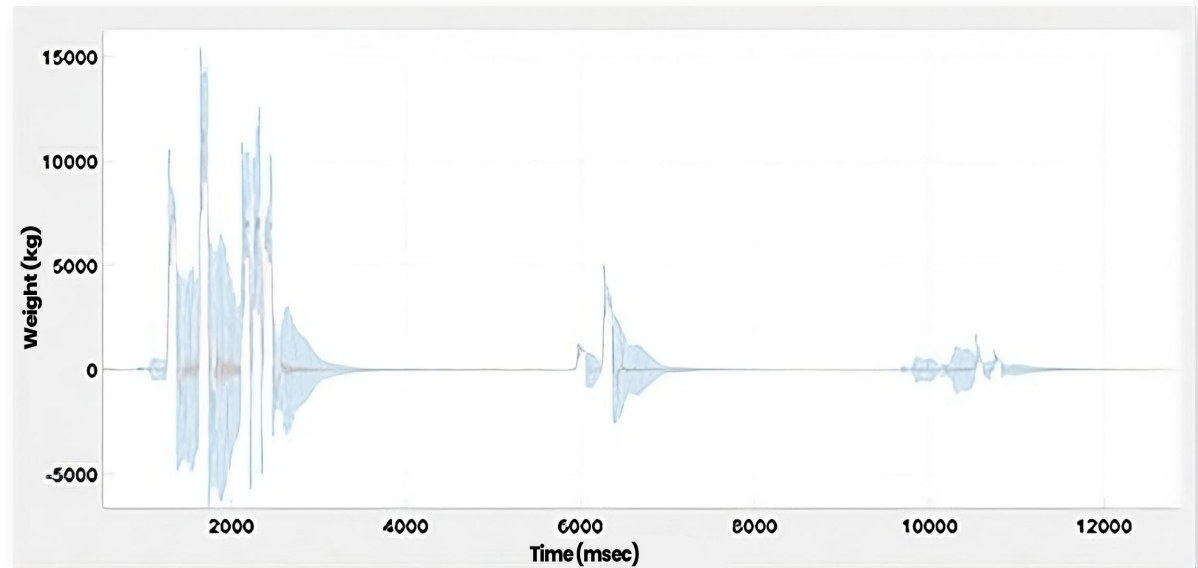
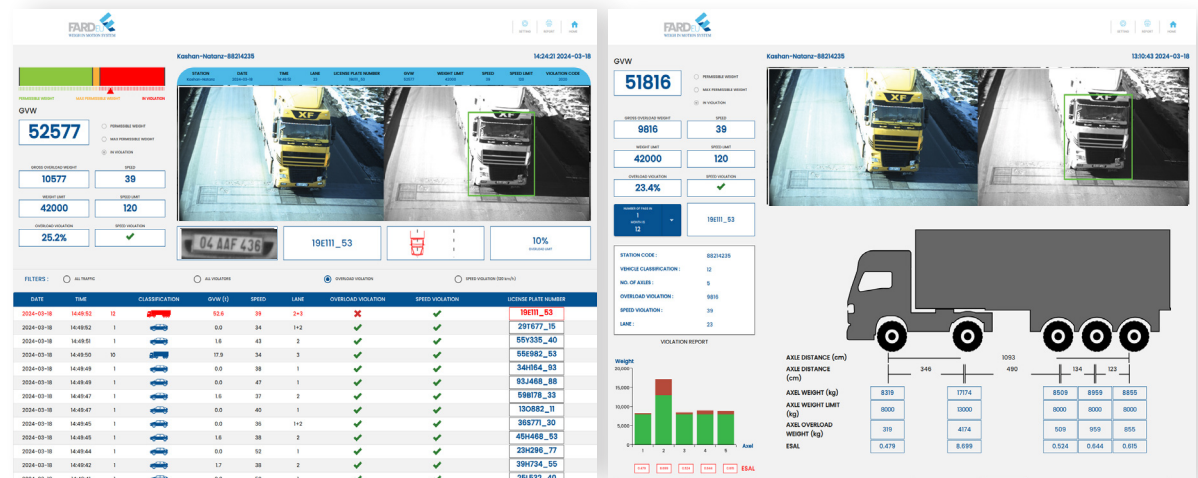


NEW
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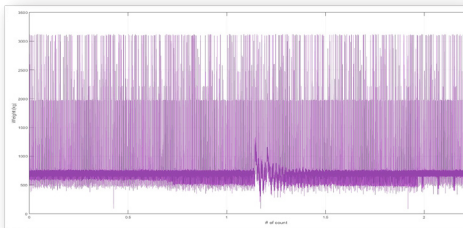
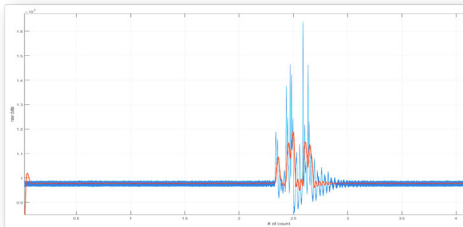
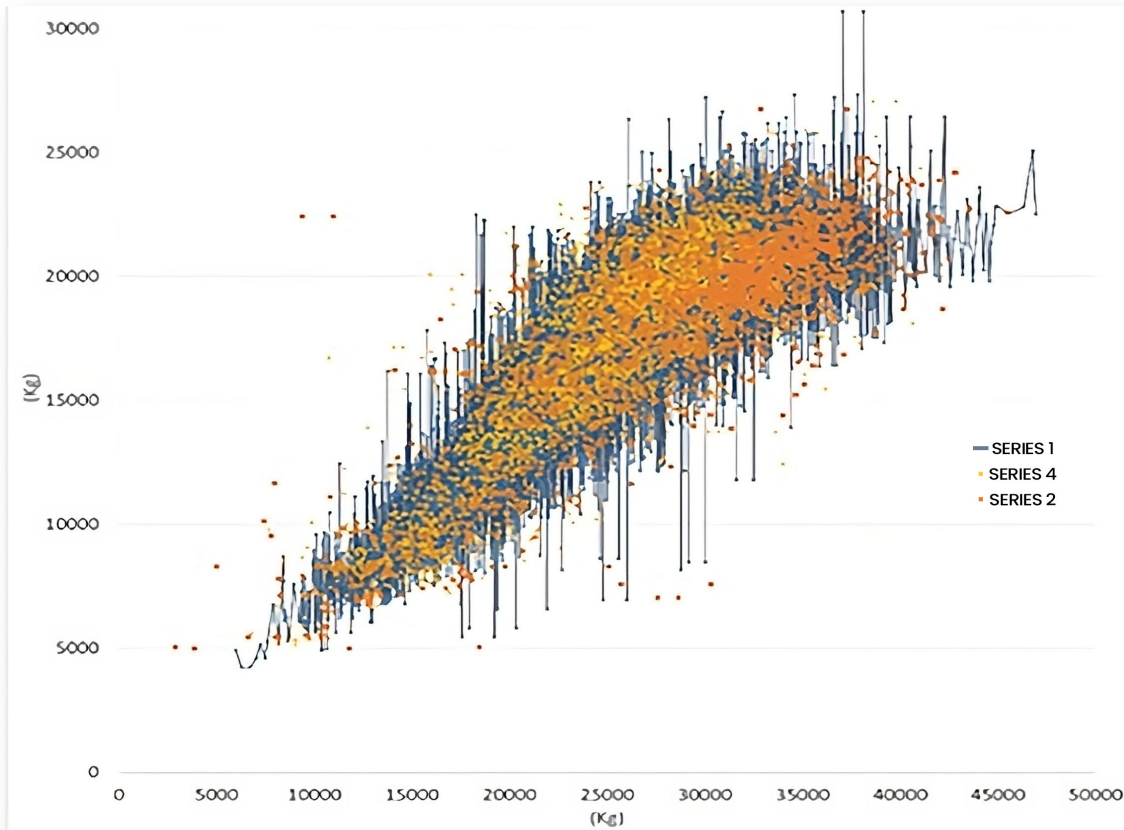
**High Speed Weigh-In-Motion
for Direct Enforcement**

Key Features:

- Extensive and live data analysis system for real-time vehicle weight measurement and direct law enforcement
- Two platforms per lane, achieving %97 GVW accuracy
- State-of-the-art, 23kHz, IP69 load cells, for possibility of low and high speeds detections
- Vehicle weighting speed range:
- 5 Km/h to 250 Km/h
- Operating temperature range:
- -30 °C to 80+ °C
- Camera-based speed detection for added accuracy
- OCR (Optical Character Recognition) technology combined with LPR (License Plate Recognition) and USDOT number reader, for vehicle image capturing and classification
- High durability and minimum maintenance requirements
- Full compliance with ASTM E1318 and COST 323







System Accuracy	
Accuracy class acc. to COST 323	A(5)
Gross Vehicle Weight Error	±5 %
Group Axle Load Error	±7 %
Single Axle Load Error	±8 %
Confidence Level	92 %
Speed Error	±3 %
Operating conditions	
Axle load	0 ... 50 tons
Gross Vehicle Weight	Unlimited
Temperature	-30 ... +80 C
Speed	5 ... 250 km/h

Data Analysis & Weight

Estimation Methods

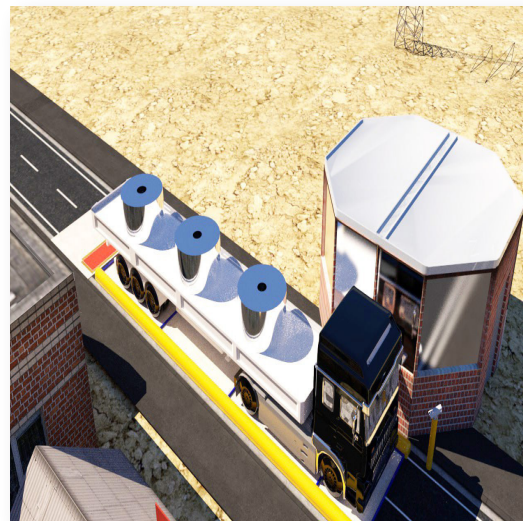
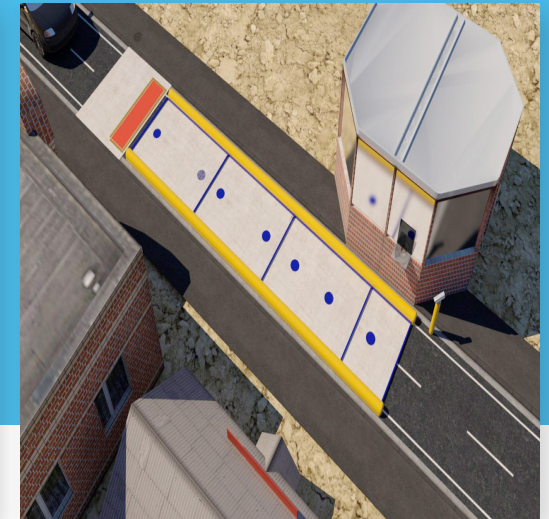
- Exceedingly high sampling rate of 2.5 mega samples per second, enabling the detection of vehicles with the speeds of 200 Km/h and above.
- 6 Mbit/s data collection rate for each platform and 24 Mbit/sec for 4 platforms at once.
- Minimum dependency to International Roughness Index (IRI) and road geometry
- Minimum system impression due to vehicle suspension systems (solid leaf spring or air type)

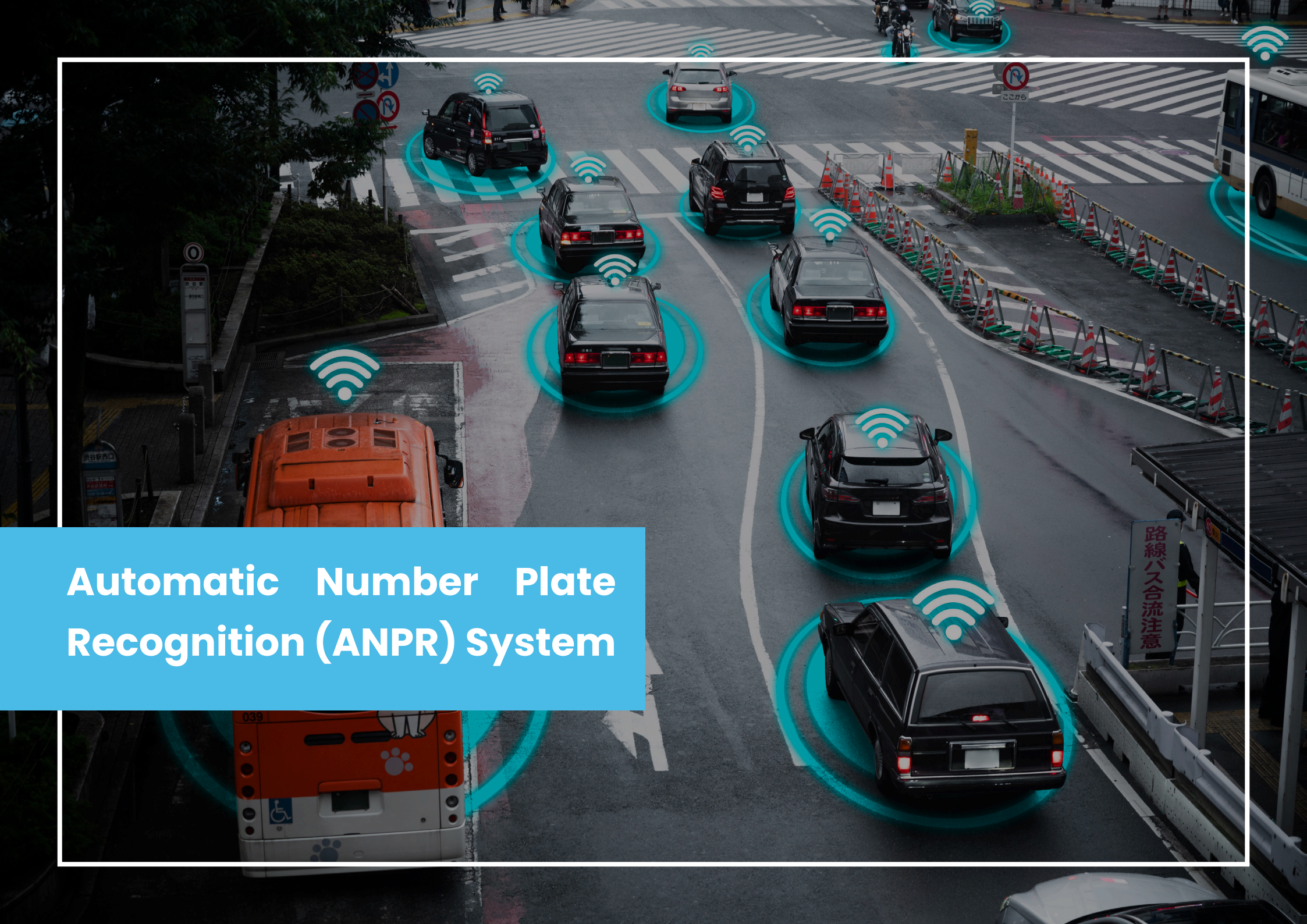


**Low Speed
Weigh-In-Motion**

Main Features:

- Unmatched design to achieve excellent accuracy
- Ability to weigh the axle load of all road vehicles
- Ability to weigh the axle group load of all road vehicles
- Employing the best load cells
- Prefabricated foundation with high strength and accuracy
- Available as both pit-mounted and above ground
- Ability to weigh vehicles with a speed of up to 10km/h
- Equipped with ANPR (Automatic number-plate recognition)
- Ability to be connected to online WIM software
- Ability to define time periods for data reporting
- %0.05 accuracy in group loads weighing



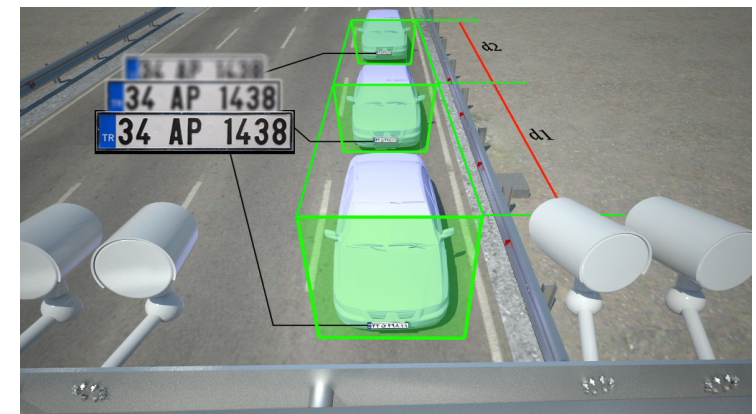
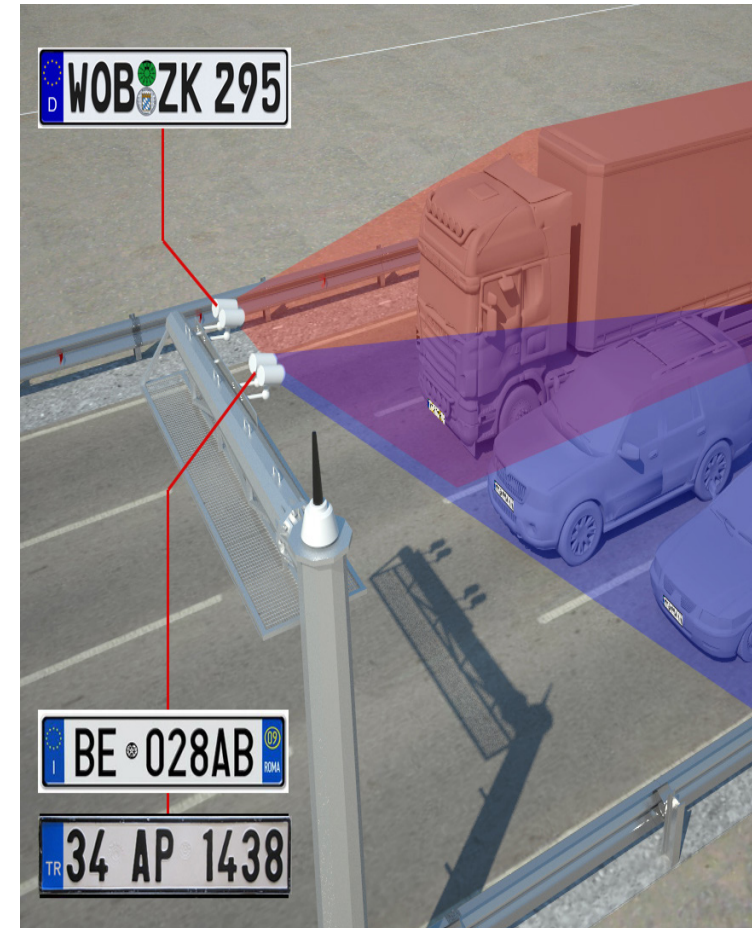


Automatic Number Plate Recognition (ANPR) System

All-Weather, High-Resolution ANPR Camera System For License Plate Recognition, Speed Detection, and Direct Enforcement.

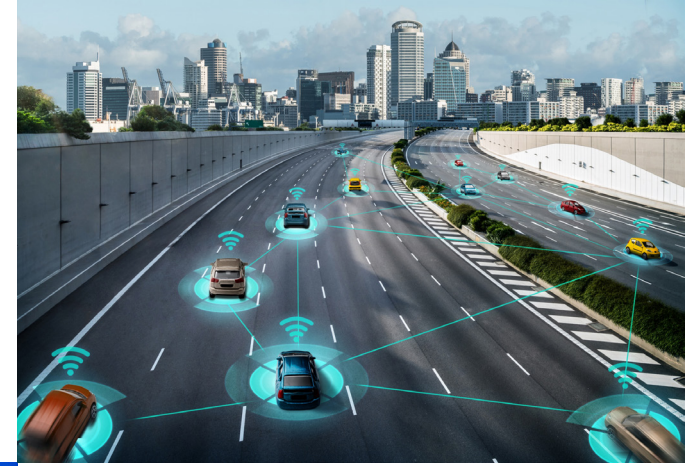
Technical Features:

- Easy installation and maintenance
- Highly accurate license plate localization and detection
- 97% accuracy of the license plate recognition system
- 98% accuracy of the speed detection system
- Equipped with overview and ANPR cameras
- High dynamic range and wide viewing angle cameras
- Capability of training and reading international license plates
- Invisible IR illumination for night and dark environments
- Adaptive camera calibration system
- Non-stop, 24 hours/7 days operation
- IP6 protection





- **Highways**
- **Urban and Rural Roads**



- **Toll Stations**

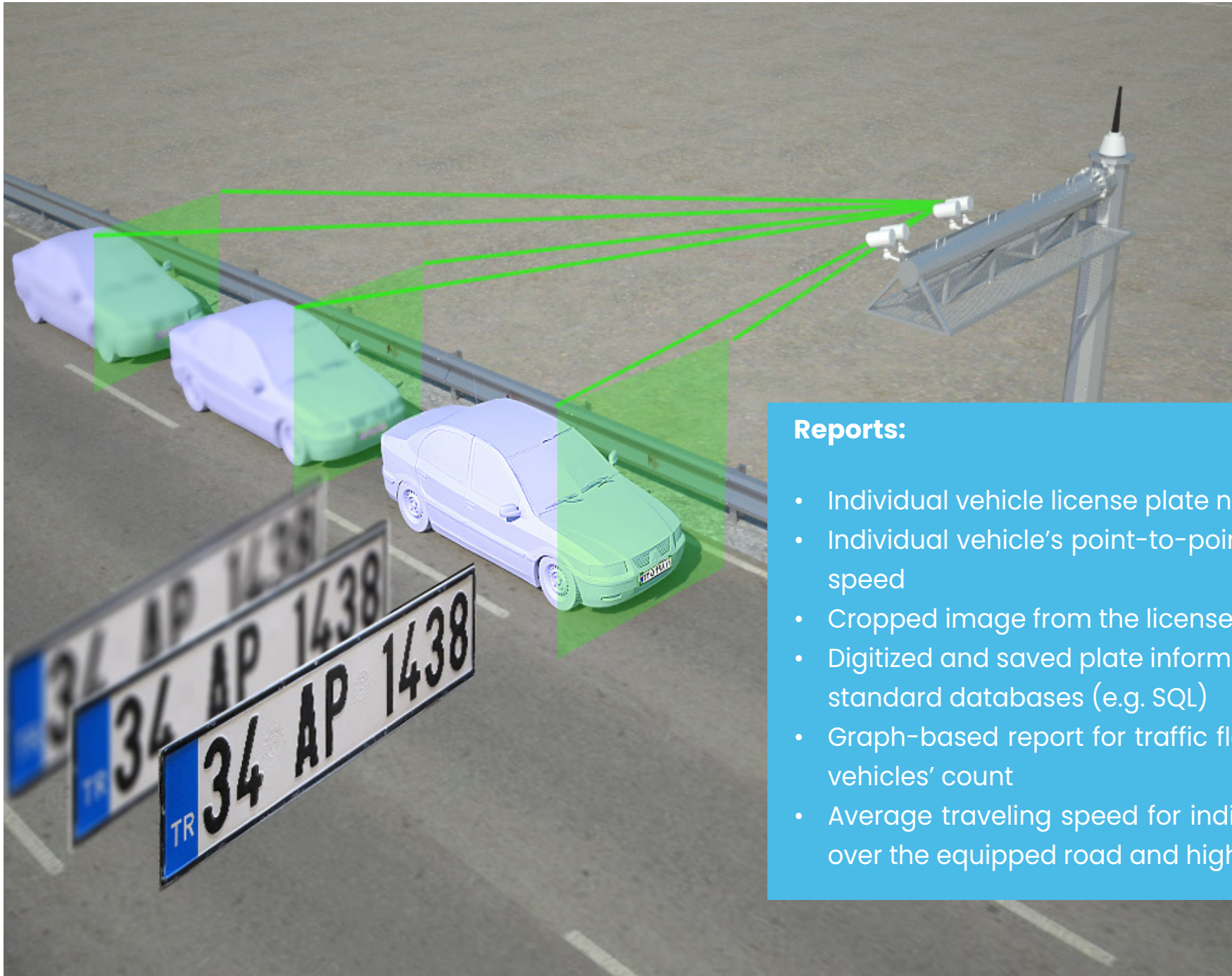


- **Petrol Stations**




- **Car Park**
- **Military and Governmental Sites**





Reports:

- Individual vehicle license plate number
- Individual vehicle's point-to-point and average speed
- Cropped image from the license plate number
- Digitized and saved plate information in various standard databases (e.g. SQL)
- Graph-based report for traffic flow, speed, and vehicles' count
- Average traveling speed for individual vehicles over the equipped road and highways

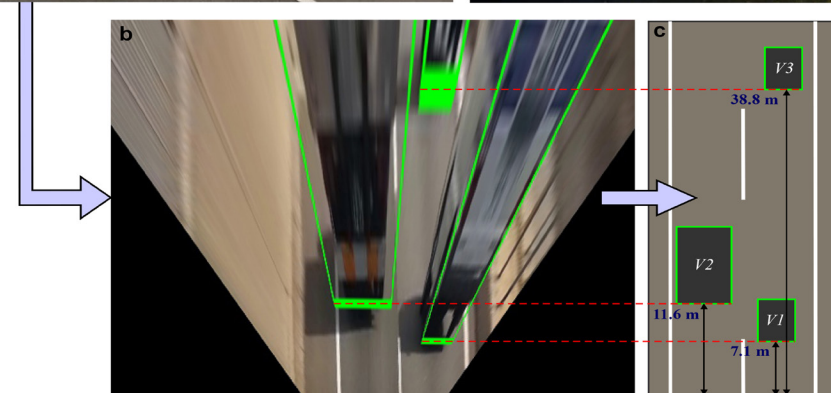
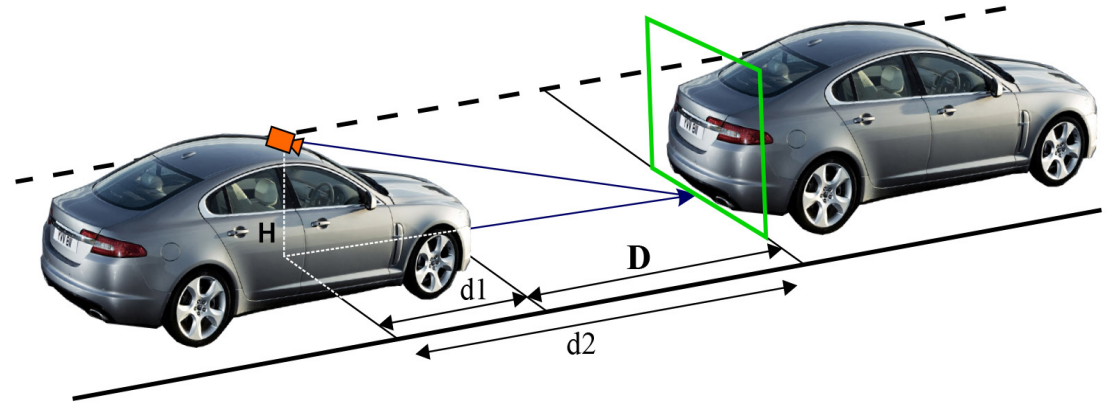
A futuristic highway scene with a speed detection system overlay. The image shows a multi-lane highway with several vehicles, including a white van in the foreground, a white bus, and a dark sedan. A large, semi-transparent blue cone of light emanates from the rear of the white van, extending forward along the road. This cone is composed of concentric circles and lines, suggesting a radar or laser-based detection system. The background features a green landscape with hills and a cloudy sky. A blue circular icon with a white arrow is visible on the left side of the road. The overall scene is set during the day with soft lighting.

Police Assistance Speed Detection System

Autonomous Video Capturing System Accurately Measures & Detects the Relative & Absolute Speed of the Vehicles Driving in Front of the Law Enforcement Vehicle.

Technical Features:

- Easy dash-mount and portable system, suitable for all-type police cars
- Speed detection range: 250 -10km/h
- Speed detection accuracy: %98
- Equipped with GPS localization and tracking system
- Online ticketing option
- Online record and report of vehicles' image, speed, and location
- Advanced computer-vision based monocular system
- Low-power battery drive system
- Adaptive camera calibration system
- 24-hour day and night operation
- 5 Years warranty

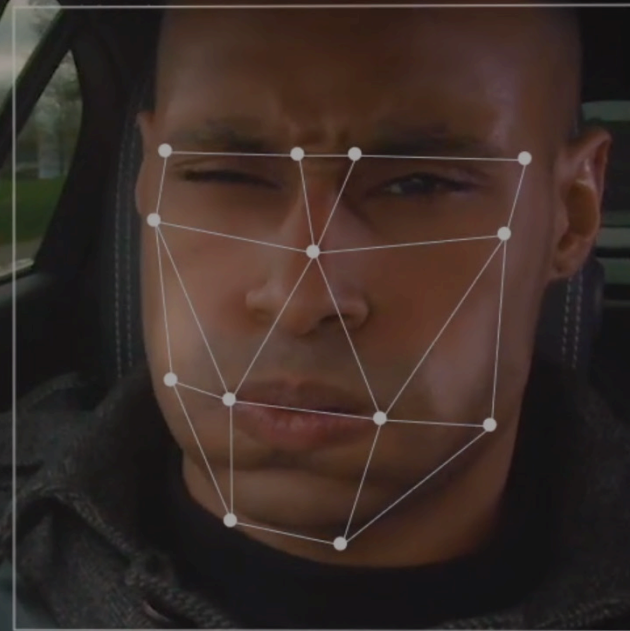


Autonomous Advanced Driver Assistance System

SCANNING

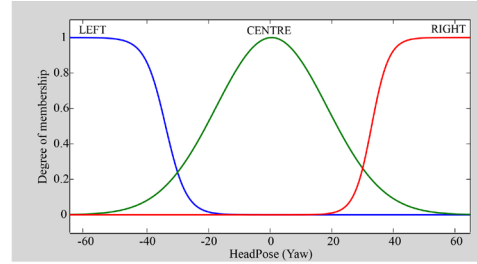
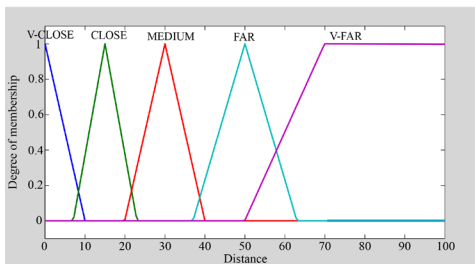


100%





Fuzzy Membership Functions



Driver Distraction Recognition System A Highly Advanced Warning System That Detects Driver's Distraction & Drowsiness, Preventing Fatal Imminent Crashes.

Key Features:

- Highly accurate blink-rate detection
- Intelligent closed-eye detection system
- Haptic and audio warning system
- Automatic day and night mode operation
- Drowsiness detection
- Head nodding detection
- Distraction detection
- Driver's head pose detection
- Eye-gaze analysis system
- Safe IR illumination for night mode monitoring
- Easy dash-mount and portable system, suitable for all types of vehicles
- Equipped with GPS localization and tracking system
- Online driver's status report
- Low-power battery operation system

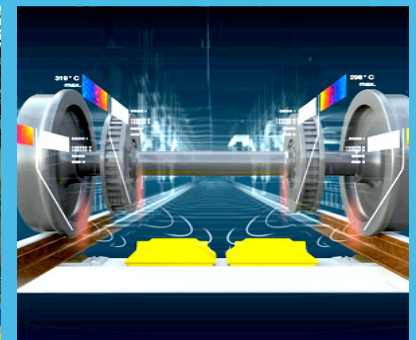
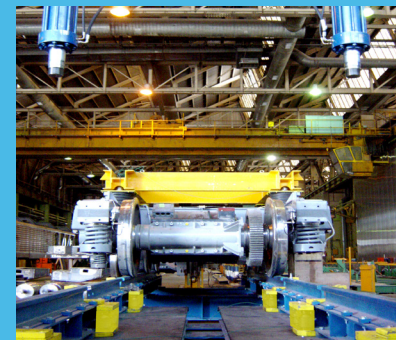
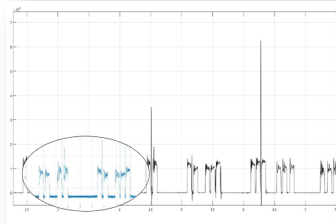
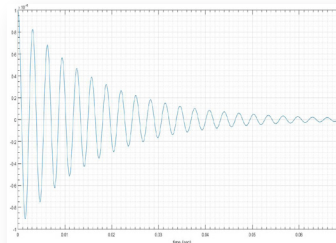
An aerial, high-angle photograph of a large high-speed rail station at night. The station is filled with numerous parallel tracks stretching into the distance. Several high-speed trains, including a prominent white and red train, are visible on the tracks. The scene is illuminated by artificial lights, creating a dramatic, blue-toned atmosphere. A blue rectangular box is overlaid on the lower-left portion of the image, containing the text "High Speed Track Weighing".

High Speed Track Weighing

Key Features:

- Automatic load cell-based track Weighing-In-Motion
- Legal for Trade
- Speed Detection Range: 5Km/h to 80Km/h, with 99.5% accuracy
- Applicable for the majority of wagon types
- Minimum Installation downtime
- Track stabilization option via ballast bonding
- No transit speed limit
- Flat wheel detection system
- Hot wheel detection system
- Wheel weighing system
- Axle weighing system
- Unbalance axle detection system
- Bogie weighing system
- Wagon weighing system

System Specifications	
Capacity	50t per axle
Accuracy	±0.5% wagon ±0.25% total train
Speed	5 ... 80 km/h
Operating conditions	
Axle load	0 ... 50 tons
Gross Wagon Weight	Unlimited
Operating temperature	-30 ... +80 C
Speed	5 ... 250 km/h





FARD GROUP INTERNATIONAL FACTORIES





Note

A series of horizontal dotted lines for writing notes.



FARDEU

AHEAD OF ITS TIME

65 YEARS OF EXPERTISE

A PROUD MEMBER OF
FARD GROUP INTERNATIONAL



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