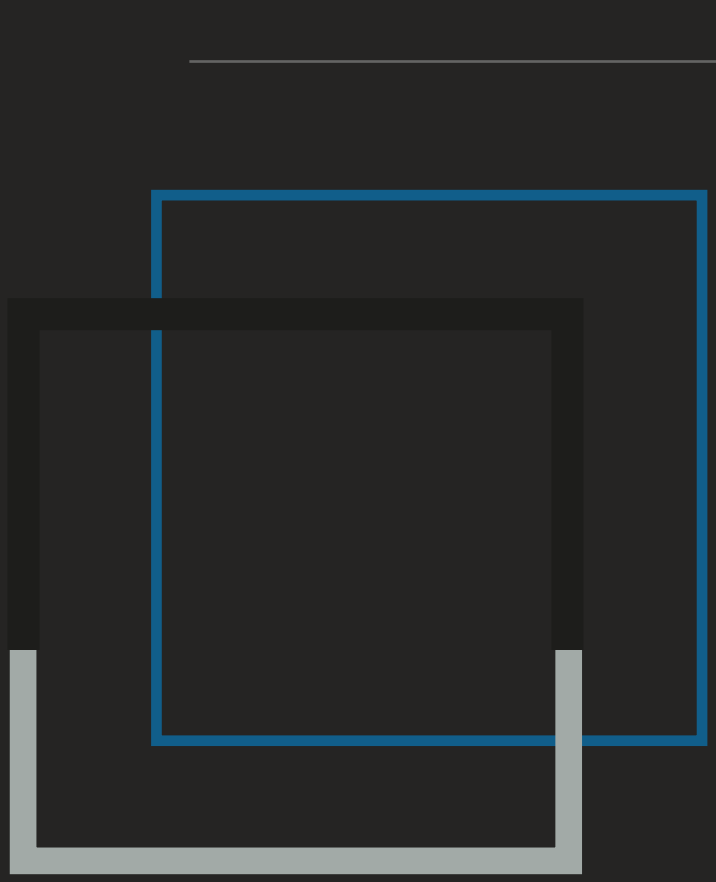


EES

Electronic Enforcement Systems

Complete Mobility Provider.

INTEGRATED SYSTEMS & SYSTEMS DESIGN

Who are we?

Founded in 2009, ISSD provides solutions to create added value in the field of intelligent transport. Its areas of expertise include traffic management, electronic applications and consulting services. With the slogan 'Complete Mobility Provider', ISSD contributes to mobility from A to Z by working for a greener, more efficient and accessible transport future in more than 5000 locations in 15 countries.

ISSD is located in METU Teknokent, Turkey's most prestigious technology development zone. The company stands out from its competitors with its product portfolio, technical expertise, R&D capabilities and long-term customer relationships. ISSD's young and talented team is committed to creating value and aims to become a global leader by delivering this value to the world.

EES
Elevates Traffic

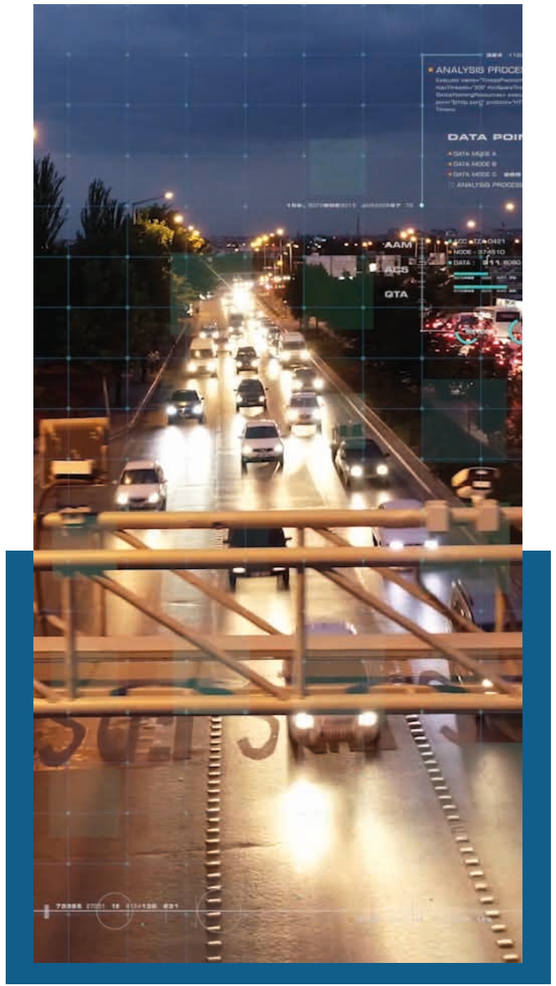
EES
Electronic
Enforcement Systems

Traffic accidents, which increase as a result of rapidly growing vehicle ownership in our country, necessitate the use of electronic systems in traffic control.

We developed the following enforcement systems by using Automated Number Plate Recognition:

- Red Light Enforcement Systems
- Speed Corridor Enforcement Systems
- Parking Enforcement Systems
- Safety Lane Enforcement Systems
- Mobile Enforcement Systems
- Overheight Detection Systems

Our systems are integrated into the POLNET system used by the General Directorate of Security and are available 24/7 under all weather conditions with 96% accuracy level.



Automated Number Plate Recognition System
POINTR Moonlight, POINTR P3000

Automated Number Plate Recognition System allows the vehicle license plates to be read, stored and analyzed.

Automated Number Plate Recognition System

- Integrated License Plate Recognition System
- High Resolution Camera
- Continuing to work by keeping records in memory in network connection failures
- Night vision with IR Led
- IP 66, IK10 and NEMA 4x certified enclosure
- Ability to work 24/7
- Brand, type and color recognition
- Sending data to a central server via FTP
- Average speed violation detection with central software

Easy Operation, Easy Installation and Easy Integration

Highway Number Plate Recognition Systems in compact structures can be mounted on roads, bridges, highways and art structures.

Automated Number Plate Recognition System Applications

- Red Light Enforcement Systems
- Speed Corridor Enforcement Systems
- Parking Enforcement Systems
- Mobile Enforcement Systems
- Safety Lane Enforcement Systems
- Overheight Detection Systems

Technical Specifications
POINTR Moonlight, POINTR P3000

System Specifications

Type	Integrated License Plate Recognition System. All In One Unit (Camera, IR Source, OCR Proccessor Unit)
Resolution	3 MP, 2048 x 1536 CMOS Color Camera
Lens	Varifocal Lens (8mm ~ 50 mm)
Lighting	64 / 6 Pieces High Power Infrared Led, 850 nm (Moonlight / P3000)
Storage	128 GB SSD (Upgradeable to 512 GB)
Video Format	2048x1546 30 FPS (H.264, H.265, MJPEG, MPEG4)

Network

Network	10/100 Base-T Ethernet (Ops. PoE)
Protocol	TCP/IP, UDP, HTTP, FTP, SMTP, NTP, DHCP, RTP
Instant Transfer	Restrictable 1 ~ 100 Instant Transfer to Defined FTP Server
Time Sync	NTP Server
Relay Output	Included

Environmental

Cooling/Heating	Included
Operating Humidity Range	%0 ~ %90
Operating Temperature	-40 ~ +85
Sunroof	Included
Enclosure	IP66 / IK10 / NEMA 4X

ANPR Specifications

Horizontal Recognition	4,2 Metre
Photo Tagging	Included (Plate, System Name, Date, etc.)
License Plate Recognition	Plates with Non-Reflective Floor (Rectangular, Square)
Vehicle Recognition	96% Capture 96% Plate 80% Type 70% Brand 70% Color Accuracy Rate

Certificates

CE	Included
Certification	LVD EN 61000 EN 60950 EN 55016 EN 60068

Power

Operating Voltage	24 VAC
Power Consumption	30 ~ 50 W

Outdoor Unit

Dimensions	164 x 132 x 404 mm (GxYxU)
Weight	4.5 Kg

Red Light Enforcement System
POINTR K3000

Red Light Enforcement System POINTR K3000, detects vehicles committing red light violations. The system contributes to increased traffic safety by minimising accidents caused by violations at signalised intersections.

Red Light Enforcement Recognition Systems

- Integrated License Plate Recognition System
- High Resolution Camera
- Continuing to work by keeping records in memory in network connection failures
- Night vision with IR Led
- IP 66, IK10 and NEMA 4x certified enclosure
- Ability to work 24/7
- Sending data to a central server via FTP
- Wide Angle Vision Camera
- High Power Flash Unit
- Virtual loop

POINTR K3000 Capabilities

- Line–based red light violation detection
- Number plate recognition
- 24/7 operation
- Remote access
- Automatic standby in case of traffic signal malfunctions
- Ability to switch off the system from the centre when the traffic police manage the intersection
- High resolution video recording
- Automatic fine receipt arrangement

Red Light Enforcement System Day / Night

The images obtained from the Red Light Enforcement System and the processed data (location, license plate, vehicle brand, vehicle color, date and time of the enforcement) are automatically transmitted to PLATÜRK Software and fine receipts are automatically generated and presented to the operator's approval.

Technical Specifications
Red Light Enforcement System

System Specifications

Type	Integrated License Plate Recognition System. All In One Unit (Camera, IR Source, OCR Proccessor Unit)
Resolution	3 MP, 2048 x 1536 CMOS Color Camera
Lens	Varifocal Lens (8mm ~ 50 mm)
Lighting	620 nm
Storage	128 GB SSD (Upgradeable to 512 GB)
Video Format	12 MP 3000x4000 30 FPS (H.264, H.265, MJPEG, MPEG4)
Enforcement Camera Feature	12 MP 3000x4000 30 FPS (H.264, H.265, MJPEG, MPEG4)

Network

Network	10/100 Base-T Ethernet (Ops. PoE)
Protocol	TCP/IP, UDP, HTTP, FTP, SMTP, NTP, DHCP, RTP
Instant Transfer	Restrictable 1 ~ 100 Instant Transfer to Defined FTP Server
Time Sync	NTP Server
Relay Output	Included

Environmental

Cooling/Heating	Included
Operating Humidity Range	%0 ~ %90
Operating Temperature	-40 ~ +85
Sunroof	Included
Enclosure	IP66 / IK10 / NEMA 4X

ANPR Specifications

Horizontal Recognition	4,2 Metre
Photo Tagging	Included (Plate, System Name, Date, etc.)
License Plate Recognition	Plates with Non-Reflective Floor (Rectangular, Square)
Vehicle Recognition	96% Accuracy Rate

Certificates

CE	Included
Certification	LVD EN 61000 EN 60950 EN 55016 EN 60068 TS 13789

Power

Operating Voltage	24 VAC
Power Consumption	30 ~ 50 W

Outdoor Unit

Dimensions	164 x 132 x 404 mm (GxYxU)
Weight	4.5 Kg

Speed Corridor Enforcement System
POINTR Moonlight, POINTR P3000

Speed Corridor Enforcement System calculates the average speeds of the vehicles between two specified points on the highways and detects the vehicles that violate the rules..

System Details

- Integrated License Plate Recognition System
- High Resolution Camera
- Continuing to work by keeping records in memory in network connection failures
- Night vision with IR Led
- IP 66, IK10 and NEMA 4x certified enclosure
- Ability to work 24/7
- Brand, type and color recognition
- Sending data to a central server via FTP
- Average speed violation detection with central software

The Speed Corridor Enforcement System is comprised of number plate recognition units positioned at the entry and exit points of a designated corridor, along with central software that computes average speeds based on the collected number plate data. By measuring the travel time of vehicles from entry to exit and factoring in distance information, the system determines average speeds. Equipped with high-resolution cameras, it can detect vehicles on single or multi-lane roads, transmitting relevant details such as location, time, date, distance, direction, vehicle speed, and speed limit violations to a centralized software.

Unlike radar-based systems, this setup does not require calibration, and its emphasis on average speed enforcement aims to encourage compliance with speed limits across the entire route, contributing significantly to accident prevention resulting from excessive speed. The system also features safeguards such as audible warnings in the event of malfunctions or unauthorized interference.

Speed Corridor Enforcement System Features

- Remote control
- 24/7 speed enforcement
- High resolution photography of the offending vehicle and license plate identification
- Video recording with external camera

Technical Specifications
Speed Corridor Enforcement System

System Specifications

Type	Integrated License Plate Recognition System. All In One Unit (Camera, IR Source, OCR Proccessor Unit)
Resolution	3 MP, 2048 x 1536 CMOS Color Camera
Lens	Varifocal Lens (8mm ~ 50 mm)
Lighting	64 / 6 Pieces High Power Infrared Led, 850 nm (Moonlight / P3000)
Storage	128 GB SSD (Upgradeable to 512 GB)
Video Format	2048x1546 30 FPS (H.264, H.265, MJPEG, MPEG4)

Network

Network	10/100 Base-T Ethernet (Ops. PoE)
Protocol	TCP/IP, UDP, HTTP, FTP, SMTP, NTP, DHCP, RTP
Instant Transfer	Restrictable 1 ~ 100 Instant Transfer to Defined FTP Server
Time Sync	NTP Server
Relay Output	Included

Environmental

Cooling/Heating	Included
Operating Humidity Range	%0 ~ %90
Operating Temperature	-40 ~ +85
Sunroof	Included
Enclosure	IP66 / IK10 / NEMA 4X

ANPR Specifications

Horizontal Recognition	4,2 Metre
Photo Tagging	Included (Plate, System Name, Date, etc.)
License Plate Recognition	Plates with Non-Reflective Floor (Rectangular, Square)
Vehicle Recognition	96% Capture 96% Plate 80% Type 70% Brand 70% Color Accuracy Rate

Certificates

CE	Included
Certification	LVD EN 61000 EN 60950 EN 55016 EN 60068 TS 13788

Power

Operating Voltage	24 VAC
Power Consumption	30 ~ 50 W

Outdoor Unit

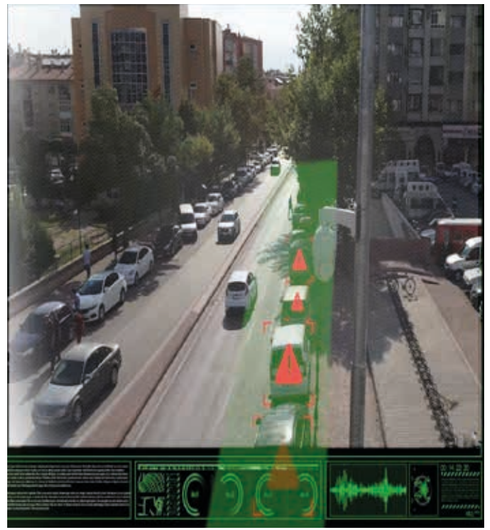
Dimensions	164 x 132 x 404 mm (GxYxU)
Weight	4.5 Kg

Parking Enforcement System
POINTR P2000

The POINTR P2000 system is designed to mitigate parking violations by employing a high-resolution camera with Pan-Tilt-Zoom capabilities and an integrated image processing card. Operating within a 75-meter radius, the system continuously scans areas where parking is restricted, automatically identifying vehicles that exceed the predetermined parking duration limits set by the operator.

Upon detection of a violation, the system records the offending vehicle, determines the duration of the violation, and issues an automatic fine receipt when the violation surpasses the operator-defined threshold time. Additionally, the system's built-in IP camera captures pictures and video recordings of the vehicle during the violation, transmitting this evidence to the central system.

The Parking Enforcement System's processed data, including location, number plate, vehicle brand, color, and date/time of violation, is then forwarded to the PLATÜRK Software, where fine receipts are automatically generated for operator approval. This integrated approach aims to streamline the enforcement process and enhance parking compliance.



Parking Enforcement System Features

- Violation detection within a 75 metre radius
- Automated number plate recognition
- Remote access
- 32 Preset points violation detection
- High resolution video recording
- Automatic fine receipt issuance
- Quick setup

Technical Specifications
Parking Enforcement System

System Specifications

Type	Integrated License Plate Recognition System. All In One Unit (Camera, IR Source, OCR Proccessor Unit)
Resolution	2 MP, 1920 x 1080 CMOS Color Kamera
Lens	Varifocal Lens (8mm ~ 50 mm)
Lighting	64 / 6 Adet High Power Infrared Led, 850 nm (Moonlight / P3000)
Storage	128 GB SSD (Upgradeable to 512 GB)
Video Format	1920x1080 30 FPS (H.264, H.265, MJPEG, MPEG4)

Network

Network	10/100 Base-T Ethernet (Ops. PoE)
Protocol	TCP/IP, UDP, HTTP, FTP, SMTP, NTP, DHCP, RTP
Instant Transfer	Restrictable 1 ~ 100 Instant Transfer to Defined FTP Server
Time Sync	NTP Server
Relay Output	Included

Environmental

Cooling/Heating	Included
Operating Humidity Range	%0 ~ %90
Operating Temperature	-40 ~ +85
Sunroof	Included
Enclosure	IP66 / IK10 / NEMA 4X

ANPR Specifications

Horizontal Recognition	4,2 Metre
Photo Tagging	Included (Plate, System Name, Date, etc.)
License Plate Recognition	Plates with Non-Reflective Floor (Rectangular, Square)
Vehicle Recognition	96% Capture 96% Plate 80% Type 70% Brand 70% Color Accuracy Rate

Certificates

CE	Included
Certification	LVD EN 61000 EN 60950 EN 55016 EN 60068

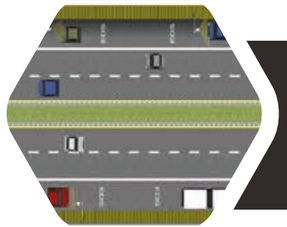
Power

Operating Voltage	24 VAC
Power Consumption	30 ~ 50 W

Outdoor Unit

Dimensions	164 x 132 x 404 mm (GxYxU)
Weight	4.5 Kg

Safety Lane Enforcement System
POINTR E3000



The Safety Lane Enforcement System is a system that allows the license plates of vehicles traveling in the safety lane to be read, stored and the data obtained to be analyzed. Safety Lane Enforcement System consists of image-based license plate recognition unit and central server applications. The license plate recognition unit contains a high resolution camera and embedded processor platform in an IP66 enclosure with built-in IR illumination unit.

The Safety Lane Enforcement System can detect the license plate, brand and color of vehicles 24/7 in all weather conditions. Thanks to the system, these data can be transferred to a desired remote center either wired or wirelessly.

Easy to Use, Easy Installation and Easy Integration
It can be mounted on poles, bridges, highway structures.

Technical Specifications
Safety Lane Enforcement Systems

System Specifications

Type	Integrated License Plate Recognition System. All In One Unit (Camera, IR Source, OCR Proccessor Unit)
Resolution	3 MP, 2048 x 1536 CMOS Color Camera
Lens	Varifocal Lens (8mm ~ 50 mm)
Lighting	64 / 6 Pieces High Power Infrared Led, 850 nm (Moonlight / P3000)
Storage	128 GB SSD (Upgradeable to 512 GB)
Video Format	2048x1546 30 FPS (H.264, H.265, MJPEG, MPEG4)

Network

Network	10/100 Base-T Ethernet (Ops. PoE)
Protocol	TCP/IP, UDP, HTTP, FTP, SMTP, NTP, DHCP, RTP
Instant Transfer	Restrictable 1 ~ 100 Instant Transfer to Defined FTP Server
Time Sync	NTP Server
Relay Output	Included

Environmental

Cooling/Heating	Included
Operating Humidity Range	%0 ~ %90
Operating Temperature	-40 ~ +85
Sunroof	Included
Enclosure	IP66 / IK10 / NEMA 4X

ANPR Specisifications

Horizontal Recognition	4,2 Metre
Photo Tagging	Included (Plate, System Name, Date, etc.)
License Plate Recognition	Plates with Non-Reflective Floor (Rectangular, Square)
Vehicle Recognition	96% Capture 96% Plate 80% Type 70% Brand 70% Color Accuracy Rate

Certificates

CE	Included
Certification	LVD EN 61000 EN 60950 EN 55016 EN 60068

Power

Operating Voltage	24 VAC
Power Consumption	30 ~ 50 W

Outdoor Unit

Dimensions	164 x 132 x 404 mm (GxYxU)
Weight	4.5 Kg

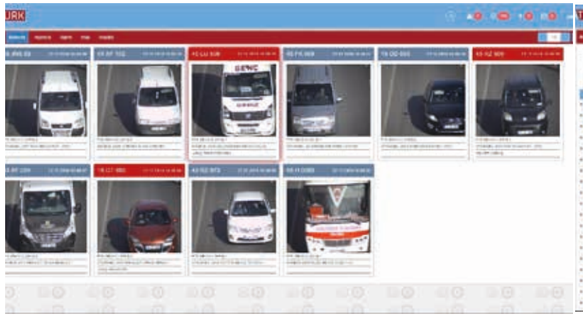
Mobile Enforcement System
POINTR-2M

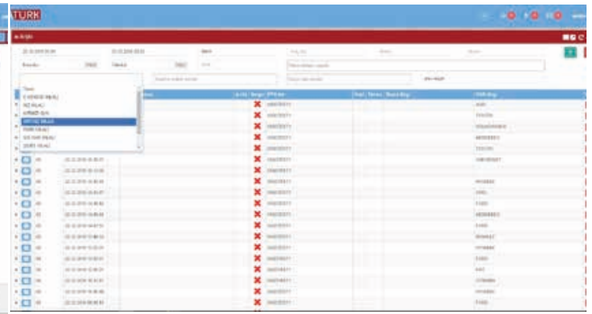
POINTR-2M is used to detect situations such as parking, safety lane violations, stops that adversely affect the normal flow of traffic, to prevent possible accidents and to ensure road safety by controlling corridors and intersections through moving cameras.

POINTR-2M Features

- Full compliance with the General Directorate of Security's number plate recognition and EES filing, database table and column standards
- Automatic Information provision with the use of the POLNET vehicle query service

- HTML/HTML5 web interface
- Detailed archive query and reporting
- User management features
- Automatic fine receipt issuing and addition to the General Directorate of Safety's system
- Storage of fine receipts in PDF format
- Violation Detection Scheduling for EES violation detections





Technical Specifications
Mobile Enforcement System

System Specifications

Type	Integrated License Plate Recognition System. All In One Unit (Camera, IR Source, OCR Proccessor Unit)
Resolution	3 MP, 2048 x 1536 CMOS Color Camera
Lens	Varifocal Lens (8mm ~ 50 mm)
Lighting	850 nm
Storage	128 GB SSD (Upgradeable to 512 GB)
Video Format	2048x1546 30 FPS (H.264, H.265, MJPEG, MPEG4)

Network

Network	10/100 Base-T Ethernet (Ops. PoE)
Protocol	TCP/IP, UDP, HTTP, FTP, SMTP, NTP, DHCP, RTP
Instant Transfer	Restrictable 1 ~ 100 Instant Transfer to Defined FTP Server
Time Sync	NTP Server
Relay Output	Included

Environmental

Cooling/Heating	Included
Operating Humidity Range	%0 ~ %90
Operating Temperature	-40 ~ +85
Sunroof	Included
Enclosure	IP66 / IK10 / NEMA 4X

ANPR Specifications

Horizontal Recognition	4,2 Metre
Photo Tagging	Included (Plate, System Name, Date, etc.)
License Plate Recognition	Plates with Non-Reflective Floor (Rectangular, Square)
Vehicle Recognition	96% Capture 96% Plate 70% Color Accuracy Rate

Certificates

CE	Included
Certification	LVD EN 61000 EN 60950 EN 55016 EN 60068

Power

Operating Voltage	24 VAC
Power Consumption	30 ~ 50 W

Outdoor Unit

Dimensions	164 x 132 x 404 mm (GxYxU)
Weight	4.5 Kg

ISSD A.Ş.
Complete Mobility Provider

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