Federal Signal PIPS is the only provider in North or South America to design, manufacture and support a complete range of ALPR equipment, software and services — the result is a unique engineered solution designed to provide superior performance even in the harsh environments of a patrol application.

The Federal Signal PIPS Police ALPR Graphical Interface System (PAGIS) consists of up to four PIPS 4D Digital Image processing systems connected to a PIPS SuperRex III trunk-mounted processor, and the PAGIS® in-car officer software interface.

Patented PIPS Platefinder® and TripleFlash® technologies, along with proprietary PIPS advanced OCR engines tailored to the state or region of interest, complete the package. PAGIS is the only solution to offer seamless integration with PIPS Back Office System Software (BOSS).

Field Application of the Mobile ALPR System

PAGIS packages Federal Signal's industry leading ALPR technology and superior performance from PIPS into a complete mobile law enforcement solution.

High volume, accurate license plate capture at speeds up to 160 mph

Instant plate check against specified databases, (NCIC Stolen, Felony Arrests, Amber Alerts, local hot lists, etc.) with immediate alerts to the officer of any "hits"

Seamless operation with PIPS Back Office System Software (BOSS®) for data management, querying and mining, mapping and networking with other agencies

Automated scofflaw enforcement

"Almost 7.4 million plates have been checked since we adopted the system. In addition to recovering over 1,000 stolen vehicles and making almost 200 arrests, the system has helped us improve the parking situation within the City by enabling us to better enforce the rules — the people are less likely to break the law when they know they will get caught. In the past twelve months, we have begun using the system to enforce parking regulations downtown. Over 750 vehicles with almost $330,000 in outstanding parking citations have been identified and towed using the PIPS solution. The revenue helps us to justify purchase of additional equipment to improve the safety of our City."

Sgt. Chris Morgan,
Long Beach Police Department
Primary Benefits:

- Officer efficiency — exponential productivity improvement as the system can capture up to 3,600 plates per hour
- Officer safety — providing officers with better awareness of their surroundings and of vehicles they are approaching
- Intelligence — through the BOSS system, the intelligence possibilities are expanded as multiple patrol deployments, fixed site cameras and other agencies are networked
- Provide information to efficiently manage parking enforcement and generate revenue
- Elimination of profiling claims — the system looks at every vehicle regardless of the condition or the driver
- Improved license plate enforcement — better enforcement results due to identification of more suspect vehicles

- Up to four dual-lens cameras at once
- Vehicle record contains infrared image of plate with corresponding OCR translation, color image of vehicle, date and time stamp, GPS coordinate, and relevant information from the database (in the event of a hit)
- User configurable audio and visual alarms
- Integration with existing MDC/laptop, or touch screen monitor with on-screen keyboard
- Support of wireless data transfer to/from the BOSS system for more frequently updated hotlists and to off-load captured data for immediate intelligence use
- Ability to prioritize databases so simultaneous hits are displayed by priority order as defined by the customer
- Data encryption to eliminate possibility of evidence tampering
- Ability to manually enter data enables immediate use of new intelligence
BOSS® 3.0 BACK OFFICE SYSTEM SOFTWARE

Features

- Add, delete or modify user privileges for security reasons
- Add databases of interest and synchronize data across deployments
- Seamless BOSS-to-BOSS sharing of hotlists, reads and alerts
- Setup instant remote notifications of database hits via e-mail or text messaging
- Map of reads and hits based on GPS coordinates
- Data networking and dispatch client
- Query historical data on partial plate, date/time, geographic location with search radius and more
- Automatic monitoring of numerous hotlists for updates with synchronization across all mobile and fixed deployments
- Improved security, adheres to U.S. FIPS data security standard (AES 256-bit encryption)
- Built-in Active Directory/LDAP user authentication integration
- Improved mapping (GIS) functionality
- Support for secure handling of covert, sensitive hotlists
- Allows hotlist data import from "any source, any format"
- Real-time monitoring and alerting from multiple ALPR cameras
- Multi-language and Internationalization support

Manage users and data from both mobile and fixed Automated License Plate Recognition (ALPR) deployments

Provides a central repository for all captured license plate data as well as the tools to support data analysis, data queries and reporting
ALPR systems can generate vast amounts of data. The Federal Signal BOSS system is designed to enable law enforcement agencies to organize and archive data collected from multiple mobile and fixed site ALPR deployments.

BOSS also includes user and database management. The user administration functions enable the administrator to set different system access levels based on user responsibility. Within the BOSS system, new users can be created and existing users can be deleted or modified. Additionally, the BOSS system is used to import, update and create databases.

Users of the BOSS system can query the data against multiple search parameters including time, date, full or partial plate, location and user. The BOSS system can also map all locations related to a single plate to track vehicle movements. The systems web interface enables data to be easily shared across multiple locations and agencies.

Benefits

- Ease of administration
- Easy access to data
- Simplifies data-sharing with other agencies
- Powerful analysis and intelligence
- Employs a User-Friendly and intuitive “smart client”
  
  user interface application.
- “Zero administration” deployment
- Supports data import from competitors’ systems
PIPS Technology – the lead

Automatic License Plate Recognition is widely recognized as an effective tool to combat criminal activity, enhance productivity and improve officer safety.

With Federal Signal’s PIPS Technology you can:

- Capture thousands of license plate reads per shift
- Capture plates at up to 160 mph differential speed
- Alert officers immediately when a license plate is a match or "hit" in any of the databases used by the agency
- Identify suspended and revoked drivers
- Capture data that aids in witness identification, watch list development, placing suspects at a scene, terrorist interdiction, pattern recognition
- Assist in stolen vehicle recovery
- Identify felons or wanted individuals
- Monitor school and playground perimeters for sexual predators
- Assist in amber alerts
- Identify delinquent citations for revenue enforcement
- BOLO suspects
- Crime scene intelligence and surveillance
- Monitor gang activity and location
- Assist in drug enforcement

Sgt. John Gaw of the Los Angeles County Sheriff's Department ASAP Unit notes, “ALPR from Federal Signal PIPS Technology is generating incredible results that go far beyond the recovery of stolen vehicles, which is the most commonly discussed benefit of the technology. The recovery of stolen vehicles, while important, is only the tip of the iceberg when it comes to the use of ALPR. The data collected by the system is incredible valuable for investigations and has helped us in many cases.”

Federal Signal designs, manufactures and supports a complete line of ALPR equipment — from fixed systems to processors, mobile systems to software, installation services to customer support.
Partner with the leader in ALPR Technology

With over 18,000 cameras deployed throughout 33 countries and a wide range of patents covering our technology and its application, Federal Signal is easily recognized as a leading provider of traffic related video imaging and license plate capture technology.

**Increase productivity**

The robust Federal Signal ALPR system provides for both improved field enforcement of wanted vehicles, and enhanced proactive, preventive enforcement by enabling more intelligent investigations and data sharing across jurisdictions.

It can also act as a force multiplier. While an officer could manually enter a few hundred license plate queries a shift, Federal Signal’s PIPS Technology is capable of capturing and querying thousands of plates a shift.

**Improve officer safety and effectiveness**

PAGIS+ software provides significant improvements to officer’s productivity and safety as compared to traditional manual license plate searches. While officers are patrolling, PAGIS instantly checks captured plates against one or more databases of interest and immediately alerts of a “hit”.

PAGIS software also offers a user-friendly and intuitive interface, to query data against multiple search parameters, such as time, date, full or partial plate, location and user.

**Access and organize data**

BOSS+ (Back Office System Software) enables users to organize and archive the vast amount of data generated by both mobile and fixed units. BOSS stores all captured license plate data in a central location to support data analysis, data queries and reporting to assist law enforcement investigations.

BOSS is capable of mapping all locations associated to a particular plate in order to track vehicle movement.

Police Chief James O’Connor of the Lyndhurst Police Department noted, “I’ve worked with Federal Signal throughout my law enforcement career, and its a name that I know and trust. Having a name like Federal Signal as my ALPR solution gives me peace of mind that I’ve made a sound investment – one that I can rely on for many years to come.”
Federal Signal's ALPR solution fits a variety of demanding applications

**Mobile ALPR System**
Federal Signal's mobile ALPR system analyzes each plate read against known databases checking for criminal activity and maintains the data for future reference.

**Portable ALPR System**
Taking advantage of the already compact and high-performance camera system, Federal Signal has packaged its proven SuperRex processor into an ultra compact package for easy deployment and portability. SuperRex system has the ability to run up to four cameras simultaneously.

**Fixed ALPR System**
Federal Signal's fixed ALPR system can provide continuous monitoring of high traffic areas and communicate to local agencies all database hits, allowing for rapid, efficient and appropriate deployment of resources. It also integrates with our mobile and portable system using the BOSS software allowing for a complete solution.

**For more**
Please call us or visit us online for details on federal signal's ALPR technology and our complete line of automatic license plate recognition technologies.

www.fedsig.com

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**ALPR Products and Solutions > Fixed Number Plate Reader**

**Fixed Plate Hunter-600**

ELSAG North America's Automatic Number Plate Reader (ALPR), the Fixed Plate Hunter-600 (FPH-6000) can be mounted to bridges, gates, overpasses and other stationary structures to help constantly monitor sensitive areas. Data captured can be reviewed for relevant periods of time assisting with vehicle tracking and other investigative purposes. Cameras, a processing unit and proprietary software, allow customers to capture images of number plates and instantaneously compare them with millions of Hot List records to identify vehicles of interest. This highly advanced Automatic Number Plate Reader reads plates day or night from all European countries. It can also read other alphanumeric identification systems—even from 1500 feet in the air. ELSAG NA's FPH-900 ALPR system minimizes the guesswork and safety risks that challenge Law Enforcement Officers every day.

With superior algorithm technology, no other ALPR system comes close to the MPH-900's ease of deployment, capabilities and accuracy.

**ELSAG North America and ELSAG Datamat are Finmeccanica companies.**