



PaXpress™ SmartLane

On-the-move, frictionless
processing and guidance
for multiple travelers at once



**Processing
travelers at
large scale**

1.5+ billion
travelers
processed
per year



**Unique ID
management
capabilities**

50+ years
of biometric
leadership



**Trusted by
the travel
industry**

350+ air, land,
and sea ports
equipped
worldwide

Introduction

With passenger volumes set to double by 2047, the travel industry faces a dual challenge: to increase capacity with existing infrastructure while maintaining robust security and protecting passenger well-being.

To meet these challenges, the industry has embraced digital transformation, including self-service and automated solutions. Biometrics and identity management have been identified as being instrumental in modernizing processes, increasing security, and streamlining operations.

However, most existing solutions process one person at a time, placing families and groups at a disadvantage. This slows down flow, introduces friction, and often leads to frustration. Addressing these demands calls for fresh thinking and a new approach to how journeys are designed and delivered.

With 50+ years of expertise in biometrics, AI, and identity management, and a longstanding tradition of innovation, IDEMIA Public Security has designed **PaXpress™ SmartLane**, a breakthrough in passenger processing combining operational throughput with the highest security standards.

**Frictionless travel,
now operational!**

PaXpress™ SmartLane

PaXpress™ SmartLane is IDEMIA Public Security's cutting-edge solution, engineered to allow groups of travelers to move through control points without stopping.

By combining facial recognition, real-time tracking, and identity management capabilities, it delivers fast, accurate identity verification—eliminating bottlenecks and queues while ensuring full compliance with regulations and privacy requirements.

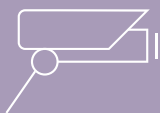
AI-powered guidance displays help users understand instructions instantly, keeping flows steady even during peak periods. This ensures

a secure, stress-free experience, freeing people to make the most of their time, while operators maintain continuous oversight and receive alerts to intervene when needed.

Its modular, scalable design adapts to diverse site layouts, and integrated supervision, alerts, and exception handling empower operational teams to stay proactive and in control.

Easy to integrate and highly interoperable, PaXpress™ SmartLane fits seamlessly into existing IT and operational ecosystems—delivering a powerful, future-ready capability to any site configuration.

This breakthrough solution is based on three main modules:



Acquisition

IP cameras for multi-face detection and capture, and traveler tracking.



Routing

Screens to display instructions in real-time. AI-powered, ergonomic user interface helps travelers get clear/simple guidance.

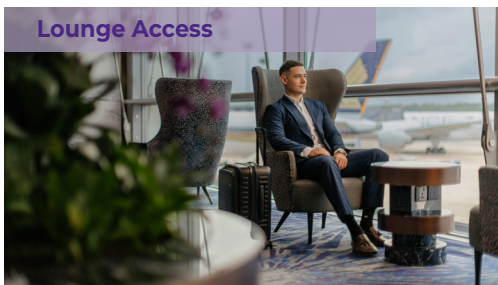


Supervision

Either on screens or tablets, security officers have a real-time view over the clearance process, and get instant alerts and instructions for exception management.

Use cases

AVIATION



MARITIME



GROUND TRANSPORTATION



Part of IDEMIA Public Security's end-to-end solution: PaXpress™

For a complete on-the-move journey, PaXpress™ SmartLane can be complemented by two modules: multi-channel biometric enrollment and a secure, trusted ID management platform.

• Multi-channel biometric enrollment:

Implementing on-the-move, frictionless multi-traveler processing relies first on the creation and issuance of a trusted digital identity that can be securely shared and used by all stakeholders involved. This crucial step can be performed through on-site enrollment, for example at a self-service kiosk (PaXpress™ Kiosk) or a check-in desk (MFACE™), or

through off-site enrollment via an advanced, secure application (PaXpress™ Capture SDK). The off-site process helps regulate congestion and processing time. It also strengthens security, as officers can assess and anticipate risks, and significantly improves the traveler experience by ensuring they arrive ready to travel.

This is made possible through state-of-the-art technologies:

- Reliable ID document authenticity checks
- Industry-leading face capture for fast and secure authentication
- Advanced ID proofing ensuring the identity being enrolled is genuine and unaltered
- Robust attack detection, including Morphing Attack Detection (MAD) and Presentation Attack Detection (PAD), preventing identity fraud and safeguarding the integrity of digital IDs



• Secure, trusted identity management platform (PaXpress™ Authorizer):

Enabling travelers to simply Look & Go through all checkpoints—without stopping or repeatedly presenting travel documents—relies on an interoperable and scalable identity management platform (IMP), interfaced with PaXpress™ SmartLane for secure identity verification.

By creating and assigning a unique digital identifier to each traveler, PaXpress™ Authorizer enables accurate and fast identity verification at any touch point without compromising security & data privacy.

Powered by IDEMIA Public Security's best-in-class facial biometric algorithms, independently recognized as the most accurate and fair in the market, it is tolerant of real-life conditions, coping with traveler attitudes and environmental lighting conditions, greatly contributing to a pleasant experience.



Create New Profile

Scan Passport's NFC

Home

PaXpress™ SmartLane

A breakthrough in traveler processing

PaXpress™ SmartLane makes frictionless travel a reality, enabling secure, continuous passenger flow without stops or queues. Built on trusted, high-performance biometric technologies, it maximizes throughput while meeting the highest security, regulatory, and privacy standards.

1 Digital ID Issuance

Travelers create a trusted digital ID (at home or on site) through document authentication, face capture (using robust Presentation Attack Detection), and identity verification.

PaXpress™ Capture SDK
for mobile application



PaXpress™ Kiosk
Self-service solution



2 Walk-Through Lane

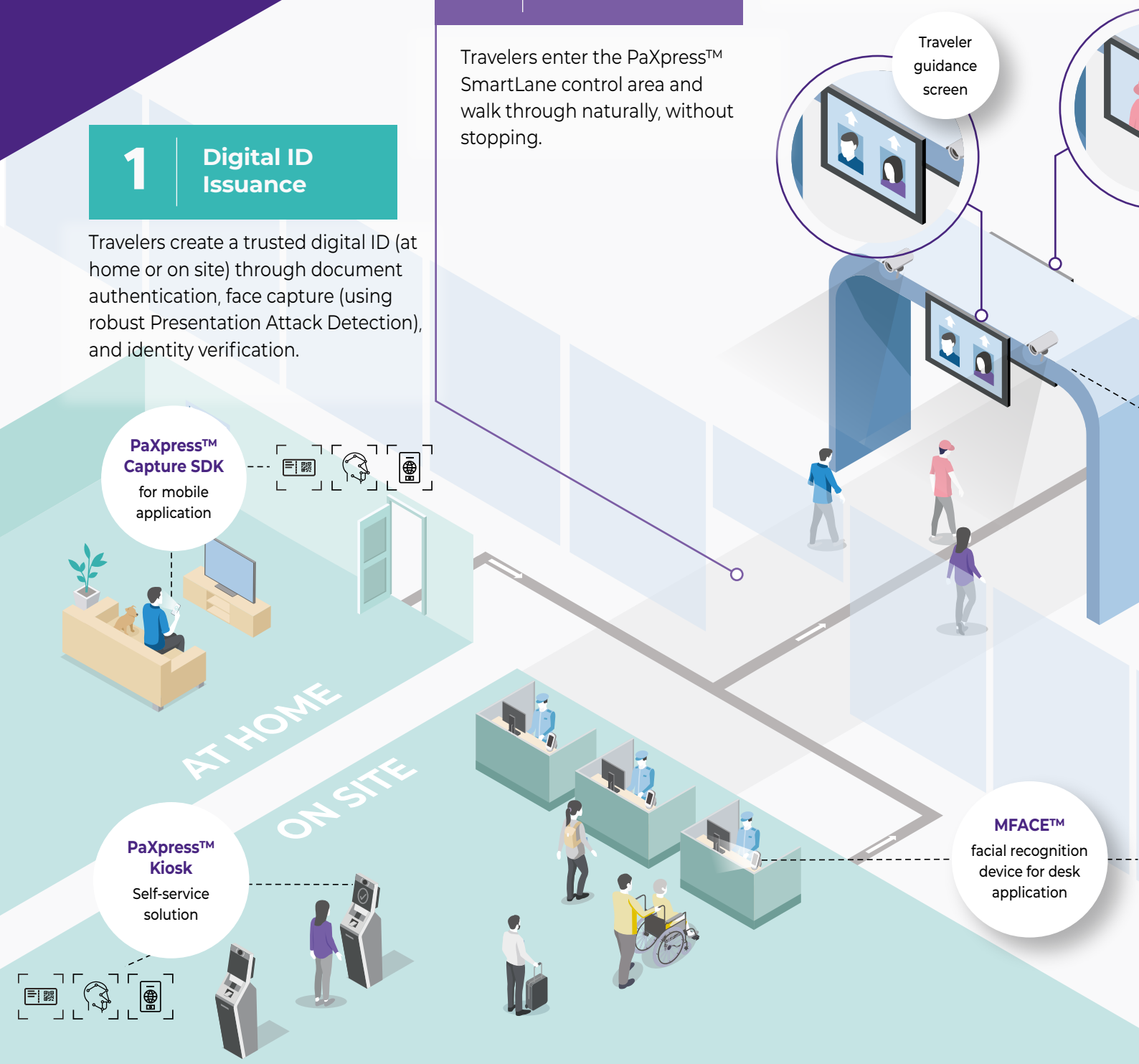
Travelers enter the PaXpress™ SmartLane control area and walk through naturally, without stopping.

3 Detection & Tracking

Travelers are instantly detected upon entry. Their movements are tracked, and faces are captured in real time.

Traveler guidance screen

MFACE™
facial recognition device for desk application



4

Real-Time Identity Verification

As they move through the area, travelers' identities are accurately and instantly verified, even when faces are not always fully visible.



SUPERVISION CENTER

PROCEED

Security officer supervision screen

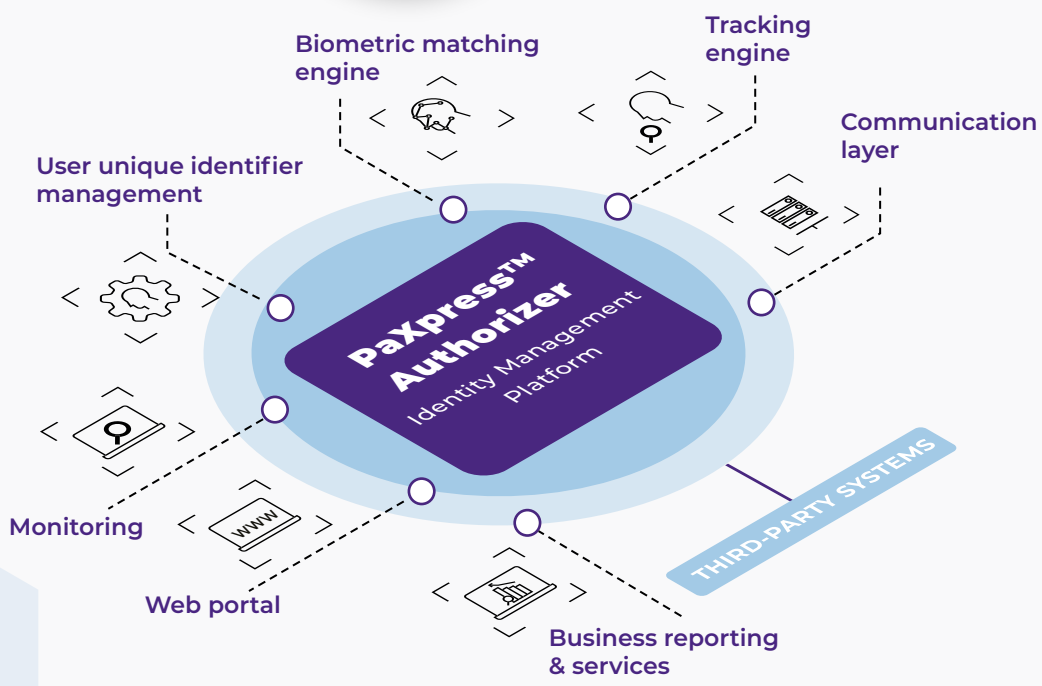
5

Routing & Exception Management

Based on the applicable rules, travelers receive clear, instant instructions to keep flows steady, while security officers maintain continuous oversight and receive alerts when intervention is required.

On a TV screen or tablet, security officers supervise the process in real time, receive instant alerts, and are guided on exception management

IP camera(s) for detection, movement monitoring, and people identification



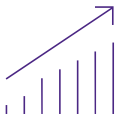
> Benefits



01

Smoother flows and a pleasant experience

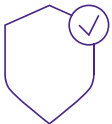
- Reduced queues and waiting times
- Frictionless, walk-through movement for individuals and groups
- Clear, dynamic guidance for stress-free navigation
- Touchless solution, mitigating hygiene concerns
- Inclusive and fair processing, regardless of gender, age, or ethnicity



02

Greater operational efficiency

- High throughput, with hundreds of travelers processed per hour
- Empowered operators through real-time supervision and alerts
- Optimized staff allocation and reduced manual workload
- Better space management thanks to a flexible setup adaptable to any environment
- Resilient performance in real-life conditions: independent of lighting, rotation, & expression
- Robust data quality management with automatic error correction



03

Stronger security and higher trust

- Accurate, real-time identification and monitoring
- Consistent processes that strengthen confidence
- Detection of fraud attempts, including tailgating
- Fewer false alerts and smoother incident handling
- Privacy by design and by default—no personal data is stored



04

Tangible economic impact

- Continuous, uninterrupted flows that increase revenue potential
- Simple rollout enabling fast operational readiness
- Lower operational friction and long-term cost optimization
- Scalable investment that grows with operational needs

The expertise behind PaXpress™ SmartLane

Unmatched expertise in identity and AI



IDEMIA Public Security has spent decades developing some of the world's most trusted identity technologies. Our systems combine high accuracy, robust performance, and proven fairness, consistently validated through independent and internationally recognized benchmark tests.

Our technologies power mission-critical systems for governments, airports, critical infrastructure, and major private organizations, where reliability and security cannot be compromised.

This same level of expertise and innovation powers PaXpress™ SmartLane.

AI, security, and data privacy built responsibly



IDEMIA Public Security is fully committed to aligning its AI-driven products, solutions, and services with the European AI Act and the Cyber Resilience Act. This reflects our dedication to ethical innovation, legal compliance, and the trust of our partners and users.

We support the responsible use of AI, reinforced by strong cybersecurity measures and privacy-by-design protection of personal and biometric data. With IDEMIA Public Security, advanced technology never comes at the expense of trust, privacy, or resilience.

Ready to be demonstrated today



The PaXpress™ SmartLane solution is proof of concept-ready and has already proven its value in real-world environments. It is the most effective way to validate your use case, refine your concept of operations, and experience first-hand how PaXpress™ SmartLane transforms traveler flow management.

Innovation designed to solve real-world challenges



At IDEMIA Public Security, innovation is never about isolated features; it is about delivering operationally meaningful breakthroughs. Over the years, we have redefined identity management, border control, and flow management—from the world's first automated border clearance programs to large-scale, frictionless passenger facilitation.

PaXpress™ SmartLane is the latest expression of this capability: a fusion of advanced biometrics, real-time tracking, intuitive user interaction, and high-throughput orchestration, engineered to perform seamlessly where it matters most.

A true partner with end-to-end solutions



Beyond PaXpress™ SmartLane, IDEMIA Public Security supports customers across the entire lifecycle of their program. We help define operational concepts, design complete use cases, and build tailored systems that combine PaXpress™ SmartLane with complementary components—from enrollment and verification to supervision, analytics, and exception handling.

We then support operations over time, ensuring reliability, evolution, and long-term value. You are not simply deploying a product; you are implementing a complete, future-ready capability backed by a partner committed to your success.

Unlock the world, **make it safer.**

