

ALIX™

Using AI to solve the problem of lost luggage



Every year, more than one million¹ pieces of luggage are lost worldwide. Not only is this a major concern for travelers, but it also significantly impacts the image of airlines and their finances. Designed with and for airline's baggage services, IDEMIA's solution offers a new approach that will help airlines reduce the number of lost luggage and increase customer satisfaction.

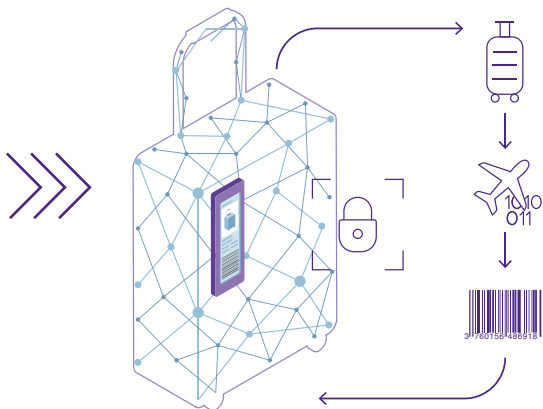
Powered by **Artificial Intelligence**, ALIX helps automate the unidentifiable luggage search process by providing each bag with an **augmented digital tag**. This innovation enables **operators** to identify bags that have lost their tags, **using only the bag's photo**.

How it works?

Once a bag is managed by the baggage handling system of the airport, the **ALIX Arch** module performs **high-quality** captures of all five sides of the luggage to create its **augmented digital tag**. If the printed tag is torn off during its journey, the operator takes a new set of images of the bag and uses **ALIX Core** to retrieve its augmented digital tag, thus **identifying** the lost luggage. The operator creates a new printed tag and puts the luggage back into the baggage handling system.

Easy to interface with existing IT systems, ALIX is **scalable** and **rapidly operational** in the field.

All elements are securely combined to create the augmented digital tag



ALIX in action today

Drawing upon decades of expertise in Artificial Intelligence and deep learning algorithms, IDEMIA is your #1 partner to help you implement high-performance solutions. Our top ranking algorithms combined with our high-quality image capture devices deliver operational efficiency to the ever-evolving requests of the air travel industry.

Developed in partnership with Air France, ALIX has been tested at Paris Charles de Gaulle (CDG) Airport for six months and helped identify bags that had lost their physical tag. After the success of the pilot phase, ALIX has been adopted and is currently being used at CDG.



Optimized operations

- › Highly accurate luggage recognition
- › High availability



Easy to integrate

- › Smooth integration into the existing luggage handling ecosystem
- › Centralized platform in the cloud



User-friendly

- › Limited training required
- › Accommodates various use cases

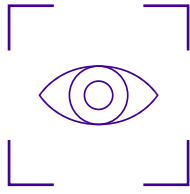


Privacy by design

- › Embedded data protection
- › Secure access to data

1- Figure per year prior to COVID-19

>> ALIX, advanced hardware and software at your service



ALIX Arch

- › **High-quality** image capture equipment
- › **Automatic** and **manual** image capture capabilities
- › **Moving** bags captured even in dim lighting
- › **Optimized** coverage of the five visible sides of the bag
- › **Reliable** volume assessment
- › **Independent** installation kit



ALIX Core

- › **Cloud-based** SaaS platform
- › **Secure centralized** system
- › **Field-proven algorithms** for image processing and luggage identification
- › **Embedded** matching service
- › **High-recognition** capacity
- › **Large** data flow management
- › **Reliable** data collection and updates

ALIX additional benefits

OPTIMIZED OPERATIONS

- › **Rapid** start-up
- › **Fast matching results** displayed with rank
- › **Reliable** and **effective** matching algorithms
- › **Low** operating costs
- › Autonomous system with supervision capabilities
- › **No need** for extra space or capacity
- › **Ready** for additional operational use cases: fraud management, proof management, etc.

USER-FRIENDLY

- › **Compatible** with all types of luggage
- › **Convenient:** does not require any modifications to the traveler's luggage

- › **Customizable** business process and reporting
- › **Easy to use** portal for the main functions and central management
- › **Customizable** display of data and results
- › **Rapid** export of reports

PRIVACY BY DESIGN

- › **State-of-the-art** IT security system
- › **Secure** web services and **encrypted** communications
- › **Secure segregation** of information depending on the user profile
- › **Compliant** with European General Data Protection Regulations (**GDPR**)

EASY TO INTEGRATE

- › **Simple** software integration with API and/or web services
- › **Web interface** reducing integration efforts
- › **Interoperable** with third-party systems
- › **Easy** future capacity expansion
- › **Compliant** with IATA Baggage Information Messages Recommended Practice (RP 1745)

