

Multimodal biometric system for large-scale fingerprint matching, iris and face recognition

Datasheet

Innovatrics ABIS

Civil Identification / Criminal Investigation / Enterprise / Elections



Innovatrics ABIS is an automated biometric identification system that can support large-scale fingerprint, iris and face matching.

Featuring our in-house, top-ranked NIST biometric algorithms, Innovatrics ABIS provides enterprises and government agencies fast and accurate identification with minimal hardware requirements.

Innovatrics ABIS has been successfully deployed to numerous identification projects around the world, including some of the most complex biometric identification systems.

Innovatrics ABIS allows system integrators to build an identity management solution tailored to a wide array of use cases from civil identification, criminal investigation to elections or enterprise.



Criminal Investigation

Identification of unknown suspects from faces in video or latent fingerprints



- Live enrollment or scanning from a person or from a criminal card
- Latent fingerprint editor, matching and comparison tools
- : Face-in-video identification
- : Customizable criminal case management
- Access ABIS from any web browser without any installation

Civil Identification

Trusted biometric identification for civil registers



- Configurable workflows for identity management
- : Complete solution for enrollment
- **:** Biometric deduplication and adjudication
- Remote identity verification with liveness detection
- QA and manual inspection of enrolled records

Enterprise Solutions

Biometric identification for identity fraud prevention



- **>** Biometric identification of customers
- ID document data extraction & authenticity check
- Selfie face verification
- : Liveness detection
- Audit logs for reviewing enrolled records

Elections

Complete solution for biometric voter registration



- Migration and cleaning of legacy voter register
- Complete solution for mobile enrollment
- Biometric and textual deduplication
- Al-powered minor identification
- Voter management

Industry-leading technology and support



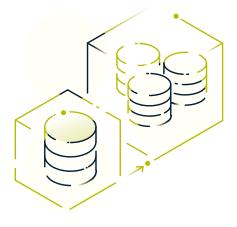
Top Accuracy

Our proprietary fingerprint, face and iris algorithms are among the best in the world based on independent NIST benchmarks. Each has been tested and optimized on well-balanced datasets.



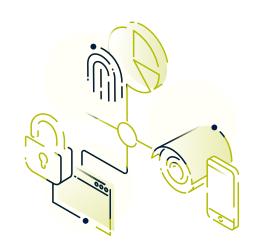
High Speed

Deployed on-premise or in the cloud, Innovatrics ABIS can lower hardware requirements by 70% when replacing legacy solutions. It can handle a 100M population on a single AWS instance with a throughput of up to 300 requests per minute in cloud installations.



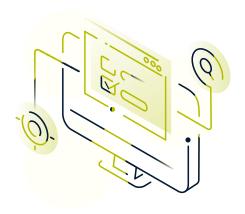
Scalability and High Availability

Using smart software architecture, our ABIS can easily be scaled to meet increasing workloads or number of enrollees for efficient data synchronization and highly operational production/disaster recovery sites.



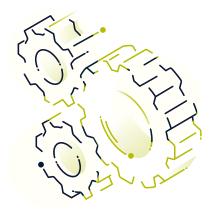
Easy-to-Integrate ABIS Using REST API

Designed with system integrators in mind, Innovatrics ABIS software is easy to integrate with any 3rd party solution using REST API.



Tailored to Your Needs

Innovatrics ABIS is designed to support different applications and configurable dynamic business rules, fully customized workflows, and operational procedures.



Consultancy, Delivery & Support

Innovatrics support includes a dedicated team of experts consisting of an experienced solution manager, project manager, and delivery engineer assigned to each ABIS project.

Features



Powerful Multimodal Biometric Engine

Top-ranked biometric algorithms, NIST Evaluations for accuracy, performance and demographic bias

Face	Fingerprint	Iris
NIST FRVT	NIST FpVTE	NIST IREX
	NIST PFT II	
	NIST MINEX III	

Intuitive User Interface

Innovatrics ABIS comes with an intuitive, web-based user interface for more convenient duplicate adjudication, enrollment, administration monitoring, and the searching, editing and browsing of records among others.

Biometric Search, Identification and Analysis

Split screen, face or fingerprint adjudicator, instant search (with an uploaded fingerprint image or facial photo) and on-demand identification (with an enrolled applicant)

Deduplication and Workflows

Accurate biometric deduplication on large datasets and complete applicant lifecycle management (renewal, merge/split, death), configurable workflows, queue management (with 4-eyes control) and operators' action tracking

Latent Fingerprint Editor

Latent-to-plain and latent-to-rolled matching, latent print editor and biometric analysis for adjudication. Criminal case management helps keep evidence grouped into cases and can reveal connections between different unresolved cases and court exhibit creation.

Face-in-Video Investigation

Face detection and identification from pre-recorded video footage uses an intuitive video management system for search by marking and grouping of persons of interest, video annotation, storage, and video player.

Enrollment Application

Enrollment station on PC for fixed enrollment station or Android application can be used for mobile enrollment in the field with local storage and offline export/import of data.

Liveness Detection

Passive face liveness evaluation on server for remote pre-enrollment or enrollment. Liveness can be used as an additional identity fraud prevention layer.

Minors Detection

A specialized Al-powered neural network detects the age of the enrollees based on their faces. If they are obviously underage, it sorts them out for rechecking by an operator to be removed from the voter register.

Voter Management Module

Our end-to-end solution is capable of performing election-related processes such as voter's data review, polling station assignment, voter cards printing, and log reporting.

Why Choose Innovatrics?

Our Independence Equals Tailor-Made Solutions

Having a respected, innovation-driven R&D team allows us to develop proprietary technology that fits market trends and specific customer needs. Open architecture of our solutions allows smooth integration with other systems, avoiding vendor lock-in.

We Have Global Experience

To date, we have successfully completed over 500 projects in 80 countries with over a billion people having been biometrically processed using Innovatrics software. We are consistently ranked among the fastest and most accurate based on independent NIST tests.

Our Solutions Are Trusted Worldwide

We believe in quality. We guarantee the technological edge of our products and services through continuous research and professional staff. Our customer-driven approach guarantees real-time support to ensure that your system keeps working flawlessly.

About us

We are an independent EU-based provider of multimodal biometric solutions. Our algorithms consistently rank among the fastest and most accurate in fingerprint and face recognition. Since 2004, we have partnered with all types of organizations to build trusted and flexible biometric identification solutions. Our products are being used in more than 80 countries, benefiting more than a billion people worldwide.

Contact

sales@innovatrics.com Brazil USA

www.innovatrics.com +55 11 4210-5185 +1 404 984-2024

Slovakia (HQ) Singapore +421 2 2071 4056 +65 3158 7379