

Biometrics - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-07-01 | 150 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

Report description:

Biometrics Market Analysis

The biometrics market size is valued at USD 58.98 billion in 2025 and is forecast to expand to USD 120.18 billion by 2030, advancing at a 15.30% CAGR. The expansion is underpinned by government digital-ID programs, rising payments tokenization, and surging airport modernization that collectively elevate the need for frictionless identity proofing. Hardware still dominates current deployments, yet cloud-ready software engines are scaling fastest as enterprises shift from point solutions to platform models. New privacy regulations in China and the European Union are tightening compliance requirements, simultaneously encouraging multi-modal architectures that balance accuracy with consent management. In North America, REAL ID enforcement from May 2025 is driving an urgent wave of federal and state procurements for airport and DMV roll-outs. Asia Pacific's integration of biometrics into super-apps, wallets, and bank e-KYC frameworks positions the region as the long-run demand accelerator.

Global Biometrics Market Trends and Insights

Government-backed National e-ID Programs Across Asia

Asian authorities are orchestrating large-scale digital identity transformations. South Korea's smartphone-based resident registration card and Vietnam's decision to extend biometric IDs to foreign nationals by July 2025 have set benchmarks for inclusive ecosystems. Indonesia's USD 200 million INA Digital platform and the Philippines' registration of 89.5 million citizens unlock financial services for previously unbanked adults. Sri Lanka's multi-modal program combining fingerprints, face, and retina

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

scans targets completion in 2026, illustrating how emerging economies leapfrog legacy infrastructures.

EMVCo and ISO Standards Catalyzing Fingerprint Payment Cards

Harmonized EMVCo and ISO rules have moved biometric cards from pilots to commercial issuance. Infineon's SECORA Pay Bio silicon and Thales' global trials cut false-accept rates and allow higher transaction ceilings. Mastercard's Identity Check and passkey support promise frictionless authentication, helping issuers reduce fraud and chargebacks. Vendors forecast shipments of 113.3 million biometric cards by 2028 as banks prioritize PIN-free contactless experiences.

GDPR and BIPA Litigation Risks Curtailing Roll-outs

More than USD 200 million in BIPA settlements during 2024-2025, including Clearview AI's USD 51.75 million payment, signals material liability for enterprises deploying facial recognition without explicit consent. GDPR's strict data-minimization and local-processing rules add EUR 50,000-200,000 (USD 56,500-226,000) compliance cost per European installation, shrinking the addressable base for small projects. The FTC's enforcement against Rite Aid sets a U.S. precedent for algorithmic-bias audits, compelling vendors to redesign architectures for privacy by design.

Other drivers and restraints analyzed in the detailed report include:

U.S. TSA Biometrics Road-map Driving Federal Procurement Surge / China's "Smart Airport 2025" Policy Accelerating Face & Voice Biometrics / Algorithmic Bias Triggering Procurement Moratoriums /

For complete list of drivers and restraints, kindly check the Table Of Contents.

Segment Analysis

Software engines grew from a supporting role to the highest-growth component at a 16.6% CAGR, even while hardware kept the 42.5 revenue share. Organizations value cloud orchestration, AI-based liveness detection, and decentralized identity wallets that continuously adapt to evolving fraud. Entrust's acquisition of Onfido aligns with this trajectory, adding deep-fake countermeasures that improved forged-ID prevention five-fold.

The hardware segment remains indispensable where specialized sensors deliver cryptographic templates to secure elements. Infineon's automotive-qualified fingerprint ICs illustrate how production-grade components expand the biometrics market into mobility and access domains. Services, while smallest, record consistent uptake as integrators customize multi-modal deployments for regulated industries.

Iris recognition posts an 18.2% CAGR, supported by liquid-lens optics that lower bill-of-material cost and shrink form factors. Fingerprint remains entrenched with 37.0% of biometrics market share in 2024, thanks to smartphones, payment cards, and time-clock systems. Facial recognition steadily penetrates airports and stadiums, while voice analytics gains footing in call-center authentication.

Behavioral biometrics, particularly gait and keystroke dynamics, add passive layers that elevate security without user friction. Mature fingerprint and facial solutions increasingly pair with iris, palm-vein, or voice modules in multi-modal kits, diversifying revenue and diluting single-modality risk.

Contactless modalities are scaling at 17.1% CAGR as hygiene and convenience trump legacy mindset. The biometrics market size for contact-based systems, despite a 37.0% share in 2024, is losing momentum to touchless fingerprint, face, and iris kiosks rolled

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

out in healthcare and retail. ZKTeco identifies contactless preference as a long-term secular shift.

Invisible sensing, showcased by Continental's in-vehicle camera-laser combo, morphs biometrics beyond access into wellness monitoring. AI improvements cut false rejects, moving touchless accuracy closer to contact-based benchmarks and satisfying high-assurance sectors.

The Biometrics Market Report is Segmented by Component (Hardware, Software, Services), Biometric Modality (Physiological, Behavioral), Contact Type (Contact-Based, Contactless, Hybrid), Authentication Type (Single-Factor, Multi-Factor), Application (Access Control, Payment Authentication, and More), End-Use Industry (Government, BFSI, and More), and Geography. The Market Forecasts are Provided in Terms of Value (USD).

Geography Analysis

North America produced 30.7% of global revenue in 2024, anchored by federal budgets and widespread private-sector adoption. TSA's accelerating lane expansions and DHS's USD 250.8 million line-item for identity management provide a multi-year demand floor for vendors . Canada and Mexico modernize land-border e-gates to streamline trade, reinforcing continental scale.

Asia Pacific records the steepest trajectory with an 18.5% CAGR forecast to 2030. South Korea's nationwide mobile-ID completion, China's codified face-recognition rules, and India's Aadhaar-linked pay services cultivate a unified biometrics market bigger than any single-country program. The region's 4.8 billion digital-wallet users push biometric KYC from optional to mandatory across banks and telecoms.

Europe's growth remains steady under strict GDPR oversight. The EU Entry/Exit System rolls out border biometrics across Schengen states, while the United Kingdom's new trust framework fosters private-sector credential innovation. Nordic pilots prove that on-device processing can satisfy privacy watchdogs without sacrificing speed, shaping procurement criteria across the continent.

List of Companies Covered in this Report:

Thales Group / NEC Corporation / IDEMIA France SAS / Fujitsu Limited / HID Global Corporation / Assa Abloy AB / Aware Inc. / Suprema Inc. / Synaptics Incorporated / Bio-Key International Inc. / Zwipe AS / Fingerprint Cards AB / M2SYS Technology / Infineon Technologies AG / Entrust Corporation / ImageWare Systems Inc. / Phonexia s.r.o. / BioID AG / Crossmatch Technologies Inc. / Hitachi Ltd. /

Additional Benefits:

The market estimate (ME) sheet in Excel format /
3 months of analyst support /

Table of Contents:

1 INTRODUCTION

1.1 Study Assumptions and Market Definition

1.2 Scope of the Study

2 RESEARCH METHODOLOGY

3 EXECUTIVE SUMMARY

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

4 MARKET LANDSCAPE

4.1 Market Overview

4.2 Market Drivers

4.2.1 Government-backed National e-ID Programs Across Asia

4.2.2 EMVCo and ISO Standards Catalyzing Fingerprint Payment Cards in North America and Europe

4.2.3 Post-pandemic Demand for Touch-free Physical Access in European Commercial Real-estate

4.2.4 U.S. TSA Biometrics Road-map Driving Federal Procurement Surge

4.2.5 China's "Smart Airport 2025" Policy Accelerating Face and Voice Biometrics

4.2.6 Biometric KYC Mandates by GCC and African Central Banks

4.3 Market Restraints

4.3.1 GDPR and BIPA Litigation Risks Curtailing Facial-Recognition Roll-outs

4.3.2 Algorithmic Bias Against Dark-Skin Demographics Triggering Procurement Moratoriums

4.3.3 CMOS Image-Sensor Shortages Constricting Fingerprint Module Supply

4.3.4 Integration and ROI Concerns in South-American Retail Chains

4.4 Value / Supply-Chain Analysis

4.5 Regulatory Outlook

4.6 Technological Outlook

4.7 Porter's Five Forces Analysis

4.7.1 Bargaining Power of Suppliers

4.7.2 Bargaining Power of Buyers

4.7.3 Threat of New Entrants

4.7.4 Threat of Substitutes

4.7.5 Intensity of Competitive Rivalry

4.8 Industry Stakeholder Analysis

4.9 Investment and Funding Analysis

5 MARKET SIZE AND GROWTH FORECASTS (VALUE)

5.1 By Component

5.1.1 Hardware

5.1.2 Software

5.1.3 Services

5.2 By Biometric Modality

5.2.1 Physiological Biometrics

5.2.1.1 Fingerprint AFIS

5.2.1.2 Fingerprint Non-AFIS (Automated Fingerprint Identification System)

5.2.1.3 Facial Recognition

5.2.1.4 Iris Recognition

5.2.1.5 Others (Palm Vein, Hand Geometry)

5.2.2 Behavioral Biometrics

5.2.2.1 Voice Recognition

5.2.2.2 Signature Verification

5.2.2.3 Others (Gait Analysis, Keystroke Dynamics)

5.3 By Contact Type

5.3.1 Contact-based

5.3.2 Contactless

5.3.3 Hybrid

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 5.4 By Authentication Type
 - 5.4.1 Single-factor
 - 5.4.2 Multi-factor
- 5.5 By Application
 - 5.5.1 Physical and Logical Access Control
 - 5.5.2 Time and Attendance Management
 - 5.5.3 Payment and Transaction Authentication
 - 5.5.4 e-Passport and Border Control
 - 5.5.5 Patient Identification and EHR Security
 - 5.5.6 Customer On-boarding (eKYC)
 - 5.5.7 Public Surveillance and Safety
 - 5.5.8 Automotive and Smart Vehicle Interfaces
- 5.6 By End-Use Industry
 - 5.6.1 Government and Law Enforcement
 - 5.6.2 BFSI
 - 5.6.3 Healthcare
 - 5.6.4 Consumer Electronics
 - 5.6.5 Commercial and Retail
 - 5.6.6 Travel and Immigration
 - 5.6.7 Military and Defense
 - 5.6.8 Automotive
 - 5.6.9 Education
 - 5.6.10 Others
- 5.7 By Geography
 - 5.7.1 North America
 - 5.7.1.1 United States
 - 5.7.1.2 Canada
 - 5.7.1.3 Mexico
 - 5.7.2 South America
 - 5.7.2.1 Brazil
 - 5.7.2.2 Argentina
 - 5.7.2.3 Rest of South America
 - 5.7.3 Europe
 - 5.7.3.1 United Kingdom
 - 5.7.3.2 Germany
 - 5.7.3.3 France
 - 5.7.3.4 Italy
 - 5.7.3.5 Spain
 - 5.7.3.6 Nordics
 - 5.7.3.7 Russia
 - 5.7.3.8 Rest of Europe
 - 5.7.4 Asia Pacific
 - 5.7.4.1 China
 - 5.7.4.2 Japan
 - 5.7.4.3 South Korea
 - 5.7.4.4 India
 - 5.7.4.5 ASEAN

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 5.7.4.6 Australia
- 5.7.4.7 New Zealand
- 5.7.4.8 Rest of Asia Pacific
- 5.7.5 Middle East and Africa
 - 5.7.5.1 Middle East
 - 5.7.5.1.1 Saudi Arabia
 - 5.7.5.1.2 United Arab Emirates
 - 5.7.5.1.3 Turkey
 - 5.7.5.1.4 Israel
 - 5.7.5.1.5 Rest of Middle East
 - 5.7.5.2 Africa
 - 5.7.5.2.1 South Africa
 - 5.7.5.2.2 Nigeria
 - 5.7.5.2.3 Kenya
 - 5.7.5.2.4 Rest of Africa

6 COMPETITIVE LANDSCAPE

- 6.1 Market Concentration
- 6.2 Strategic Moves
- 6.3 Market Share Analysis
- 6.4 Company Profiles (includes global overview, market overview, core segments, financials, strategic information, market rank/share, products and services, recent developments)
 - 6.4.1 Thales Group
 - 6.4.2 NEC Corporation
 - 6.4.3 IDEMIA France SAS
 - 6.4.4 Fujitsu Limited
 - 6.4.5 HID Global Corporation
 - 6.4.6 Assa Abloy AB
 - 6.4.7 Aware Inc.
 - 6.4.8 Suprema Inc.
 - 6.4.9 Synaptics Incorporated
 - 6.4.10 Bio-Key International Inc.
 - 6.4.11 Zwipe AS
 - 6.4.12 Fingerprint Cards AB
 - 6.4.13 M2SYS Technology
 - 6.4.14 Infineon Technologies AG
 - 6.4.15 Entrust Corporation
 - 6.4.16 ImageWare Systems Inc.
 - 6.4.17 Phonexia s.r.o.
 - 6.4.18 BioID AG
 - 6.4.19 Crossmatch Technologies Inc.
 - 6.4.20 Hitachi Ltd.

7 MARKET OPPORTUNITIES AND FUTURE OUTLOOK

- 7.1 White-space and Unmet-need Assessment

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

**Biometrics - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts
(2025 - 2030)**

Market Report | 2025-07-01 | 150 pages | Mordor Intelligence

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	\$4750.00
	Team License (1-7 Users)	\$5250.00
	Site License	\$6500.00
	Corporate License	\$8750.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-02-28"/>
		Signature	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

