

Digital ID Solution

BROCHURE | SOLUTION OVERVIEW

REV01



Empowering Digital Identity for People



Xperix's story began in 2009 and is rooted in the biometric identity solutions business under the umbrella of Suprema Inc. Following a strategic spin-off, Suprema ID was established in 2017 and went public on KOSDAQ in 2019. In 2023, Suprema ID had rebranded itself as Xperix Inc. This renaming reflects our shift in ownership and underscores our dedication to enhancing customer experiences and broadening our business scope.

Since 2009, we have been dedicated to creating a safer and better world by integrating cutting-edge technologies and solutions. We aim to continually develop and refine digital identity solutions that transcend geographical and physical boundaries. Together, we aim to build a secure and empowered global community.

Our digital identity solutions are deployed globally, leveraging our proven biometric and OCR (optical character recognition) technology in 133 countries. With our unique technological edge and market influence, we believe Xperix can set the standard for empowering digital identity solutions in B2G and B2B sectors.

Core values for customers

2017

Established

1 000+

Trusted Partners

133+

Countries of
Scanner Client

75+

Government Projects

40+

Patents and
Intellectual Property Rights

AI-driven Algorithm

Artificial Intelligence (AI) engines built into all products and algorithmic technologies help solve problems faster and deliver high performance.

Biometrics

By providing facial recognition, fingerprint, and palm print recognition with high convenience and security are applied to various industries.

Liveness Detection

Our FBI-certified devices effectively prevent spoofing of fake fingerprints made of film, adhesive, rubber, clay, silicone, etc. In addition, AI technology can easily prevent authentication using a mask made with a 3D printer or a face made with silicon.

Document Reading

It provides high-performance ID recognition technology with OCR, QR code, 1D & 2D barcode recognition technology used for eID, ePassport, driver's license, visa issuance, and boarding ticket checks.

Comprehensive technology application portfolio

Citizen ID

Border control and travel
Driving license issuance
ePassport issuance
National ID
Pension distribution
Voter registration

Finance & Healthcare

ATM / POS integration
Access management
Bank account opening

Telecommunication

SIM card registration

Workforce Management

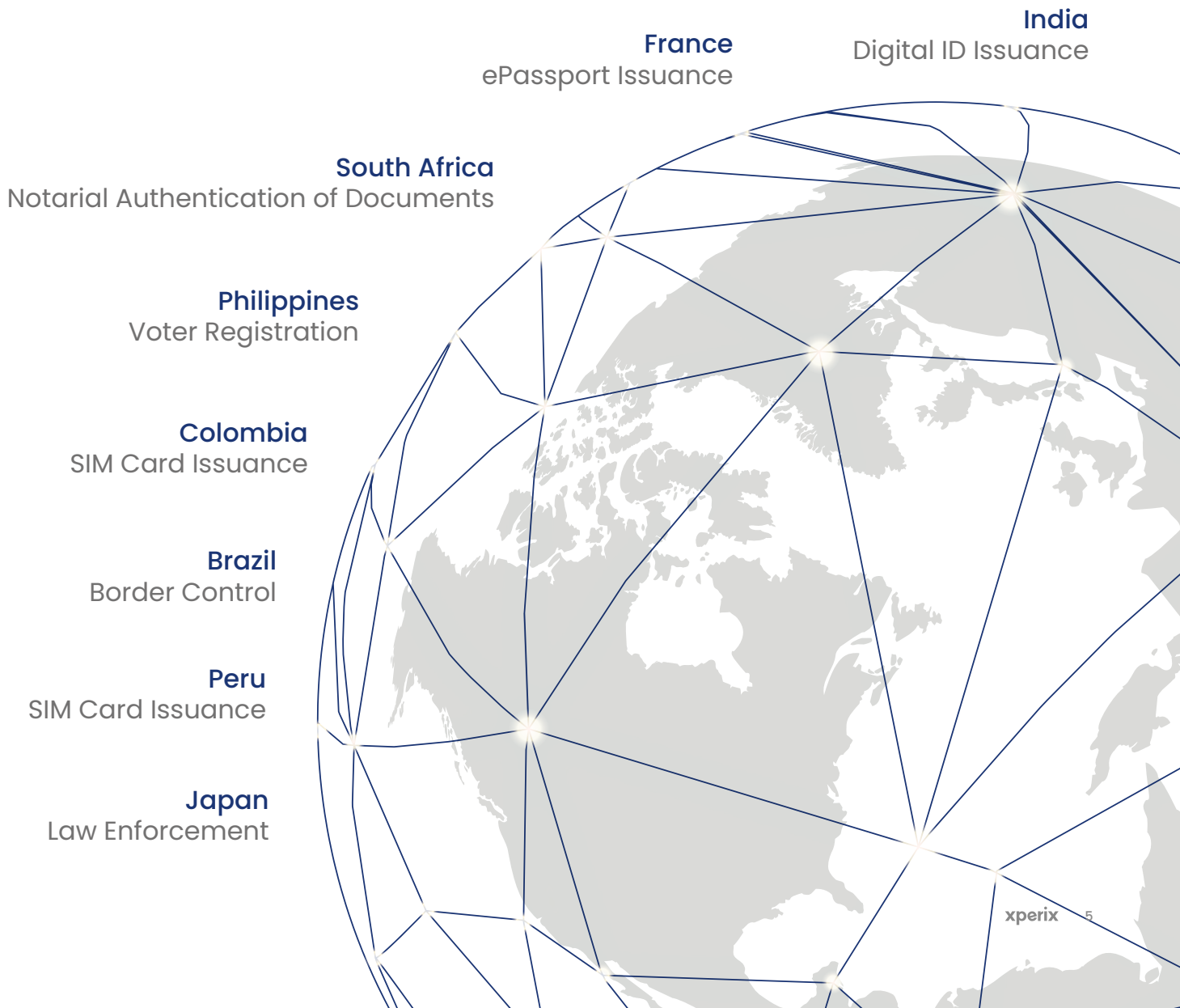
Time attendance

Law Enforcement

Criminal identification

Leader by market share

Xperix's products are used globally for automated border control, VISA and ePassport issuance, digital ID issuance, voter registration, SIM card issuance, criminal identification, self-service kiosk, and more.



Powerful products.
Expand what's possible.





xperix

xperix



RealScan S60

World's First FAP60 Live Scanner has obtained PAD Level 2 & 1 Standards



Embedded Module: RealScan S60M

 **BixeLab**
ISO 30107-3 Compliant

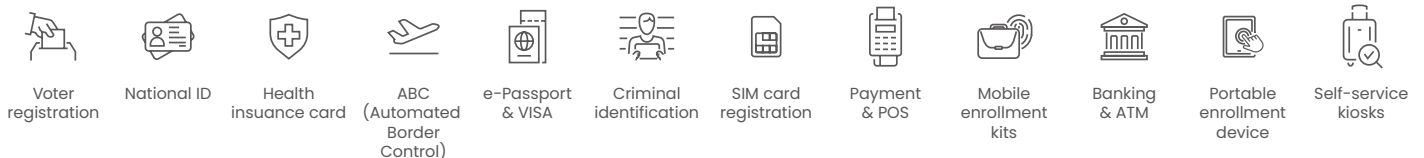
 **MOSIP**
COMPLIANT

RealScan S60 is the FBI Appendix F certified, FAP60, Ultra Slim, and Lightweight fingerprint live scanner. RealScan S60 provides advanced artificial intelligence-based live finger detection technology compliant with ISO/IEC 30107-3 PAD Level 1 & 2 Standard. Applying LFD technology, RealScan S60 distinguishes fake fingerprints made from various materials, including clay, rubber, silicon, glue, paper, film, and more.

With Xperix's proprietary fingerprint algorithm and an advanced TFT (Thin Film Transistor)-optical technology, RealScan S60 enables capture of the highest fingerprint image quality flat and rolled fingers with little effect from various fingerprint conditions. Due to the small and thin form factor, it is optimized for desktop solutions and easy integration into portable devices, providing a significant advantage for customers to maximize the benefit from their product and solution.

— Features

- FBI Appendix F & Mobile ID **FAP 60** Certified
- Flat (Four, Two, Single) and Rolled (Single) fingerprints capturing
- **Advanced TFT Optical Technology**
- Ingress Protection IP65
- Optimized for easy integration
- AI-based Liveness Detection (Compliant with ISO/IEC 30107-3 PAD Level 1 & 2 Standard)
- **Advanced Rolled Image Construction Technology**
- **Windows, Linux, and Android support**



RealScan-G10

Iconic FAP60 Live Scanner



BixeLab
ISO 30107-3 Compliant

MOSIP
COMPLIANT

RealScan-G10 is the FBI Appendix F certified, FAP60, and the iconic live scanner for enrollment. Xperix's advanced optical technology guarantees high-speed image capturing and seamless image processing without being affected by the dry/wet finger or any environment.

With its proven fingerprint algorithm, RealScan-G10 distinguishes fake fingerprints and captures the highest fingerprint image quality flat and rolled fingers. RealScan-G10 is the perfect live scanner for citizen ID and various applications.

Features

- FBI Appendix F & Mobile ID **FAP 60** Certified
- Flat(Four, Two, Single) and Rolled(Single) fingerprints capturing
- Ingress Protection **IP54**
- **Voice Instruction**
- Optimized for easy integration
- AI-based Liveness Detection (Compliant with **ISO/IEC 30107-3 PAD Level 1 & 2** Standard)
- **Advanced Rolled Image Construction Technology**
- **Windows, Linux, and Android support**



Voter registration



National ID



Health insurance card



ABC (Automated Border Control)



e-Passport & VISA



Criminal identification



SIM card registration



Payment & POS



Mobile enrollment kits



Banking & ATM



Portable enrollment device



Self-service kiosks

RealScan-FC

Palmprint & Tenprint Live Scanner



RealScan-FC is an all-in-one palmprint live scanner for capturing various types of fingerprints and palmprints, including slaps, flats, rolls, palms, and writer's palms. Featuring Xperix's cutting-edge optical & biometric technologies, it is capable of capturing the highest quality images regardless of the physical condition of hands.

RealScan-FC supports user-friendly features like voice instruction, foot switches, and a mobile power supply. With the proven reliability of FBI certification, RealScan-FC is a perfect fit for criminal identification.

— Features

- **FBI Appendix F & Appendix P Certified**
- Flat(Four, Two, Single) and Rolled(Single) fingerprints capturing
- Upper & Lower, writer's palmprints capturing
- Scan 4-finger combined print and palms under fingers up to 5" x 5"
- Scan rotated fingerprints up to 1.6" x 1.6"
- Scan full palmprint up to 4.5" x 3", rotated and flat fingerprints up to 5"x 1.6"
- Ingress Protection **IP64**
- Slippage detection for flats and rolls
- Ghost image elimination
- Optimized for easy integration
- AI-based Liveness Detection
- **Advanced Rolled Image Construction Technology**
- **Windows, Linux, and Android support**



National ID



e-Passport
& VISA



Criminal
identification



Civil
identification



Airport & Border
Check



Background
Check

RealScan-D

Portable Dual Finger
Live Scanner



RealScan-D is the FBI Appendix F certified, FAP45, single/dual fingerprint live scanner. Its proven fingerprint algorithm, RealScan-D captures the flat and roll fingerprint at an extremely fast frame rate. All the leading technology resides in a sleek and ergonomic design and a user-friendly interface that makes it credibly simple to use with minimum training and maintenance.

— Features

- FBI Appendix F & Mobile ID **FAP45** Certified
- Flat(Two, Single) and Rolled(Single) fingerprints capturing
- Ingress Protection **IP53**
- Optimized for easy integration
- AI-based Liveness Detection
- **Advanced Rolled Image Construction Technology**
- **Windows, Linux, and Android support**



Voter
registration



National ID



Health
insurance card



e-Passport
& VISA



Criminal
identification



SIM card
registration



Mobile
enrollment
kits



Banking
& ATM

BioMini Slim 3

Ultra-slim FAP30 Single Fingerprint Scanner



Embedded Module: BM-Slim3

BioMini Slim 3 is the ultra-slim FAP30 single fingerprint scanner. Along with its 15 mm slim optical sensor, it features Xperix's proprietary Multi-dynamic Range(MDR) technology, MINEX III compliance, and Android device support. BioMini Slim 3 also provides developers with more physical flexibility with its reduced form factor, and the ultra-slim optical sensor ensures robust operation over time.

With Xperix's proprietary fingerprint algorithm, BioMini Slim 3 distinguishes fake fingerprints made from various materials, including clay, rubber, silicon, glue, paper, film, and more. It reliably operates under direct sunlight and captures high-quality fingerprint images when the finger is dry or wet.

— Features

- **FBI PIV & Mobile ID FAP30 Certified**
- Capturing high-quality fingerprint images when the finger is dry / wet
- **Operates under direct sunlight (up to 100 000 LUX)**
- Enhanced security (on-device encryption of fingerprint templates & supporting security protocols)
- **Standalone operation**
- Ingress Protection **IP65**
- Optimized for easy integration
- AI-based Liveness Detection
- **True Plug-n-Play**
- **Windows, Linux, and Android support**



Voter verification



National ID



Health insurance card



Criminal identification



SIM card registration



Payment & POS



Civil identification



Banking & ATM



Portable enrollment device

BioMini Slim 2/2S

Ultra-slim FAP20 Single Fingerprint Scanner



Embedded Module: BM-Slim2, BM-Slim2S



ISO 30107-3 Compliant

BioMini Slim 2 is the ultra-slim FAP20 single fingerprint scanner. Along with its 13.5 mm slim optical sensor, it features Xperix's proprietary Multi-dynamic Range(MDR) technology, MINEX III compliance, and Android device support. BioMini Slim 2 also provides developers with more physical flexibility with its reduced form factor, and the ultra-slim optical sensor ensures robust operation over time.

With Xperix's proprietary fingerprint algorithm, BioMini Slim 2 provides advanced artificial intelligence-based live finger detection technology compliant with ISO/IEC 30107-3 PAD Level 1 & 2 Standard. Applying LFD technology, BioMini Slim 2 distinguishes fake fingerprints made from various materials, including clay, rubber, silicon, glue, paper, film, and more. It reliably operates under direct sunlight and captures high-quality fingerprint images when the finger is dry or wet.

— Features

- **FBI PIV & Mobile ID FAP20 Certified**
- Capturing high-quality fingerprint images when the finger is dry / wet
- **Operates under direct sunlight (up to 100 000 LUX)**
- Enhanced security (on-device encryption of fingerprint templates & supporting security protocols)
- **Standalone operation** (BioMini Slim 2S Only)
- Ingress Protection **IP65**
- Optimized for easy integration
- AI-based Liveness Detection (Compliant with **ISO/IEC 30107-3 PAD Level 2 & 1 Standard**)
- **True Plug-n-Play**
- **Windows, Linux, and Android support**



Voter verification



National ID



Health insurance card



Criminal identification



SIM card registration



Payment & POS



Civil identification



Banking & ATM



Portable enrollment device

BioMini Combo 2

FAP20 Single Fingerprint and Smartcard Scanner



Embedded Module: BM-Slim2

BioMini Combo 2 is the FBI FAP 20 and PIV certified two-factor authentication scanner with machine learning-based Live Finger Detection(LFD) technology. This innovative product offers unmatched protection using advanced anti-spoofing techniques to prevent fake fingers from clay, rubber, silicone, glue, paper, film, and more. Furthermore, it provides an additional layer of security with SAM(Secure Access Module) slot. Designed for indoor and outdoor use, the BioMini Combo 2 captures fingerprints under 100,000 Lux direct sunlight and with water and dustproof IP65 protection. Compatible with Windows and Linux operating systems, the BioMini Combo 2 offers versatility and flexibility for various applications.

— Features

- **FBI PIV & Mobile ID FAP20 Certified**
- Capturing high-quality fingerprint images when the finger is dry / wet
- **Operates under direct sunlight (up to 100 000 LUX)**
- **Standalone operation**
- Ingress Protection **IP65**
- Optimized for easy integration
- AI-based Liveness Detection (Embedded BM-Slim2 Module)
- **True Plug-n-Play**
- **Windows, Linux, and Android support**



Voter verification



National ID



Health insurance card



Criminal identification



SIM card registration



Payment & POS



Civil identification



Banking & ATM



Portable enrollment device

RealPass-N

Multi-functional & Full-page Document Reader



ICAO

ICAO Doc 9303 Compliant

RealPass-N is a multi-functional and full-page document reader for one-step reading of multiple document types, including ICAO standard documents such as e-Passport, e-Visa, ID cards, and ID & 2D barcodes. It is designed to capture or extract data from visual data pages and RFID chips of electronic documents quickly and reliably in a variety of public and commercial sectors.

— Features

- ICAO Doc 9303 Standard Compliance
- One-step reading of visual data page and RFID chip of e-documents
- OCR data capture of the Machine-Readable Zone(MRZ)
- Reads ISO14443 Type A/B contactless chip, 1D/2D Barcodes
- Automatic detection of document placement
- No moving parts, robust, minimal maintenance cost
- Windows and Linux support



Airport



Passport & VISA Issuance



Border Control



Duty-Free Shop



Casino



Hotel



Travel Agency



Car Rental



Currency Exchange

Build Something Great.

Xperix's SDK development framework allows control of Xperix's products and developers to integrate the core functionality of biometric devices with others seamlessly. With its SDKs, you can make your applications sustainable and clear for various applications such as national ID, border control, voter registration/verification, criminal identification, SIM card registration, banking, and more.

BioMini SDK

Supported Product

- BioMini Slim 3
- BioMini Slim 2/2S
- BioMini Combo 2
- BM-Slim3
- BM-Slim2/2S

OS & Languages

- Windows
C# / C++ / Java
- Linux
C++ / Java
- Android
Java

Features

- Various capture mode
- Minutiae extract from image
- Image quality check
- Data encryption & Decryption for image and template
- Fingerprint matching (1:1, 1:N)
- International standard image compressions, formats, and interfaces
- AI-based liveness detection (ISO/IEC 30107-3)

RealScan SDK

Supported Product

- RealScan S60
- RealScan-G10
- RealScan-D
- RealScan-FC
- RealScan S60M

OS & Languages

- Windows
C# / C++ / Java
- Linux
C++ / Java
- Android
Java

Features

- Auto-capture by sensing finger placement
- Slippage and blurred detection
- Halo and latent fingerprint image elimination
- Image quality check
- Automatic segmentation
- Sequence check-in rolls and slaps acquisition
- International standard image compressions, formats, and interfaces
- AI-based liveness detection (ISO/IEC 30107-3)

RealPass SDK

Supported Product

- RealPass-N

OS & Languages

- Windows
C# / C++ / Java
- Linux
C++ / Java

Features

- Security protocols and PKI: BAC,BAP, AA, PACE, PACE-CAM, CA, TA, TCC, SAC
- ID, 2D, Postal, All Stacked codes reading
- MRZ reading & inspection
- Flexible OCR engine to read various document types
- Control the illuminations (White,IR, UV)

RealPass SDK

Supported Product

- RealPass-N

OS & Languages

- Windows
C# / C++ / Java
- Linux
C++ / Java

Features

- Security protocols and PKI: BAC,BAP, AA, PACE, PACE-CAM, CA, TA, TCC, SAC
- ID, 2D, Postal, All Stacked codes reading
- MRZ reading & inspection
- Flexible OCR engine to read various document types
- Control the illuminations (White, IR, UV)



Specifications

	RealScan S60	RealScan S60M
Capture	Flat(Four/Two/Single) and Rolled(Single) fingers	Flat(Four/Two/Single) and Rolled(Single) fingers
Sensor Type	Optical TFT	Optical TFT
Resolution	500 ppi	500 ppi
Grayscale	8-bit, 256 levels	8-bit, 256 levels
Image Size (WxL)	Four finger slap: 1600 x 1500 pixels Two finger flat: 900 x 900 pixels Single flat / Roll: 800 x 750 pixels	Four finger slap: 1600 x 1500 pixels Two finger flat: 900 x 900 pixels Single flat / Roll: 800 x 750 pixels
Template Format	Xperix, ISO 19794-2, ANSI 378 by Image SDK	Xperix, ISO 19794-2, ANSI 378 by Image SDK
Supported Image Formats	RAW, BMP, WSQ, JPEG2000, ISO 19794-4	RAW, BMP, WSQ, JPEG2000, ISO 19794-4
Encryption	AES-256 by Image SDK	AES-256 by Image SDK
FBI / Image Certifications	Identification Flats (Appendix F), Live-Scan(Tenprint) System (Appendix F), Mobile ID FAP60 (Appendix F)	Identification Flats (Appendix F), Live-Scan(Tenprint) System (Appendix F), Mobile ID FAP60 (Appendix F)
OS Support	Windows 7 or higher 32/64bit, Linux Ubuntu, Debian, Fedora, OpenSUSE, CentOS 32/64bit, Android 5.0 or higher	Windows 7 or higher 32/64bit, Linux Ubuntu, Debian, Fedora, OpenSUSE, CentOS 32/64bit, Android 5.0 or higher
Weight	220 g	189 g
Platen Size (WxL)	83.3 mm x 78.2 mm	83.3 mm x 78.2 mm
Sensing Area (WxL)	81.3 mm x 76.2 mm	81.3 mm x 76.2 mm
Dimensions (WxLxH)	118 mm x 120 mm x 19.3 mm	102.4 mm x 112 mm x 15.9 mm
Surface Protection	Optic Glass + AR coating (Pencil 6H)	Optic Glass + AR coating (Pencil 6H)
Ingress Protection	IP65 (Sensor Surface)	IP65 (Sealed between bezel and sensor surface)
Operating Temperature	-10 °C - 55 °C	-10 °C - 55 °C
Operating Humidity	10% - 90%, non-condensing	10% - 90%, non-condensing
Storage Temperature	-20 °C - 80 °C	-20 °C - 80 °C
Interface	USB 2.0 High Speed, USB-C	USB 2.0 High Speed, USB-C
Power Source	USB Host	USB Host
USB Voltage Level	5.0 V ±10%	5.0 V ±10%
Live Finger Detection (LFD)	Supported (by AI-based, ISO/IEC 30107-3 Compliant)	Supported (by AI-based, ISO/IEC 30107-3 Compliant)
Sound	Buzzer	Not Supported
LED Indicator	Supported	Not Supported
Kensington Lock	Not Supported	Not Supported
Smart Sleep Mode	Supported	Supported
Certification	FBI, CE, FCC, KC, RoHS, USB-IF, IEC 62471, WEEE, REACH, WHQL, UL	FBI, CE, FCC, KC, RoHS, USB-IF, IEC 62471, WEEE, REACH, WHQL, UL

RealScan-G10	RealScan-D	RealScan-FC
Flat(Four/Two/Single) and Rolled(Single) fingers	Flat(Two/Single) and Rolled(Single) fingers	Upper & Lower Palms, Writer's palms, Flat(Four/Two/Single) and Rolled(Single) fingers
Optical	Optical	Optical
500 ppi	500 ppi	500 ppi
8-bit, 256 levels	8-bit, 256 levels	8-bit, 256 levels
Four finger slap: 1600 x 1500 pixels Single flat / Roll: 800 x 750 pixels	Two finger flat: 900 x 900 pixels Single flat / Roll: 900 x 900 pixels	Palm print: 2500 x 2500 pixels Four finger slap: 1600 x 1500 pixels Single flat / Roll: 800 x 750 pixels
Xperix, ISO 19794-2, ANSI 378 by Image SDK	Xperix, ISO 19794-2, ANSI 378 by Image SDK	Xperix, ISO 19794-2, ANSI 378 by Image SDK
RAW, BMP, WSQ, JPEG2000, ISO 19794-4	RAW, BMP, WSQ, JPEG2000, ISO 19794-4	RAW, BMP, WSQ, JPEG2000, ISO 19794-4
AES-256 by Image SDK	AES-256 by Image SDK	AES-256 by Image SDK
Identification Flats (Appendix F), Live-Scan(Tenprint) System (Appendix F), Mobile ID FAP60 (Appendix F)	Mobile ID FAP45 (Appendix F), PIV Single Finger (PIV-071006)	Identification Flats (Appendix F & Appendix P), Live-Scan(Tenprint) System (Appendix F), Live-Scan(Palm) system (Appendix P)
Windows 7 or higher 32/64bit, Linux Ubuntu, Debian, Fedora, OpenSUSE, CentOS 32/64bit, Android 5.0 or higher	Windows 7 or higher 32/64bit, Linux Ubuntu, Debian, Fedora, OpenSUSE, CentOS 32/64bit, Android 5.0 or higher	Windows 7 or higher 32/64bit, Linux Ubuntu, Debian, Fedora, OpenSUSE, CentOS 32/64bit, Android 5.0 or higher
1.8 kg	540 g	5.26 kg
89 mm x 80 mm	48 mm x 48 mm	131.2 mm x 130.2 mm
81.3 mm x 76.2 mm	46 mm x 46 mm	127 mm x 127 mm
152 mm x 152 mm x 127 mm	84 mm x 171 mm x 63 mm	193 mm x 315 mm x 150 mm
Optic Glass (Scratch free)	Optic Glass (Scratch free)	Optic Glass (Scratch free)
IP54 (Sealed between bezel and sensor surface)	IP53 (Sealed between bezel and sensor surface)	IP64
-10 °C - 50 °C	-10 °C - 50 °C	0 °C - 55 °C
10% - 90%, non-condensing	10% - 90%, non-condensing	10% - 90%, non-condensing
-20 °C - 70 °C	-20 °C - 70 °C	-20 °C - 70 °C
USB 2.0 High Speed	USB 2.0 High Speed	USB 2.0 High Speed
USB Host	USB Host	USB Host / Adapter
5.0 V ±10%	5.0 V ±10%	5.0 V ±10% / 12 VDC ±10%
Supported (by AI-based, ISO/IEC 30107-3 Compliant)	Supported (by AI-based)	Not Supported
Speaker	Buzzer	Speaker
Supported	Supported	Not Supported
Supported	Not Supported	Not Supported
Not Supported	Not Supported	Not Supported
FBI, CE, FCC, KC, RoHS, USB-IF, IEC62471, WEEE, REACH, WHQL, UL, BIS, STQC	FBI, CE, FCC, KC, WHQL, UL	FBI, CE, FCC, KC, RoHS, WEEE, REACH, WHQL, UL, BIS

Specifications

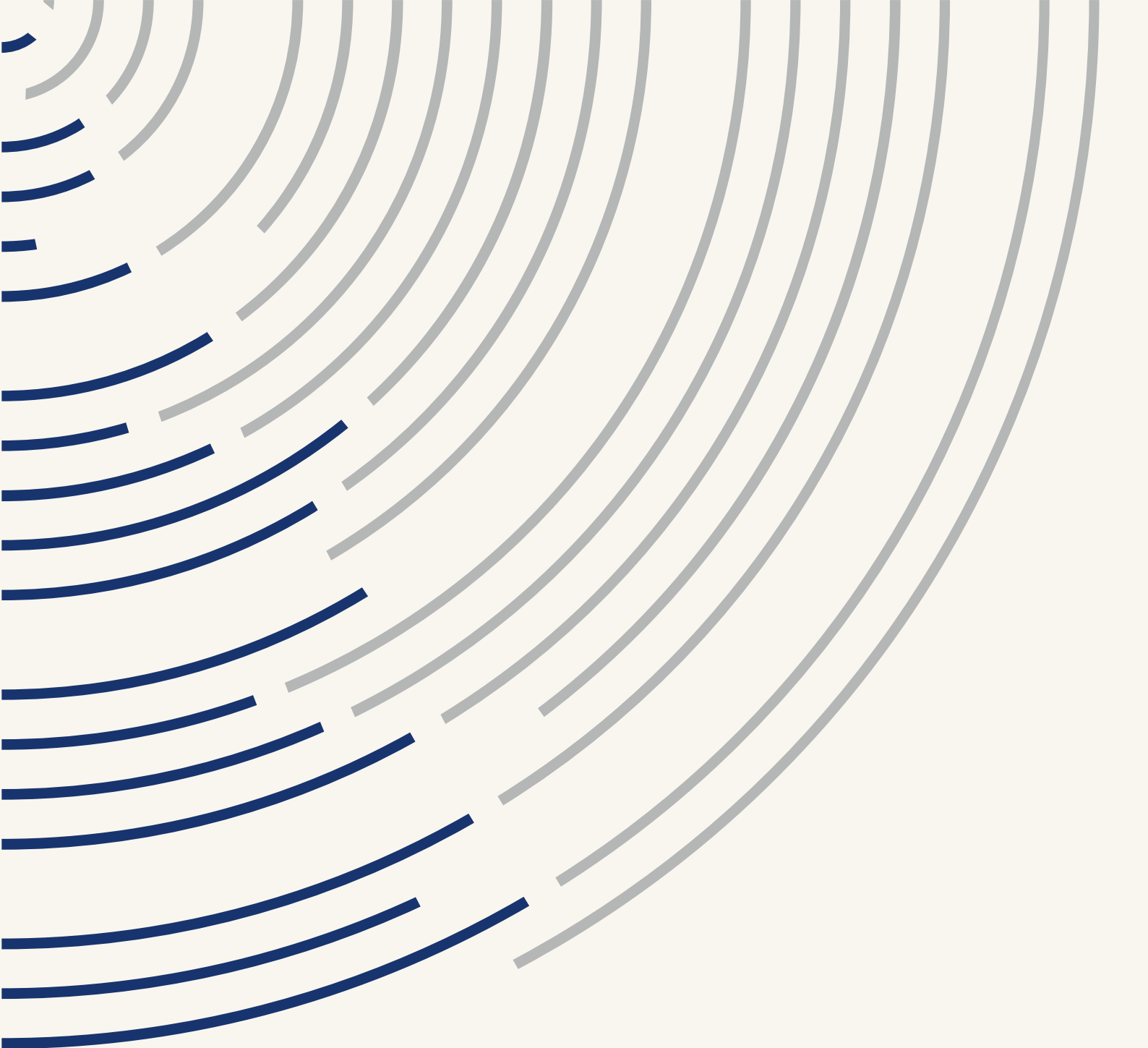
	BioMini Slim 3	BioMini Slim 2/2S
Capture	Flat(Single) fingers	Flat(Single) fingers
Sensor Type	Optical	Optical
Resolution	500 ppi	500 ppi
Grayscale	8-bit, 256 levels	8-bit, 256 levels
Image Size (WxL)	400 x 500 pixels	300 x 400 pixels
Template Format	Xperix, ISO 19794-2, ANSI 378	Xperix, ISO 19794-2, ANSI 378
Supported Image Formats	RAW, BMP, ISO 19794-4, WSQ (FBI certified)	RAW, BMP, ISO 19794-4, WSQ (FBI certified)
Encryption	Device: AES-256, RSA 1024bit, ECC 521bit SDK: AES-256	Device: AES-256, RSA 1024bit, ECC 521bit (BioMini Slim 2S Only) SDK: AES-256
FBI / Image Certifications	Mobile ID FAP 30 (PIV-071006), PIV Single Finger (PIV-071006), FIPS	Mobile ID FAP 20 (PIV-071006), PIV Single Finger (PIV-071006), FIPS (BioMini Slim 2S Only)
OS Support	Windows 7 or higher 32/64bit, Linux Ubuntu, Debian, Fedora, OpenSUSE, CentOS 32/64bit, Android 5.0 or higher (USB Host), OS/Platform Independent, Stand-alone Operation	Windows 7 or higher 32/64bit, Linux Ubuntu, Debian, Fedora, OpenSUSE, CentOS 32/64bit, Android 5.0 or higher (USB Host), OS/Platform Independent (BioMini Slim 2S Only), Stand-alone Operation (BioMini Slim 2S Only)
Weight	111 g	91 g
Platen Size (WxL)	21.5 mm x 26.5 mm	16.5 mm x 21 mm
Sensing Area (WxL)	20.3 mm x 25.4 mm	15.2 mm x 20.3 mm
Dimensions (WxLxH)	83 mm x 45.9 mm x 20 mm	72.8 mm x 40.7 mm x 18.5 mm
Surface Protection	Optic Glass (Scratch free)	Optic Glass (Scratch free)
Ingress Protection	IP65 (Sealed between bezel and sensor surface)	IP65 (Sealed between bezel and sensor surface)
Operating Temperature	-10 °C - 50 °C	-10 °C - 50 °C
Operating Humidity	0% - 90%, non-condensing	0% - 90%, non-condensing
Storage Temperature	-20 °C - 70 °C	-20 °C - 70 °C
Interface	USB 2.0 High Speed	USB 2.0 High Speed
Power Source	USB Host	USB Host
USB Voltage Level	5.0 V ±10%	5.0 V ±10%
Live Finger Detection (LFD)	Supported (by AI-based)	Supported (by AI-based, ISO/IEC 30107-3 Compliant)
Plug & Play	Supported (by HID Protocol)	Supported (BioMini Slim 2S Only)
Standalone Mode	Supported	Supported (BioMini Slim 2S Only)
Multi Dynamic Range (MDR)	Supported	Supported
Smart Sleep Mode	Supported	Supported
Certification	FBI, CE, FCC, KC, RoHS, USB-IF, CB, IEC 62471, WEEE, REACH, BIS, WHQL	FBI, CE, FCC, KC, RoHS, CB, IEC 62471, WEEE, REACH, WHQL, BIS, USB-IF, PAD Level 1 & 2 by Bixelab (BioMini Slim 2 Only)

BM-Slim3	BM-Slim2/2S
Flat(Single) fingers	Flat(Single) fingers
Optical	Optical
500 ppi	500 ppi
8-bit, 256 levels	8-bit, 256 levels
400 x 500 pixels	300 x 400 pixels
Xperix, ISO 19794-2, ANSI 378	Xperix, ISO 19794-2, ANSI 378
RAW, BMP, ISO 19794-4, WSQ (FBI certified)	RAW, BMP, ISO 19794-4, WSQ (FBI certified)
Device: AES-256, RSA 1024bit, ECC 521bit	Device: AES-256, RSA 1024bit, ECC 521bit (BM-Slim2S Only)
SDK: AES-256	SDK: AES-256
Mobile ID FAP 30 (PIV-071006), PIV Single Finger (PIV-071006), FIPS	Mobile ID FAP 20 (PIV-071006), PIV Single Finger (PIV-071006), FIPS (BM-Slim2S Only)
Windows 7 or higher 32/64bit, Linux Ubuntu, Debian, Fedora, OpenSUSE, CentOS 32/64bit, Android 5.0 or higher (USB Host), OS/Platform Independent, Stand-alone Operation	Windows 7 or higher 32/64bit, Linux Ubuntu, Debian, Fedora, OpenSUSE, CentOS 32/64bit, Android 5.0 or higher (USB Host), OS/Platform Independent (BM-Slim 2S Only), Stand-alone Operation (BM-Slim 2S Only)
48.6 g	30 g
21.5 mm x 26.5 mm	16.5 mm x 21 mm
20.3 mm x 25.4 mm	15.2 mm x 20.3 mm
67.5 mm x 36 mm x 15 mm	59 mm x 32 mm x 13.5 mm
Optic Glass (Scratch free)	Optic Glass (Scratch free)
IP65 (Sealed between bezel and sensor surface)	IP65 (Sealed between bezel and sensor surface)
-10 °C - 50 °C	-10 °C - 50 °C
0% - 90%, non-condensing	0% - 90%, non-condensing
-20 °C - 70 °C	-20 °C - 70 °C
USB 2.0 High Speed	USB 2.0 High Speed
USB Host	USB Host
5.0 V ±10%	5.0 V ±10%
Supported (by AI-based)	Supported (by AI-based, ISO/IEC 30107-3 Compliant)
Supported (by HID Protocol)	Supported (BM-Slim2S Only)
Supported	Supported (BM-Slim2S Only)
Supported	Supported
Supported	Supported
FBI, CE, FCC, KC, RoHS, USB-IF, CB, IEC 62471, WEEE, REACH, BIS, WHQL	FBI, CE, FCC, KC, RoHS, CB, IEC 62471, WEEE, REACH, WHQL BIS, USB-IF, PAD Level 1 & 2 by Bixelab (BM-Slim2 Only)

Specifications

	BioMini Combo 2
Capture	Flat(Single) fingers
Sensor Type	Optical
Resolution	500 ppi
Grayscale	8-bit, 256 levels
Image Size (WxL)	300 x 400 pixels
Template Format	Xperix, ISO 19794-2, ANSI 378
Supported Image Formats	RAW, BMP, ISO 19794-4, WSQ (FBI certified)
Encryption	SDK: AES-256
FBI / Image Certifications	Mobile ID FAP 20 (PIV-071006), PIV Single Finger (PIV-071006)
OS Support	Windows 7 or higher 32/64bit, Linux Ubuntu, Debian, Fedora, OpenSUSE, CentOS 32/64bit
Weight	280 g
Platen Size (WxL)	16.5 mm x 21 mm
Sensing Area (WxL)	15.2 mm x 20.3 mm
Dimensions (WxLxH)	95.7 mm x 114.8 mm x 52.6 mm
Surface Protection	Optic Glass (Scratch free)
Ingress Protection	IP65 (Sealed between bezel and sensor surface)
Operating Temperature	-10 °C - 50 °C
Operating Humidity	0% - 90%, non-condensing
Storage Temperature	-20 °C - 70 °C
Interface	USB 2.0 High Speed, CCID, PC/SC driver
Power Source	USB Host
USB Voltage Level	5.0 V ±10%
Live Finger Detection (LFD)	Supported (Embedded BM-Slim2 module)
Plug & Play	Not Supported
Standalone Mode	Not Supported
Multi Dynamic Range (MDR)	Supported
Smart Sleep Mode	Not Supported
Certification	FBI, CE, FCC, KC, RoHS, USB-IF, WHQL, UL
SAM Slot	Supported (Optional, Max 1 slot)
Contact Card	ISO 7816 Class A/B/C (5V, 3.0V, 1.8V) T=0 and T=1, EMV2000 contact smart card with SAM Slot (Optional, Max 1 slot)

RealPass-N		
Model Name	RPN-BQ	RPN-FQ
Capture	Passport, ID Card, Driver licence, QR code, Barcode	ePassport, ID Card, Driver licence, QR code, Barcode
Sensor Type	Optical	Optical
Resolution	500 ppi	500 ppi
Image Color Depth	24-bit / pixels	24-bit / pixels
Image Size (WxL)	Full size: 2560 x 1772	Full size: 2560 x 1772
Illuminations	White, IR(880 nm), UV(365 nm)	White, IR(880 nm), UV(365 nm)
Supported Image Formats	BMP, JPG, PNG, JPEG2000, TIFF	BMP, JPG, PNG, JPEG2000, TIFF
OCR	ICAO DOC 9303(ISO-7510) compliant travel documents (2 & 3-line MRZ) ISO-18013 driving licenses (1-line MRZ) Korean ID Card (National ID Card, Driver license)	ICAO DOC 9303(ISO-7510) compliant travel documents (2 & 3-line MRZ) ISO-18013 driving licenses (1-line MRZ) Korean ID Card (National ID Card, Driver license)
Barcode 1D	BC412, Codabar, Code 11, Code 32, Code 39, Code 93, Code 128 GS1 DataBar(RSS), Hong Kong 2 of 5, IATA 2 of 5, Interleaved 2 of 5, Plessey Matrix 2 of 5, MSI Plessey, NEC 2 of 5, Straight 2 of 5, Telepen Trioptic, UPC/EAN/JAN	BC412, Codabar, Code 11, Code 32, Code 39, Code 93, Code 128 GS1 DataBar(RSS), Hong Kong 2 of 5, IATA 2 of 5, Interleaved 2 of 5, Plessey Matrix 2 of 5, MSI Plessey, NEC 2 of 5, Straight 2 of 5, Telepen, Trioptic, UPC/EAN/JAN
Barcode 2D	PDF 417, QR Code, QR Code Model 1, Micro QR Code, Aztec, DataMatrix, Grid Matrix, Dot Code, Han Xin, Maxicode	PDF 417, QR Code, QR Code Model 1, MicroQR Code, Aztec, DataMatrix, Grid Matrix, Dot Code, Han Xin, Maxicode
RFID	Not Supported	ISO 14443 A/B Type(up to 848Kbps) including BAC, PA, AA, EAC, PACE and SAC, PC/SC support
OS Support	Windows 7 or higher 32/64bit, Linux Ubuntu, Debian, Fedora, OpenSUSE, CentOS 32/64bit	Windows 7 or higher 32/64bit, Linux Ubuntu, Debian, Fedora, OpenSUSE, CentOS 32/64bit
Weight	1 kg	1 kg
Sensing Area (WxL)	130 mm x 90 mm	130 mm x 90 mm
Dimensions (WxLxH)	155 mm x 190 mm x 99.8 mm(device) / 103.8(guidance) mm	155 mm x 190 mm x 99.8 mm(device) / 103.8(guidance) mm
Surface Protection	Tempered Glass (Scratch free)	Tempered Glass (Scratch free)
Ingress Protection	IP54 (Sealed between bezel and sensor surface)	IP54 (Sealed between bezel and sensor surface)
Operating Temperature	-10 °C - 50 °C	-10 °C - 50 °C
Operating Humidity	10% - 90%, non-condensing	10% - 90%, non-condensing
Storage Temperature	-20 °C - 80 °C	-20 °C - 80 °C
Interface	USB 2.0 High Speed, Integrated USB 3.0 Hub 2 ports	USB 2.0 High Speed
Power Source	USB Host / Adapter	USB Host / Adapter
USB Voltage Level	5.0 V ±10% / 12 VDC ±10%	5.0 V ±10% / 12 VDC ±10%
Sound	Buzzer	Buzzer
LED Indicator	Supported	Supported
Kensington Lock	Supported	Supported
Certification	CB, CE, FCC, KC, RoHS, IEC 62471, WEEE, REACH, WHQL	CB, CE, FCC, KC, RoHS, IEC 62471, WEEE, REACH, WHQL



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