

# Futronic FS50

## High-performance usb fingerprint reader for one or two fingers

Bioidentidad Futronic FS50 is a fingerprint scanner whose capture quality is certified by the FBI, complying with the Mobile ID FAP 40 fingerprint review and FIPS 201 information processing standards for the verification of people's identity (PIV - Personal Identity Verification), with a large capture area for one finger or two flat fingers simultaneously.

Its large capture window generates fingerprint images of 800 x 750 biometric pixels and is made of a special glass with a thickness of 33mm, resistant to scratches, liquid ingress and other types of stress, ensuring uninterrupted use in harsh environments. It has excellent performance for various skin types and environmental conditions.

### Highest security biometric fingerprinting and identification with wide capture window

#### GENERAL FEATURES

Bioidentidad FS50 uses an advanced optical precision system with CMOS technology sensor, which meets the rigorous requirements for fingerprint image quality required by the PIV-071006 standard and certified by the FBI.

The FS50 allows the following types of capture, as required by the project:

- One (1) flat finger ("single finger").
- Two (2) flat fingers simultaneously ("slaps")
- Rolled finger ("rolled")

It is compatible with the most popular software platforms on the market. Also, its connection with the PC / laptop / netbook / PDA / tablet / smartphone is USB, which simplifies the process of installation and use.

The FS50 is a high quality, compact and robust, cost efficient fingerprint capture device, ideal for applications in banking, notary, migration, ID cards, driver's license, elections, police, attendance control and any biometric or AFIS application where a reliable fingerprint review is required.

#### ADVANCED LIVE FINGER DETECTION

The FS50 features unique "live finger" detection technology, rejecting imitation fingerprints on silicone, gelatin and other materials.

#### BIOMETRIC SOFTWARE AND DEVELOPMENT KITS

Bioidentidad FS50 has the drivers, libraries and application programming interface (API) for the management and capture of fingerprint images, including:

- Automatic fingerprint capture
- Automatic segmentation of the slaps (images of two simultaneous fingers) into individual prints.
- Fingerprint quality control according to NFIQ standard
- Fingerprint image compression in FBI certified WSQ format
- Advanced Live Finger Detection (ALFD)
- Red/Green LED indicator control

Bioidentidad can provide the application or software development kit (SDK) according to your project requirements, which may also include functions for biometric verification (1:1), biometric identification (1:N) and database integration, as well as compliance with the required international biometric standards (ANSI/INCITS 378, NIST MINEX, ISO/IEC 19794, ANSI/NIST-ITL 1-2011, among others).



The Bioidentidad FS50 fingerprint scanner is internationally recognized for its high quality, which has been certified by the FBI. It has a large capture area allowing up to two fingers to be captured simultaneously.



#### PROVEN QUALITY

The high quality of the FS50 is endorsed by internationally recognized security organizations such as the FBI, NIST, GSA, among others.



#### HIGH PERFORMANCE

The FS50 will surprise you. The fingerprint capture is very fast and the fingerprint can be displayed in real time, everything with ideal quality.



#### MAINTENANCE FREE

Made with state-of-the-art electronic technology and no moving parts, it is designed to have an MTBF\* of more than 50,000 hours.  
(\*MTBF: Mean Time Between Failures)

*"The safety and reliability of our systems is driven by the most demanding needs of our customers, and our goal is to exceed their expectations."*



Bioidentidad® provides high performance solutions for people identification and control.

With more than two decades of experience in research, development, manufacturing, consulting, project implementation, distribution and support, it is the preferred choice of biometrics experts.

#### COMPATIBLE PLATFORMS

We offer compatibility with the widest variety of platforms on the market, including:

- Windows 11, 10, 8, 7, Vista, XP, 2025, 2022, 2019, 2012, 2008, 2003 or higher, 32bit y 64bit
- Linux con kernel 2.4 or higher (x86 and ARM9 architecture)
- Android 3.1 or higher (with OTG or Host port)
- MacOS (10.5 or higher)
- Windows CE 5.0 or higher (x86 and ARM9 architecture)
- Java



#### TRACEABLE

A unique serial number is factory programmed into each FS50, making each device traceable; which is extremely important for large-scale project management.

#### COMPATIBLE SOFTWARE

Due to the high quality of fingerprint capture, superior security, great durability and excellent level of compatibility, the FS50 is the recommended fingerprint capturer by a wide variety of biometric software brands, including Bioidentidad (BioCaptura, BioVerifica, etc.), Griaule (Fingerprint SDK, Biometric Suite), Id3, Innovatrics, NEC (AFIS, ABIS, etc.), Neurotechnology (Verifinger, Megamatcher) and more.

#### WARRANTY

The high quality of Bioidentidad products allows us to grant up to five (5) years of warranty.

#### TECHNICAL SPECIFICATIONS

- Sensor type: Optical CMOS with 33mm thick high durability glass prism.
- Live finger detection: Advanced Live Finger Detection (ALFD).
- Image resolution: 500 dpi, 256 gray levels
- Image size: 800 x 750 pixel
- Scanner area: 40.64 x 38.10 mm
- Capture types:
  - Two simultaneous flat fingers
  - Single flat finger
  - Rolled finger
- Scanner illumination: infrared LEDs
- Image quality: FBI certified according to PIV and FAP 40 standards
- Visual indicators: red/green LED
- Communication interface: USB 2.0 (in USB-A and USB-C versions)
- Power supply: via USB port
- Electrostatic resistance: contact 8KV, air 16kV
- Operating range: -10° to 55°C
- Liquid and dust ingress protection on scanner window.
- Dimensions: 110 x 110 x 45 mm
- Weight: 460 grams
- Cable length: USB-A 2 meters, USB-C 30 centimeters
- Technical standards:
  - FBI IAFIS Image Quality Specifications (IQS) Personal Identity Verification (PIV) Single Finger Capture Device Specifications
  - FBI EBTS Appendix F Mobile ID FAP 40
  - GSA FIPS 201 PIV-071006 IQS
  - Microsoft WHQL
  - FCC, CE, RoHS
  - NFIQ, BMP, WSQ (IAFIS-IC-0110)
  - NIST MINEX
  - ANSI INCITS 378
  - ISO IEC 19794
  - RENIEC



#### INTEROPERABLE TECHNOLOGY

Because the Bioidentidad FS50 complies with international biometric standards, fingerprints captured with it can be used in a variety of systems, platforms and AFIS, regardless of the vendor.



#### EASY INSTALLATION

The drivers are user-friendly and are available for the widest variety of operating systems.



#### PERMANENT TECHNICAL ASSISTANCE

Bioidentidad provides specialized technical assistance, accompanied by warranty and experienced biometric consulting.



*The fingerprint obtained with the FS50 is of such high quality that even the pores located on the finger ridges can be appreciated.*

Bioidentidad – Futronic division

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