



WATSON MINI

**Compact, Lightweight
FBI Certified FAP 45 2-Print Scanner**

- Automatic Spoof Rejection
- Software-Based Autodetect



WATSON MINI

Encrypted communications between scanner and host application



Intuitive, ergonomic, lightweight

Built for mobile and desktop applications

Compact 2-finger scanner for 1-, 2-, and 10-finger enrollment and verification

Watson Mini encrypts communications between the scanner and external devices or applications using 256-bit AES keys and RSA algorithms.



This closed-loop approach protects biometric data at the point of acquisition, across field wiring, and into the host application. By combining onboard security chipsets, private/public key structures, and industry best practices, Watson Mini ensures that sensitive personal information receives the highest level of scanner encryption currently available. For details, see encryption specification on the next page.

Watson Mini also contains protection against tampering through a unique calibration file installed in each serialized unit during production. Attempts to defeat Watson Mini's security through disassembly or hardware damage alters the device's calibration, rendering that device's imagery unacceptable.

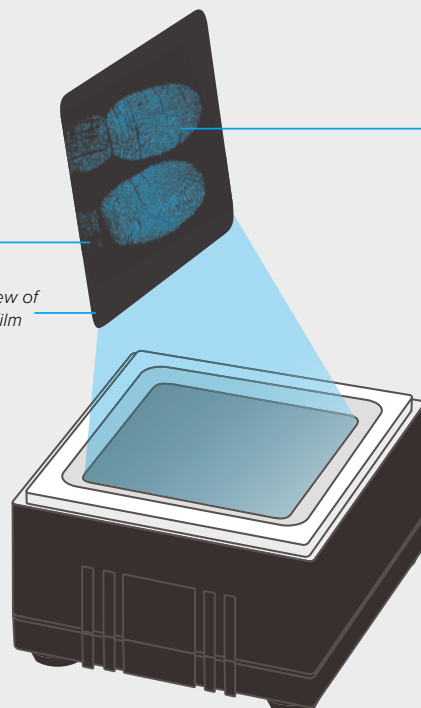
LES Light Emitting Sensor Technology

Integrated Biometrics' scanners use our patented light-emitting sensor (LES) technology to deliver fixed and mobile FBI certified fingerprint imaging in an exceptionally durable, lightweight scanner.



LES film contains luminescent phosphor microparticles that respond only to human fingers when they touch the film

Underside view of LES Sensor Film



A TFT camera captures the glow from the phosphor particles, producing a high-resolution fingerprint image

LES Phosphor Particle	•	13-32 μm
Human Hair	•	50-70 μm
Fine Beach Sand	•	90 μm

FEATURES & BENEFITS

Faster

- Rapid dry finger capture
- No need to clean latent prints in high-volume situations
- Easy integration via single SDK for all Integrated Biometrics FBI-certified products

Better

- Unaffected by extreme temperatures, direct sunlight, or bright artificial lights
- Compact, lightweight, and rugged
- Rejects common spoofing attacks
- Emits no bright lights during scans
- Meets or exceeds US military durability specifications

Smarter

- Competitive pricing
- Extremely low power consumption
- Eliminates consumables (silicone membranes or cleaning tape)
- Lower maintenance costs

Hardware-based Automatic Spoof Rejection

IB's LES film recognizes real versus manufactured fingerprints. LES-based scanners automatically reject fingerprints based on silicone, glue, rubber, and other common spoofing materials.

Two options available for PKCS (Public Key Cryptology standard)

PKCS – Elliptical Curve NIST P-521 or RSA 2048; AES-256, TRNG - NIST SP-800-90 A, B, C; Optional SHA-256, HMAC, MAC

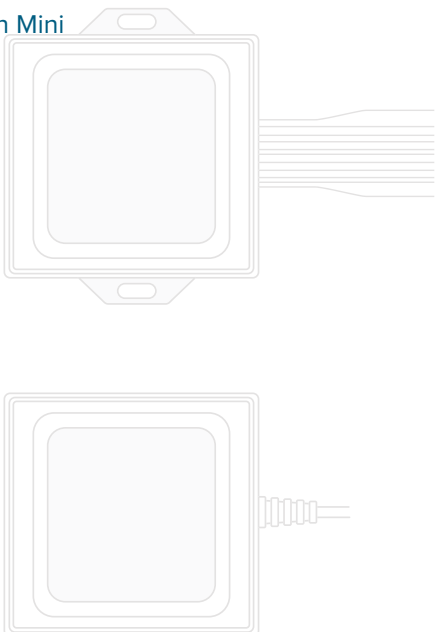
Software-Based Autodetect

IB's LES technology automatically detects the finger capture that generates the highest quality image without user intervention. Application developers enable this feature through the IB's software development kit (SDK).

AVAILABLE VERSIONS

Product

- Watson Mini



Part Number

WM110CA-E00
WM1109B-E00
WM1109C-E00
WM1108B-E00
WM1118C-E00
WM110FA-E00
WM1108M-E00
WM110DA-E00
WM1125M-E00
WM1128C-E00
WM1129C-E00
WM1114M-E00
WM2A03M-E00

Description

58" Cable, USB 2.0
24" Cable, Micro USB
24" Cable, USB C
8" Cable, Micro USB
8" Cable, USB C
3 Meter Cable, USB A 2.0
8" No Choke Molex, No Feet
1.8 Meter Cable, USB 2.0
80mm Molex, Wings
8" Cable, USB C, Required for Samsung mobile devices
24" Cable, USB C, Required for Samsung mobile devices
70mm Molex, Pigtail Cable
80mm Molex cable (FIPS-140-2 Encryption)

OS Support & System Requirements

OS Support

Windows 7 or later (32/64 bit), Linux Kernel 2.6 or later (32-bit, 64-bit, ARMv7-A, and ARMv8-A), Android 4.0 or later (32-bit, 64-bit, ARMv7-A, and ARMv8-A)

CPU

x86 and x64 | 2.0GHz or higher
ARM | 1.0 GHz or higher

Memory

512MB or higher

Images & Capture

Sensor Type

LES

Camera

CMOS

Resolution

500 PPI

Grayscale

256 grayscale dynamic range

Image Size

800 x 750 pixels

Supported Image Formats

RAW, JPEG2000, BMP, PNG, WSQ ([FBI-approved](#))

Encryption

256-bit AES keys and RSA algorithms

FBI / Image Certifications

Certification Mobile ID IQS FAP45, PIV, GSA FIPS201, FBI Appendix F Certified

Speed

Minimum > 10fps for Galaxy Nexus 1.2 GHz dual-core ARM Cortex-A9 or equivalent; 17 FPS for Intel 2.8 GHz processor or equivalent

API Interface

Capture single-finger/two-finger direct, single-finger rolls, multi-device / multi-thread support

Quality Scoring

NFIQ v1 supported on all OSes and NFIQ2 for Windows

Weight & Dimensions

Product Weight

< 180 grams / 0.40 lbs (not including cable)

Platen Size

40.64 mm x 38.1 mm / 1.6" x 1.5"

Sensing Area

40.64 mm x 38.1 mm / 1.6" x 1.5"

Scanner Assembly Dimensions

60.3 mm x 62.3 mm x 33.04 mm / 2.37" x 2.45" x 1.30"

Power & Connectors

Interface

USB 2.0

Power Source

USB Host

USB Voltage Level

4.4V to 5.25V

Sleep*

< 2mA

**Feature not available on all models. Ask technical support for further information.*

Conformance & Certifications

USB Certification

USB-IF [USB.ORG](#)

FCC/CE Conformance

FCC Part15 (per ANSI C62.4:2003) Class A, CSA ICES-003 Class A, CE Emissions: EN55022:2006 Class A, CE Immunity EN 55024:1998/A1:2001/A2:2003, IEC61000-4-2

Air Discharge / Contact Discharge

In compliance with IEC 61000-4-2

Equipment Safety

IEC 60950-1

Hazardous Material

RoHS directive 2002/95/EC

Vibration Test

IEC 60068-2-64

Temperatures & Humidity

Operating Temperature

-10°C ~ +55°C / 14°F ~ 131°F

Humidity

30~85% RH < 40°C / 104°F (Non-condensing)

Storage Temperature

-40°C ~ +80°C / -40°F ~ 176°F

Surfaces & Systems

Ingress Protection / Water / Dust

IP65 Sealed bezel to scanning surface

Surface Durability

MIL-C-675c 4.5010, MIL-STD-810F

Cleaning & Sanitization

For proper cleaning and disinfection of IB products, visit integratedbiometrics.com/cleaning

Mean-Time Between Failures (MTBF)

Based on 200 full two-finger enrollments per day, the Watson Mini MTBF is 33 years.

Warranty

All products have a 12-month warranty starting from the date of delivery. Additional years warranties available. Inquire with your salesperson.

View the warranty here: integratedbiometrics.com/warranty

