



- Automatic Spoof Rejection
- Software-Based Autodetect
- Multiple Encryption Levels



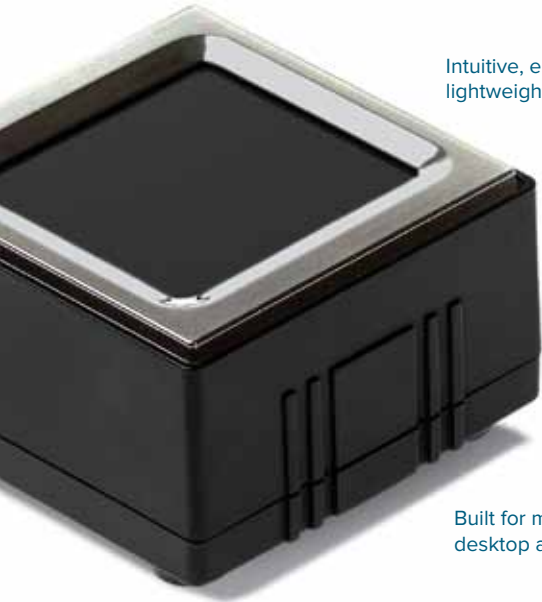
WATSON_{MINI}

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



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

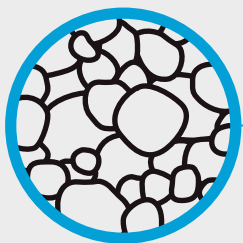
Watson Mini encrypts communications between the scanner and external devices or applications using 256-bit AES keys and RSA algorithms. This closed-loop approach protects biometric data at the point of acquisition, across field wiring, and into the host application. By combining onboard security chipsets, 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.

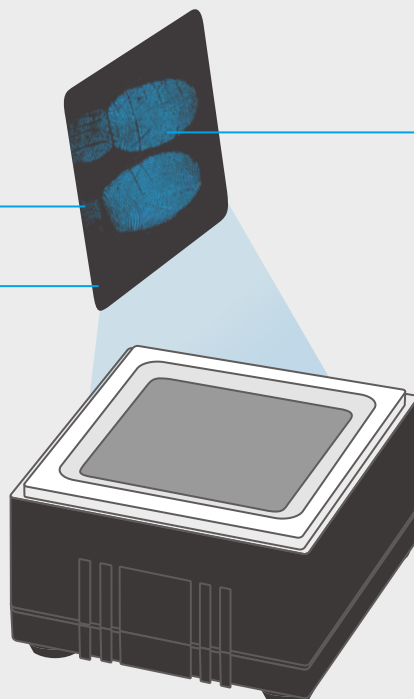
LES Light Emitting Sensor Technology

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 | • | 13-25 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

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

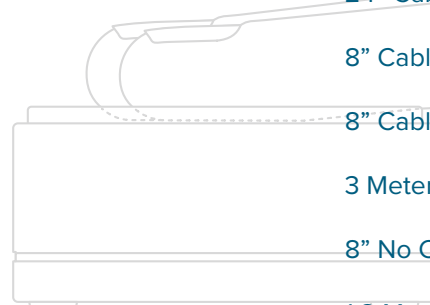
8" No Choke Molex, No Feet

1.8 Meter Cable, USB 2.0

80mm Molex, Wings

70mm Molex, Pigtail Cable

80mm Molex cable
(FIPS-140-2 Encryption)



Images & Capture

Usage

Indoor/outdoor rated, direct sunlight operation

Sensor Type

Electroluminescent - Light-emitting sensor (LES) TFT camera

Memory

256 MB non-volatile, 1 MB write once, 128 MB volatile RAM

Resolution

500 PPI

Gray Scale

256 grayscale dynamic range (8-bit grayscale)

Image Size

800 W x 750 H pixels at 500 PPI (WSQ available in SDK)

Supported Image Formats

RAW, JPEG2000, BMP, PNG, WSQ

FBI Certification / Image Certifications

PIV 071006, FIPS 201, FAP 40/Appendix F FAP45, certified to Mobile ID Requirements

Encryption

X.509 certificate as EDDSA; PKCS - NIST P-521 elliptical curve or RSA 2048; AES-256, TRNG - NIST SP-800-90 A, B, C; Optional SHA-256, HMAC, MAC

Speed

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

Capture Types

Single-finger flat, two-finger flat, single-finger rolls

API Interface

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

Weight & Dimensions

Product Weight

85 grams / 3 oz

Sensing Area

40.6 mm x 38.1 mm / 1.6 x 1.5"

Scanner Assembly Dimensions

62 mm x 60 mm x 33 mm / 2.44" x 2.36" x 1.30

Power & Connectors

Interface

USB 2.0

Power Source

USB Host

USB Power Requirement / Consumption

Full scanning < 300mA, standby < 40 mA

Conformance & Certifications

USB Certification

USB-IF USB.ORG

FCC/CE Conformance

FCC Part 15 (per ANSI C62.4:2003) Class A; CSA ICES-003 Class A; CE Emissions: EN 55022:2006 Class A; CE Immunity: EN 55024:1998/A1:2001/A2:2003, IEC 61000-4-2

Air Discharge / Contact Discharge

In compliance with IEC 61000-4-2

Equipment Safety

IEC 60950-1

Hazardous Material RoHS Certified

RoHS directive 2011/65/EU with amendment: 2015/863

Vibration Test

per Mil-STD-810F (Method 514.5), Category 24, Fig. 514.5C-17

Temperatures & Humidity

Operating Temperature

-10°C ~ +55°C / 14°F ~ 131°F

Humidity

10~90% RH < 40°C (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

Surface Resistance / Allowable Cleaning Chemicals

Ammonia, IPA, methanol, soaps, detergents, salt water

OS Support

Window 7, Windows 8, Windows 10, Linux, Embedded Linux, Android 4.0+

Warranty

1 year hardware warranty

(extended warranty available upon request)

