



# KOJAK

**Rugged, Compact, FBI Certified  
FAP 60 10-Print Scanner**

- Automatic Spoof Rejection
- Software-Based Autodetect



# KOJAK

Encrypted communications between scanner and host application

Supports FBI Certified Appendix F 10-finger enrollment and verification

LED graphical user interface

Designed for fixed and mobile applications

Lowest power consumption of any comparable FAP 60 scanner

Optional private labeling



Kojak ends the myth that 4-4-2 FAP 60 fingerprint scanners must be big, heavy, and power hungry. This compact, lightweight unit delivers fast FBI Certified Appendix F performance for 10-print enrollment and verification in a compact form factor that uses less power than any other FAP 60 scanner currently available.

Kojak comes with an intuitive LED-based graphical interface that makes it fast and easy to register accurate scans. A private label version carries custom branding for OEMs and identity management solutions providers.

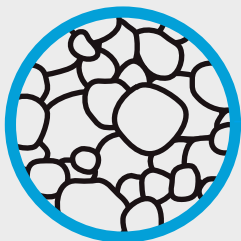
Available in embedded and standalone versions.

# LES Light Emitting Sensor Technology

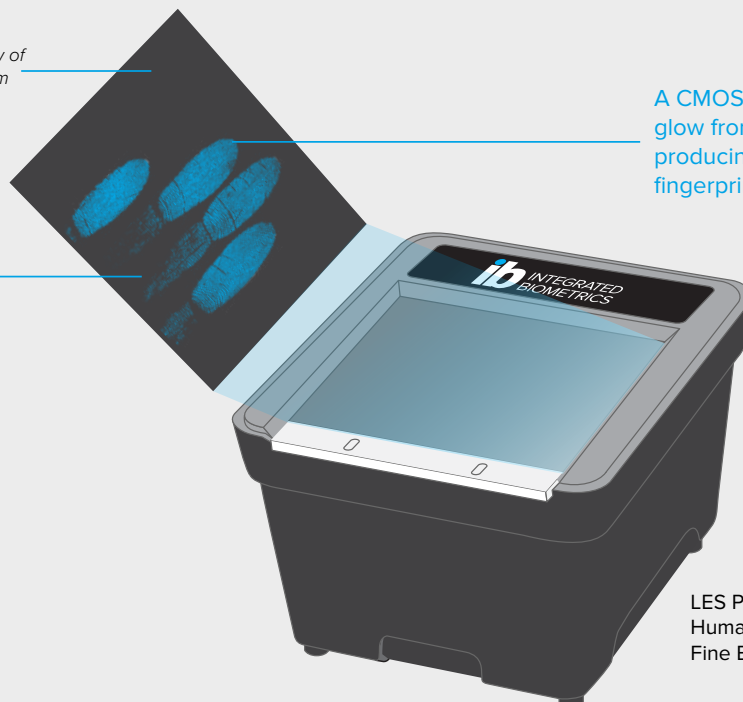
Integrated Biometrics' scanners use our patented light-emitting sensor (LES) technology to deliver fixed and mobile FBI certified fingerprint imaging in an exceptionally durable, lightweight scanner.

Underside view of LES Sensor Film

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



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



LES Phosphor Particle	•	13-32 $\mu\text{m}$
Human Hair	•	50-70 $\mu\text{m}$
Fine Beach Sand	•	90 $\mu\text{m}$

# 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



Kojak 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, Kojak ensures that sensitive personal information receives the highest level of scanner encryption currently available.

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

## Hardware-based Automatic Spoof Rejection

IB's patented LES film technology cannot be activated using common types of manufactured, fake fingerprints. Leveraging the electrical properties of human skin, LES film does not luminesce in the presence of fingerprints based on silicone, glues, rubbers, and other non-conductive materials.

## 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).

# IB SCAN ULTIMATE CAPTURE SDK

IBScan Ultimate Capture SDK is provided with every Kojak. The SDK contains comprehensive API functions necessary for 10-Print enrollment tasks. Among the API functions supported are:

- Dynamic auto capture of four finger slaps
- Four finger segmentation
- Easy Roll print capture with smear detection
- Individual finger NFIQ scoring of segmented slaps and individual rolled images
- Sequence checking for wrong finger or wrong hand detection
- Superior capture of damaged or dry fingers without requiring a silicon pad through our "Touch On Film" technology
- Captured images can be provided to the application in WSK, RAW, BMP, JPEG2000, and PNG formats

# AVAILABLE VERSIONS

## Product

- Kojak 3.0 Ten Print & Roll Scanner - Encryption
- Kojak 3.0 Ten Print & Roll Scanner - Encryption
- Kojak 2.0 Ten Print & Roll Scanner

## Part Number

- KJ210DA-E00
- KJ21000-E00
- KJ110DA-000

## Description

- 1.3m / 72" Fixed cable USB A Female USB C
- 1.3m / 72" Fixed cable USB A

## Images & Capture

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### Sensor Type

Light-emitting sensor (LES) CMOS camera

### Resolution

500 PPI

### Gray Scale

256 grayscale dynamic range

### Image Size

1600 W x 1500 H pixels

### Supported Image Formats

RAW, JPEG2000, BMP, PNG, WSQ

### Encryption

256-bit AES keys and RSA algorithms

### FBI Certification / Image Certifications

FBI Appendix F, PIV, FIPS 201, FAP 60

### Speed

Min frame rate > 10 FPS, slaps and rolls

### Capture Types

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

## Weight & Dimensions

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### Product Weight

725 grams / 1.6 lbs (not including cable)

### Platen Size

88.90 mm x 80.01 mm / 3.50" x 3.15"

### Sensing Area

81.28 mm x 76.30 mm / 3.20" x 3.00"

### Scanner Assembly Dimensions

114.7mm x 131.8mm x 82mm / 4.5" x 5.2" x 3.2"

## Power & Connectors

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### Scanner Interface

USB 2.0 / USB 3.0 Compatible

### Power Source

USB Host

### Power Specifications

4.4via USB; 4.40V to 5.25V, full scanning < 300mA, typical < 250 mA, sleep mode < 2 mA

## Conformance & Certifications

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### 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 2002/95/EC

### Vibration Test

IEC 60068-2-64

## Temperatures & Humidity

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### Operating Temperature

-10°C ~ +55°C / 14°F ~ 131°F

### Humidity

10~95% RH < 104°F / 40°C (non-condensing)

### Storage Temperature

-30°C ~ +60°C / -22°F ~ 140°F

## Surfaces & Systems

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### Ingress Protection / Water / Dust

Direct water spray, no dust or dirt ingress, IP65 entire enclosure

### Surface Durability

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

### Surface Resistance / Allowable Cleaning Chemicals

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

### OS Support

Windows Desktop 32/64 bit (7, 8, 10), Windows Server, Linux, Android 4.0+, Java

## Warranty

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1 year hardware warranty

(extended warranty available upon request)

