INTEGRATED BIOMETRICS

CAPTURE   CAPTURE   CAPTURE

ROLL

K⊙JAK

USER
MANUAL

WELCOME!

Thank you for purchasing Kojak, Integrated Biometrics' newest addition to our patented Light Emitting Sensor (LES) fingerprint scanning solutions. Kojak is the most durable, highest performance FAP 60 FBI Appendix F-certified ten-print live scanning solution.

Please read this manual thoroughly before using your Kojak to review proper steps for unit operation and capture processes. Your Integrated Biometrics reseller and the IB team are ready to answer any questions you may have!
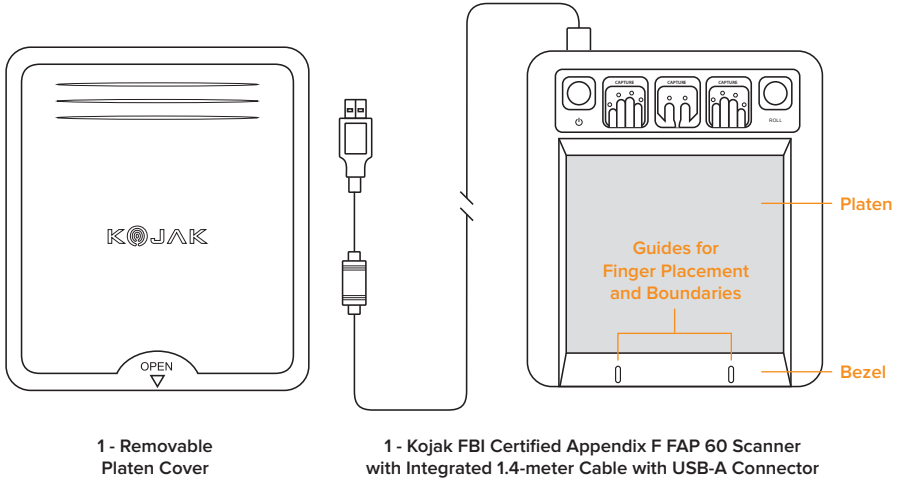
CONTENTS

UNPACKING

CONTENTS

1 - Removable Platen Cover

1 - Kojak FBI Certified Appendix F FAP 60 Scanner with Integrated 1.4-meter Cable with USB-A Connector

Platen

Guides for Finger Placement and Boundaries

Bezel

Kojak is provided in a securely packaged case. Please notify your Integrated Biometrics reseller in the event of damage during shipment. The product packaging contains all Kojak hardware components. The latest Software Development Kit (SDK) may be downloaded from Integrated Biometrics. Consult page 6 of this manual for details about the software download.
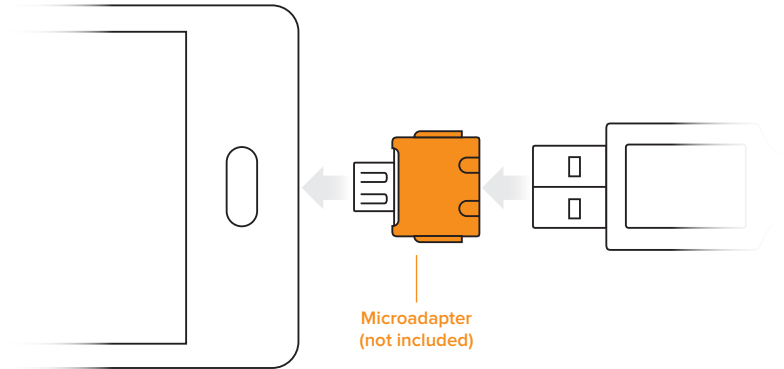
REMOVE COVER
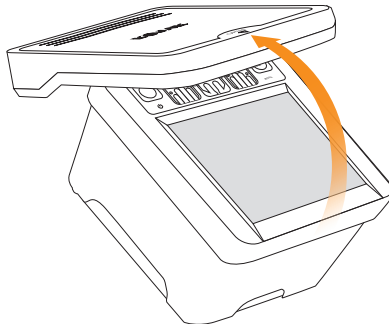
Pull UP and BACK to remove protective cover.

CONNECTING

CONNECT USB TO DEVICE

Microadapter (not included)

Connecting Kojak is easy!

1. Download and install the latest IBScanUltimate SDK

2. Connect Kojak to the system via USB (USB 2.0 or later)
   Note: An adapter may be required and is not provided

3. Integrated Biometrics provides a variety of test applications for demonstration. IBScanUltimate SDK includes demonstration applications for supported platforms and source code for ease of deployment.

CLEANING

BEST PRACTICES

Cleaning the Kojak scanner is a simple process.

· Use a water-moistened rag to remove dirt and debris.

· Mild soap or detergent may be used for stubborn dirt and grime.

· Wipe clean using a dry cloth.

WARNINGS AND CONSIDERATIONS

· Alcohol and alcohol-based cleaning solutions may stain if allowed to remain on the platen.

· Wipe alcohol products from Kojak's platen and clean using a water-based solution.

· Care should be taken to clean and remove chemicals immediately following a spill.

· Remove chemical solutions immediately using a water-moistened rag.

· Common chemicals that require immediate attention include:

- Acetone and polish removers

- Paint

- Paint thinners

- Stain removers

- Gasoline or petroleum products

- Pesticides and herbicides

- DEET or DEET infused products

- Cleaning cloths, rags, or devices impregnated with any of the above examples

RESOURCES

SUPPORT / SOFTWARE DEVELOPMENT

The IBScanUltimate Software Development Kit (SDK) is a set of robust tools that empower solution providers with the ability to deploy compelling LES biometric acquisition applications. The SDK includes support for a variety of operating systems and exceeds the needs of the most challenging environments.

The SDK includes Application Programming Interface (API) documentation, IB software components, demonstration applications and source code for each platform. Demonstration source code is a simple reference for integrators to rapidly develop solutions using Integrated Biometrics' LES technologies. We encourage you to review the included materials and explore the limits of creativity when designing custom biometric solutions.

If you have any questions, please contact your Integrated Biometrics reseller or the IB team. We'll be glad to provide assistance during solution development.

DOWNLOAD SDK
www.integratedbiometrics.com/sdk-downloads
Download Software Development Kit (SDK)
Technical Documentation and Product Support

SCANNING
FINGER CONDITIONS

VERY MOIST FINGERS
· **Result:** Images too dark, poorly defined. Indicates too much moisture on the fingers.
· **Solution:** Dry the fingers with a towel or cloth before fingerprint capture.
· The resultant images will be lighter and the NFIQ quality scores will improve.

VERY DRY FINGERS
· **Result:** Images too light or do not show up. Indicates the fingers are very dry.
· **Solution:** Rub a small amount of moisturizer on the fingertips. (Do not slather.)
· The resultant images will be darker and the NFIQ quality scores will improve.
· Gentle or light contact with the plate is recommended in scanning. Placing extra pressure on the hand is not recommended.
· Avoid using hand sanitizers, alcohol based lotions, and baby wipes prior to scanning.

BEST PRACTICES
· Never put a wet hand on the scanner i.e., just washed and not thoroughly dried, holding a bottle of liquid that leaves condensation on your hand. Hands should be wiped dry.
· Never use two hands on the scanner at the same time (see image on next page).
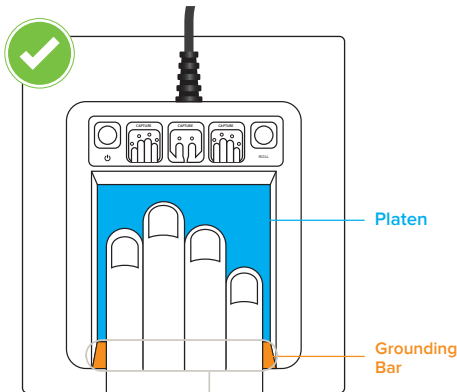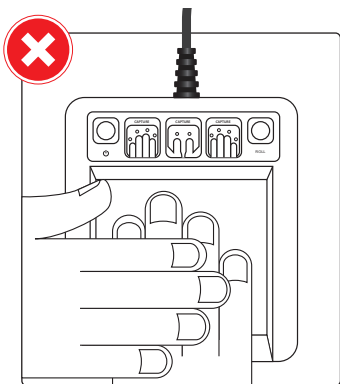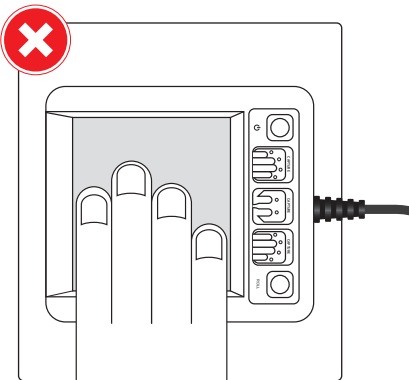
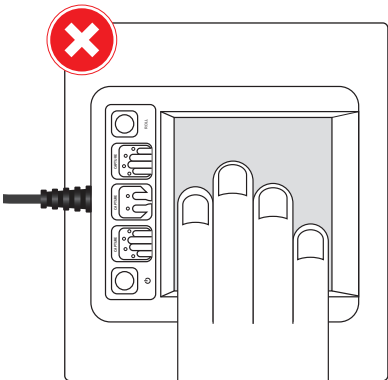| Normal Fingerprints | Wet Fingerprints | Dry Fingerprints |

HAND ORIENTATION

CORRECT PLACEMENT - TOP VIEW

Platen

Grounding Bar

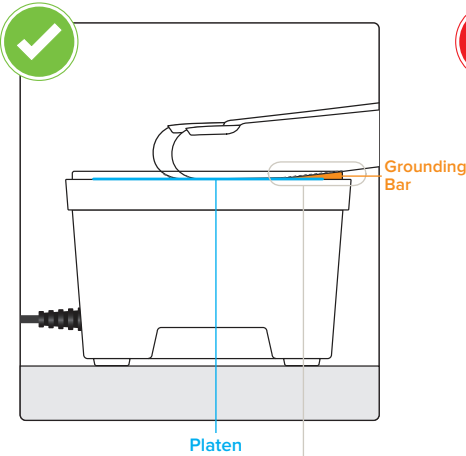**Fingers should be pointing at cord and grounded firmly against the platen and grounding bar.**
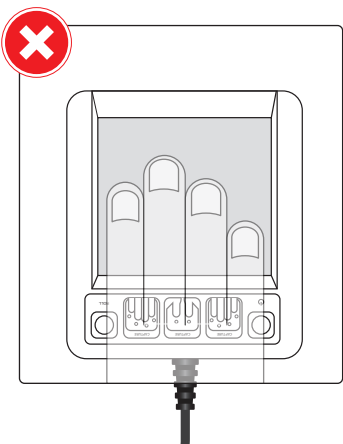
Never use two hands on the scanner at the same time.

FINGER CONTACT

CORRECT PLACEMENT - SIDE VIEW

Grounding Bar

Platen

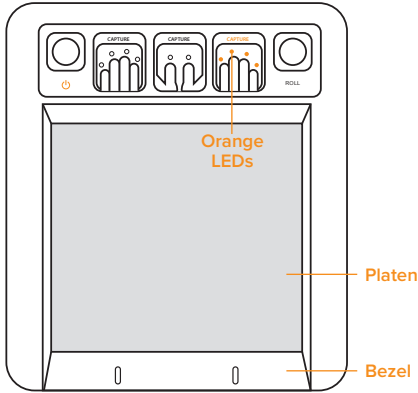**Fingers should be pointing at cord and grounded firmly against the platen and grounding bar. Gentle or light contact with the plate is recommended in scanning. Placing extra pressure on the hand is not recommended.**
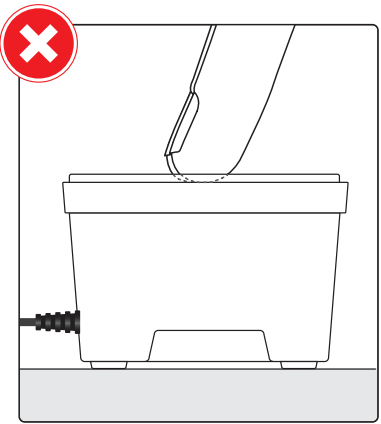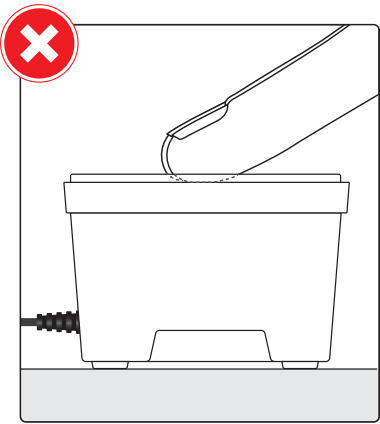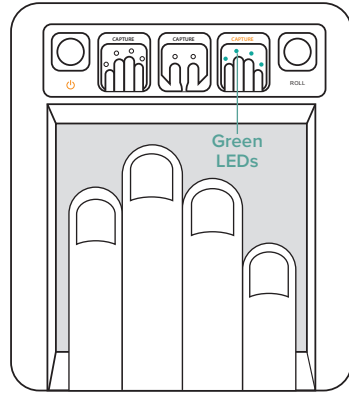
FLAT SCANNING

FINGER PLACEMENT

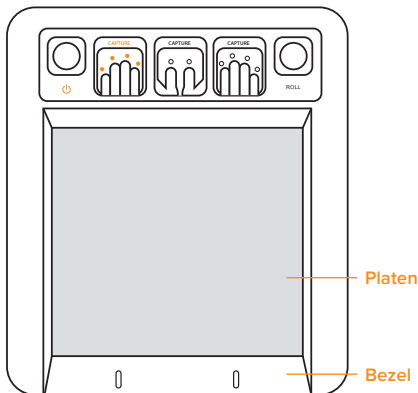Place hand firmly against the bezel to ensure proper contact.

Orange LEDs

Platen

Bezel

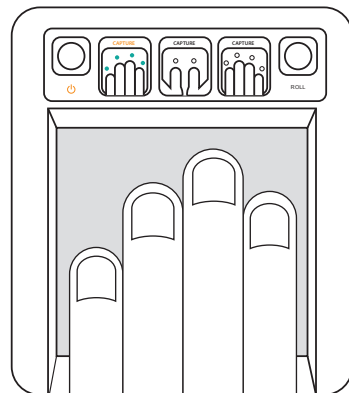**Ready to Scan - Right**

Green LEDs

Scan Complete - Right

· Kojak LEDs glow orange

· Place right hand firmly against the bezel
 to ensure proper contact

· Kojak LEDs glow green when capture is complete
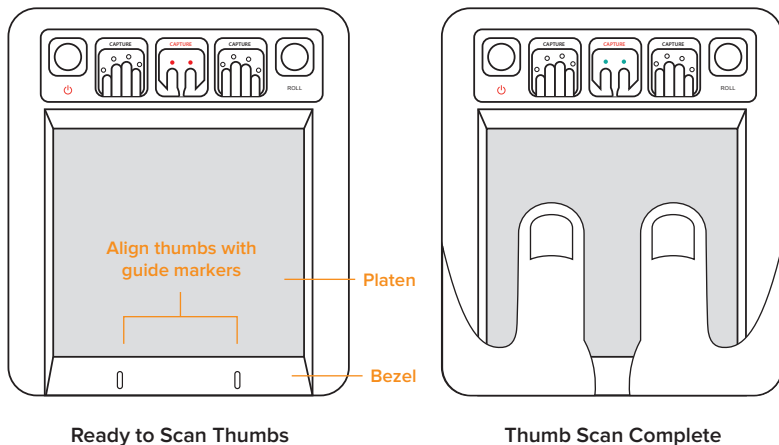
· Repeat process for left hand

Platen

Bezel

Ready to Scan - Left

Scan Complete - Left

FLAT SCANNING

THUMB CAPTURE

Place bottom of thumbs firmly against the bezel to ensure proper contact.

Align thumbs with guide markers

Platen

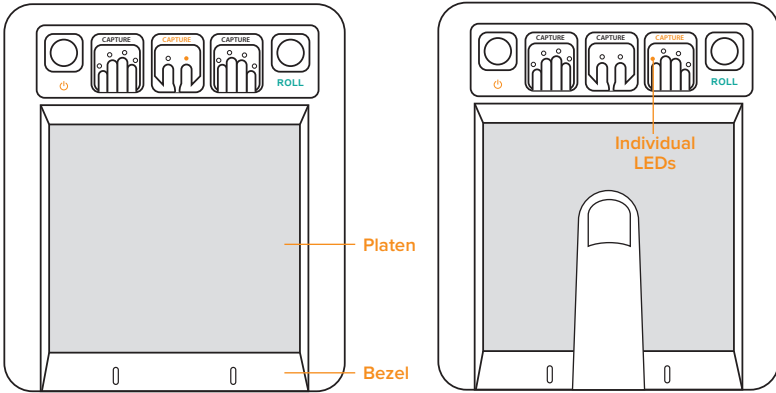Bezel

Ready to Scan Thumbs

Thumb Scan Complete

· Kojak LEDs glow orange

· Grasp the unit with index fingers pointed towards the LED notification panel at the top of Kojak

· Place thumbs flat against the platen

· Kojak LEDs glow green when capture is complete
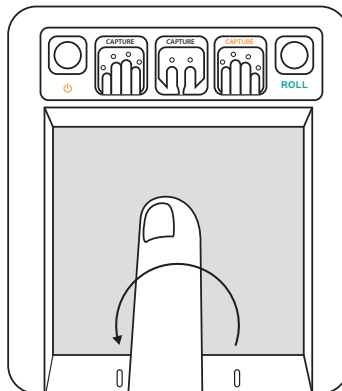
ROLL SCANNING

FINGER PLACEMENT

When performing rolls, place indicated finger firmly against the bezel and platen to ensure proper contact.

Ready to Scan - First Finger

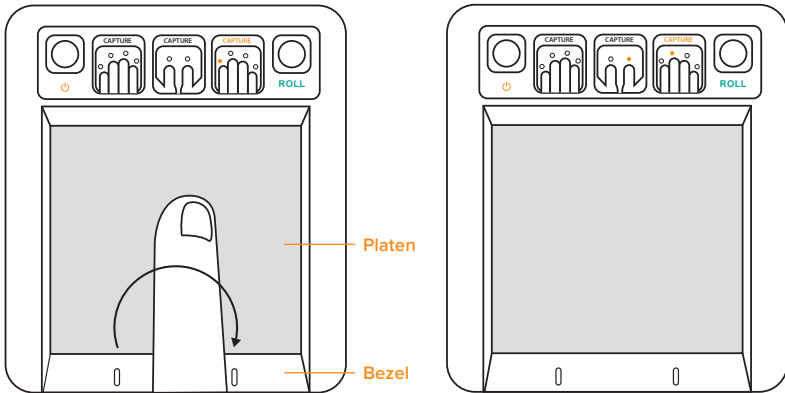**Finger Placement**

· Roll scan LED illuminates

· Individual LEDs indicate specific finger to scan

· Place finger flat on platen between bezel guide markers extending slightly past the first knuckle

· While maintaining good contact with both platen and bezel, roll finger 45 degrees to the left

NOTE: Optimal scanning requires stopping at +/- 45 degrees from flat.

Roll Left Complete

ROLL SCANNING

Ready to Scan Next Finger

· While maintaining good contact with both platen and bezel, roll finger 45 degrees to the right

· On-screen operator visualization and LED / audio notification from Kojak notify scan complete

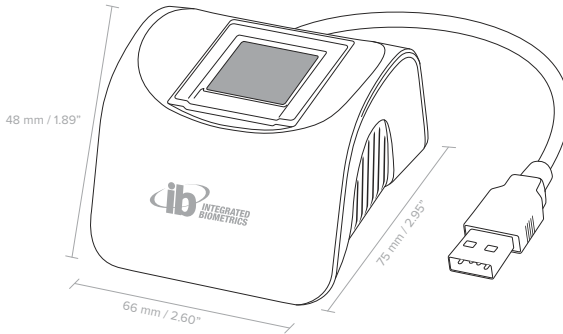· Kojak finger placement LED indicates the next finger in sequence

ROLLING EXAMPLES

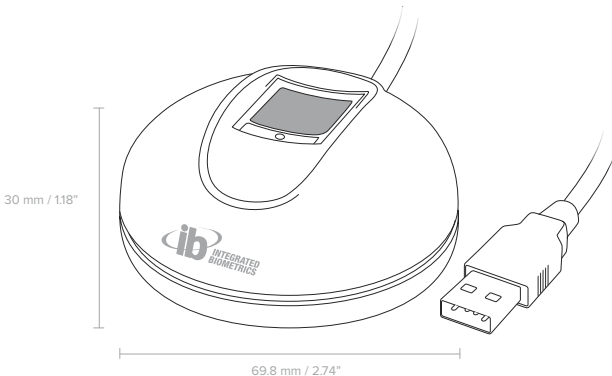**Improperly Rolled**

Proper Print

ONE-FINGER SCANNERS

COLUMBO

Columbo (embedded version) and Columbo Desktop (pictured) are the world's smallest and lightest FBI PIV-certified FAP 30 single-fingerprint scanners. The incredibly accurate scanners provide a new alternative for unattended verification applications.
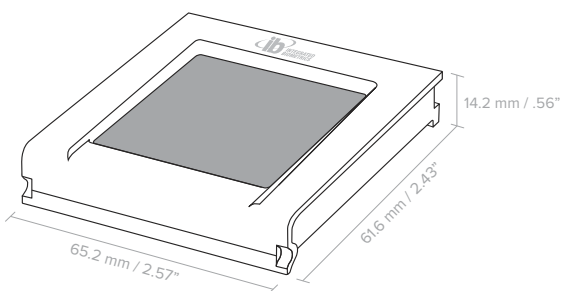
CURVE

Curve (pictured) and eCurve (embedded version) succeed in demanding real-world conditions common to commercial applications. Curve scanners are globally-deployed as an accurate, cost-effective solution for biometric identification.

TWO-FINGER SCANNERS

SHERLOCK

14.2 mm / .56"

61.6 mm / 2.43"

65.2 mm / 2.57"

Sherlock is the world's smallest, lightest FBI Appendix F-certified, FAP 45 fingerprint scanner for embedded applications. Sherlock is ideal for hand-held devices requiring flat-print and single finger roll scans.

WATSON MINI

33 mm / 1.30"

60 mm / 2.36"

62 mm / 2.44"
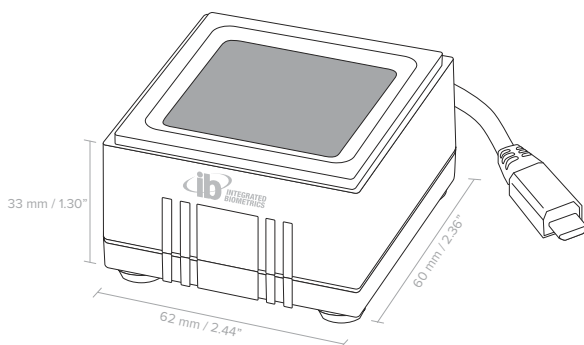
Watson Mini is an FBI Appendix F-certified, FAP 45 fingerprint scanner for both embedded and standalone applications. It supports flat print and single finger roll scans and can be a cost effective platform for ten-print enrollments.

KOJAK DIMENSIONS

131.8mm

114.7mm

131.8mm

82.6mm
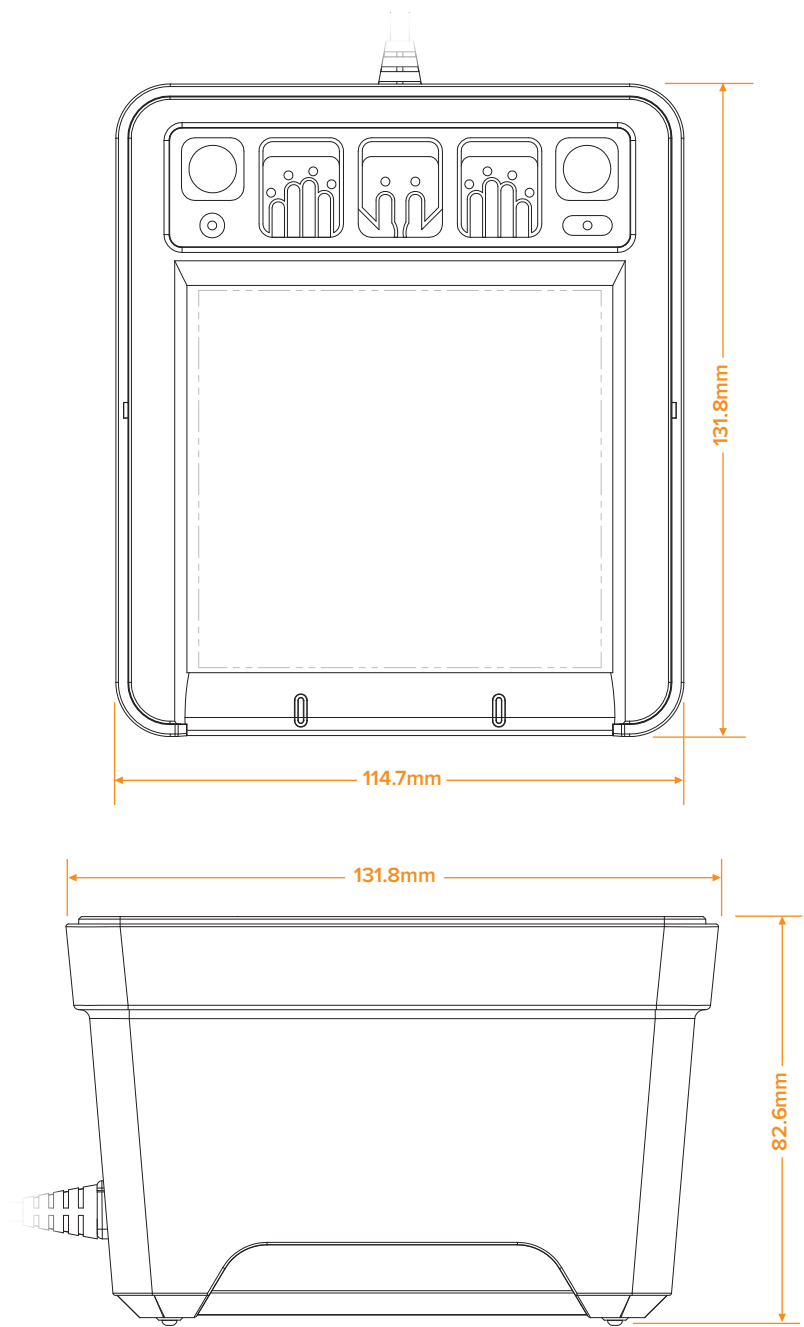
SPECIFICATIONS

Kojak exceeds the needs for enrollment and verification applications in demanding international programs. It is particularly suited for mobile applications where minimal size, weight and power consumption have significant value. Kojak is the cost-effective solution for ten-print live scanning requirements.

Kojak is provided with a full featured SDK to enable effective integration into applications requiring certified FAP 60 quality images.

FBI Certification	FBI Appendix F, PIV, FIPS 201, FAP 60
Resolution	500 PPI
Platen Size	3.5" (W) x 3.15" (H) / 88.9 mm (W) x 80.01 mm (H)
Sensing Area	3.2" (W) x 3.0" (H) / 81.28 mm (W) x 76.3 mm (H)
Gray Scale	256 grayscale dynamic range
Image Size	1600 (W) x 1500 (H) pixels
Supported Image Formats	RAW, JPEG2000, BMP, PNG, WSQ
Scanner Physical Size	4.5" x 5.2" x 3.3" 114.3 mm x 132.08 mm x 83.83 mm
Interface	USB 2.0
USB Certification Spec	USB-IF USB.ORG
USB Level	4.40V – 5.25V
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
Equipment Safety	IEC 60950-1
Product Weight	725 grams / 1.6 lbs (not including cable)
Power Consumption	<300mA during full scanning mode
Air Discharge/Contact Discharge	In compliance with IEC 61000-4-2
Operating Temperature	-10°C ~ +55°C / 14°F ~ 131°F
Humidity	30~85% RH < 40°C / 104°F (Non-condensing)
Storage Temperature	-30°C ~ +60°C / -22°F ~ 140°F
RoHS Certified	RoHS Directive 2002/95/EC
Ingress Protection	Direct water spray, no dust or dirt ingress, IP65 bezel to film
OS Support	Windows Desktop 32/64 bit (7, 8, 10), Windows Server, Linux, Android 4.0+, Java
Surface Durability	MIL-C-675c 4.5010, MIL-STD-810F

WORLD-CLASS TECHNOLOGY

LES technology empowers energy-efficient, compact, and durable biometric scanning solutions unique to the market. Ready to deploy in any environment under any conditions, Integrated Biometrics' scanners are the choice for high performance applications.

KOJAK