4 FINGERS TOUCHLESSID

An innovative approach to capturing contactless fingerprints from unmodified iPhone and Android smartphones. One of the most reliable, secure, and convenient biometrics on the market.

OVERVIEW

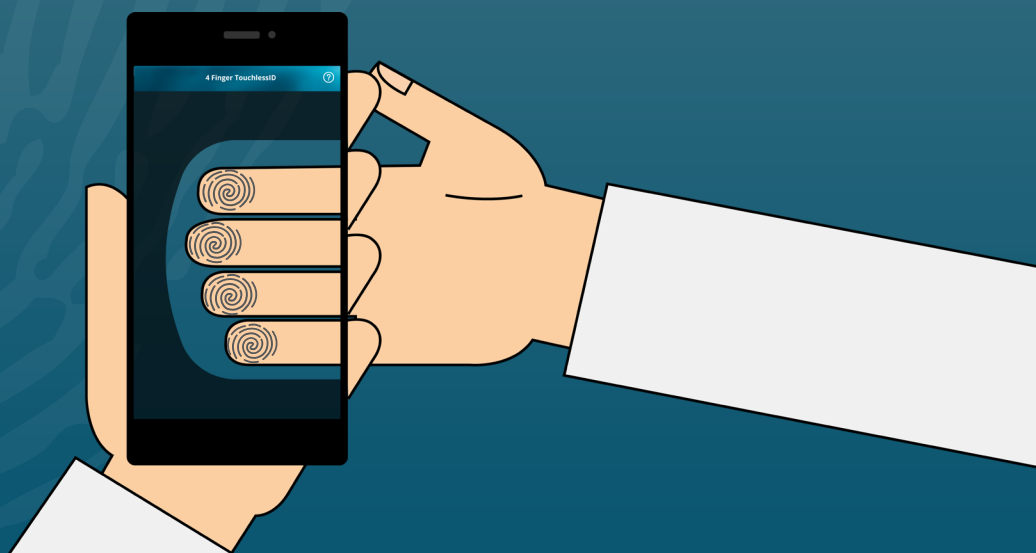
Veridium's 4 Fingers TouchlessID (4 Fingers) is the world's first multi-finger contactless biometric authentication system that works on unmodified smartphones, capturing four fingerprints simultaneously. Capturing four fingers instead of a single fingerprint makes it harder to spoof due to the complexity of the data collected.

4 Fingers requires only a 5-megapixel camera and LED flash, so it works on almost any smartphone and under almost all environmental conditions. 4 Fingers, working in conjunction with VeridiumID's back-end server software, is ready to integrate within any mobile app. This removes the need for additional hardware peripherals or for individuals to buy the most up-to-date smartphones with built in fingerprint sensors, which allows for multi-factor authentication right from their smartphone.

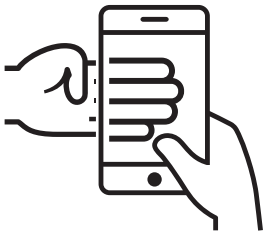
LEGACY DATABASE MATCHING

The images captured with 4 Fingers can also be exported for matching against legacy databases. Government agencies and financial institutions around the world collect people's fingerprints for the purposes of identification in order to receive financial services, government benefits, healthcare, as well as other services.

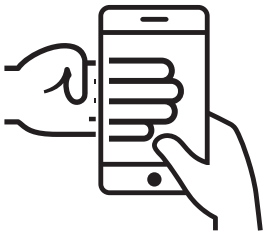
Since the quality of prints captured with 4 Fingers is equivalent to prints collected from a conventional flatbed scanner you can easily use them for authentication on the go. With the Export SDK, these prints can be exported in a variety of formats. This method of capturing fingerprints allows for convenient, quick, and secure identity verification.



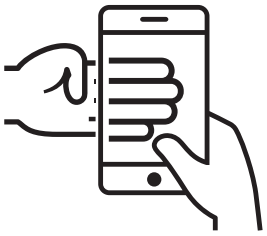
HOW IT WORKS



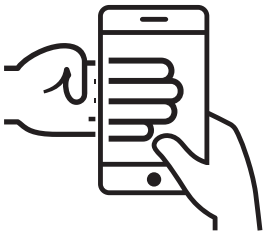
1. Place your hand behind your phone



2. The rear camera will detect your fingers



3. Place them within the guide and wait for the flash



4. All four fingerprints are captured at once

Prints are captured and matched in a matter of seconds, in any environment or lighting.

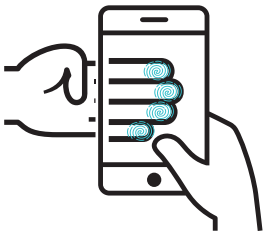
4 FINGERS IS IDEAL FOR...

Financial Institutions looking to add a robust and highly secure biometric for stepped up security when logging in to accounts or making transactions.

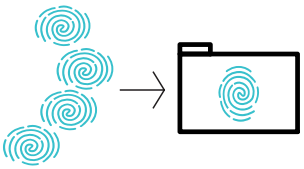
Government and law enforcement agencies to capture fingerprints in the field and match them against legacy databases.

Enterprises seeking to replace passwords, PINs, tokens, and ID cards wherever they are used.

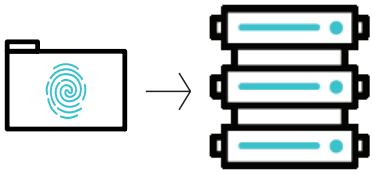
4 FINGERS EXPORT



1. 4 Fingers Export SDK captures your fingerprints using the phone's rear camera and LED flash.



2. Your biometric template is normalized to 500 PPI and exported to the required format.



3. The new file is then sent to the legacy database for matching against previously enrolled prints.

INDEPENDENT ACCURACY TESTING

Independent QA testing firm iBeta tested 4 Fingers against the Drug Enforcement Agency's biometric standards for Electronic Prescription of Controlled Substances (EPCS) applications. The study found that the system met the False Match Rate of 0.0001 with 95 percent accuracy, surpassing the accuracy levels needed to be a strong authenticator for password and token replacement, medical prescriptions, and mobile banking.

NIST

We are working with the National Institute of Standards and Technology to achieve certification for governmental use. 4 Fingers is one of only a few contactless fingerprint capture solutions being considered for compatibility with existing law enforcement and immigration fingerprint databases.

KEY BENEFITS

Seamless Integration	**Integrates with any app for complete customization and compatibility across platforms.**
Cost Efficiency	**Requires no additional hardware beyond the user's smartphone, so it's a low-cost deployment for businesses and works ubiquitously across Android and iOS devices.**
Reliability	**Scales with any environment for small or large user bases, performing capture in seconds.**
Legacy Database Compatible	**4 Fingers Export is compatible with legacy fingerprint databases, enabling 1-1 and 1-n matching for banks, law enforcement, and government agencies.**
Liveness Detection	**Uses proprietary liveness detection to help distinguish between a real person performing authentication or a presentation attack.**
VeridiumID Ready	**Ready to deploy in any environment using the VeridiumID platform.**

TECHNICAL SPECIFICATIONS

Minimum Device Specifications	**CAMERA** • 5MP camera w/ LED flash **OPERATING SYSTEM** • Android 4.1 or later • iOS 8 or later
Capture Specification	• >500 DPI resolution • ~3 second image capture time • ~6-inch capture distance • +/- 1 inch finger positioning tolerance (X,Y,Z) • ~14kB template size
Performance Specifications: 1-1 Verification	• False Rejection Rate (FRR) of 1.0% • At a False Acceptance Rate (FAR) of 0.01%
False Match Rate	• Lower than 0.1% at 95% confidence
Performance Specifications: 1-n Identification	• FRR of ~3% • At a FAR of 1 in a Million (per hand) • FAR of >1 in a billion (both hands)
Compatibility	• ISO/IEC 19794-2 data format • VeridiumID Solution • IEEE 2410 Biometric Open Protocol Standard
Export Formats	• VeridiumID TouchlessFP • ANSI/NIST-ITL 1-2007 (record type-4, type-14) • ANSI/NIST-ITL – INTERPOL • ISO/IEC19794-4, 2005 • RAW print images in B&W segmented and in .zip format • JSON text encoding with Base-64 encoded images (PNG, WSQ, or RAW) • WSQ, B&W segmented prints packed in .zip format • NFIQ quality score provided • Other formats available on request

REQUEST A DEMO

www.VeridiumID.com/Demo

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