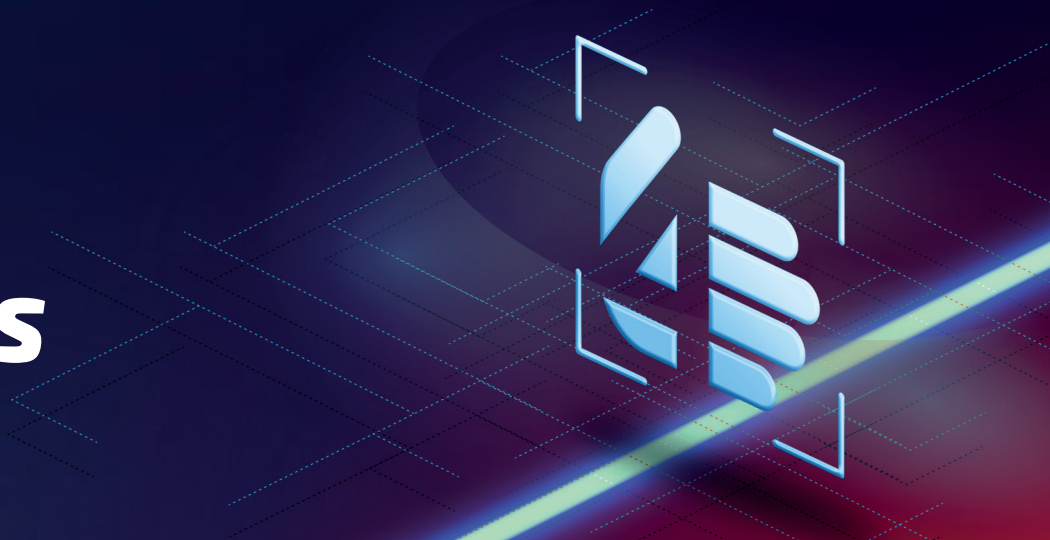# VERIDIUM
TRUSTED DIGITAL IDENTITY

>>> DATASHEET

4 FINGERS
TOUCHLESSID

An innovative approach for touchless capture of fingerprints from nearly any smartphone. Reliable and secure biometrics for fast and convenient mobile identity verification.

OVERVIEW

Veridium's 4 Fingers TouchlessID (4 Fingers) is the a contactless biometric authentication solution that captures four fingerprints simultaneously. The 4 Fingers app requires only a 5-megapixel camera and LED flash, so it works on nearly any iPhone or Android smartphone. It is reliable under adverse conditions, such as low light , that hinder other biometric techniques.

Veridium creates a unique digital identity tied to a single identity profile at enrollment via the VeridiumID authentication platform and the 4 Fingers customizable app. In contrast, Touch ID has no idea which or whose fingers are enrolled on a phone. Veridium transforms your smartphone into a convenient, highly secure, multifactor authentication solution.
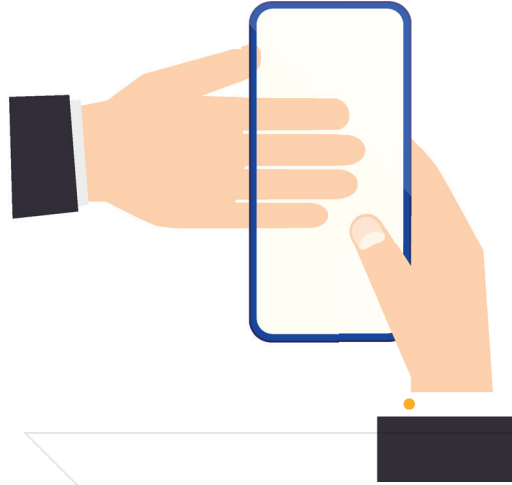
4 FINGERS TOUCHLESSID IS IDEAL FOR:

Financial Institutions: Improving customer experiences by adding robust and secure authentication for Know Your Customer (KYC) processes and digital transactions.

Government and Law Enforcement Agencies: Needing to capture fingerprints and match them against legacy databases for citizens.

Healthcare Institutions: Requiring secure authentication (i.e. Electronic Prescription of Controlled Substances (EPCS)).

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

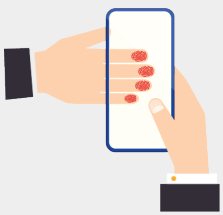*Biometric authentication in seconds, in any environment or lighting, from nearly any smartphone.*

LEGACY DATABASE MATCHING

The images captured by Veridium can be exported for matching against legacy databases. Government agencies and financial institutions around the world collect indivduals fingerprints to validate identification against National databases or AFIS systems . Fnancial services, Mobile Network operators and Government institutions are now able to securely and reliably, remotely identify individuals by simply taking a picture of their hand using a mobile phone.
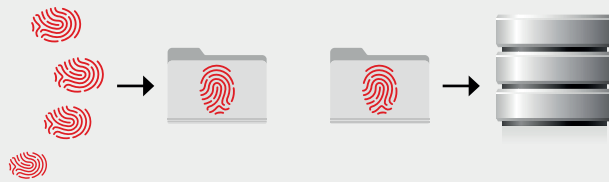
Authentication on the go:
The quality of the fingerprint images captured by Veridium is equivalent to prints collected from a conventional flatbed scanner. The prints can be exported in a variety of formats. Veridium enables convenient, quick, and secure identity verification on the go.

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 DPI and exported to the required format.

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

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 distinguish between a real person performing authentication or a presentation attack.
Enterprise Ready	Ready to deploy at scale in any environment using the VeridiumID authentication platform with robust Microsoft AD integration.

INDEPENDENT TESTING

Independent testing firm iBeta tested 4 Fingers TouchlessID against the Drug Enforcement Agency's biometric standards for applications. The study validated that there was at least 95 percent confidence that the system operates at a False Match Rate (FMR) of 0.1 percent or lower. Across independent tests Veridium surpasses the accuracy levels needed to be a strong authenticator and replace passwords and tokens for medical prescriptions and mobile banking with strong results of a FAR of 0.01percent with a FRR of <1percent.

TECHNICAL SPECIFICATIONS for 4 FINGERS TOUCHLESSID

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
Performanc Specifications: 1-1 Verification	• False Rejection Rate (FRR) of <1.0% • False Acceptance Rate (FAR) of 0.01%
Export Formats	• VeridiumID TouchlessFP • ANSI/NIST-ITL 1-2007 • ANSI/NIST-ITL – INTERPOL • ISO/IEC19794-4, 2005 • RAW & PNG images in greyscale(8-bit) • WSQ (customizable compression rate) • NFIQ quality score can be provided • Other standard formats considered via customer request