

Mobile Fingerprint Collection Device

NeoScan® 45

At a Glance

- Most compact Fingerprint Acquisition Profile (FAP) 45 mobile device available
- Forensic image quality of all fingerprints-rolled and slap
- Intuitive and simple to use in the field for identification and booking
- Certified compliant with the FBI¹ Appendix F Image Quality Specificatin(IQS) and the Apple® MFI Program

Overview

Designed for public safety applications in the field, NeoScan 45 delivers the highest degree of speed and accuracy for mobile fingerprint capture, including individual rolled and slap prints and simultaneous two-finger slap prints. This innovative device from NEC is simple and easy to use, featuring a large (1.6" x 1.5") scanning platen for better fingerprint image quality and greater accuracy, as proven by NIST².



Solution

NeoScan 45 supports multiple communication protocols, including Bluetooth® and Wi-Fi. The device is compatible with the latest Apple iOS, Android®, and Microsoft® Windows® operating systems, including the latest Apple, Google, Motorola, and Samsung smartphone and tablet models. Equipped with a sensor for single and dual rolled and slap fingerprint capture, NeoScan 45 is compliant with the FBI Appendix F IQS standard for FAP 45 image quality. Along with NEC's Mobile WAY and IDcheck Plus mobile applications, NeoScan 45 adheres to the ANSI/NIST-ITL 1-2011:2015³ and the FBI/CJIS EBTS V11⁴ transmission standards.

Made for

As an open device, NeoScan 45 can operate with nearly all ANSI/NIST-compatible Automated Fingerprint Identification System (AFIS) solutions, including NEC's Integra-ID Multimodal Biometric Identification System (MBIS), enabling agencies to extend their existing AFIS infrastructure investments into mobile applications.

¹ Federal Bureau of Investigation (FBI) Letter of Certification is available upon request. Proof of certification can also be found by searching the FBI Certified Products List at <https://fbibiospecs.fbi.gov/certifications-1/cpl>.

² National Institute of Standards and Technology (NIST) Interagency Report (NISTIR) 7950 at <https://nvlpubs.nist.gov/nistpubs/ir/2014/NIST.IR.7950.pdf>

³ American National Standards Institute (ANSI)/NIST Special Publication 500-290 Edition 3 at <https://doi.org/10.6028/NIST.SP.500-290e3>

⁴ FBI Electronic Biometric Transmission Specification (EBTS) NCI-DOC-01078-10.0 at <https://fbibiospecs.fbi.gov/file-repository/master-ebts-v11-0.pdf/view>

NEC engineering teams worldwide collaborated to make this lightweight, compact FAP 45 fingerprint collection device the new standard for accuracy and portability. In fact, NeoScan 45 is utilized in many third-party software applications in the United States and around the world. Designed in California and manufactured in Japan, it abides by NEC's strict manufacturing and quality standards, resulting in a superior device with a substantially improved design, enhanced ergonomics, and long-term reliability.

Simple to Use, Connect and Interoperate

NeoScan 45 can be held comfortably in an operator's hand when capturing a subject's fingerprints. The simple LED interface guides the operator to capture the necessary fingerprints in the correct sequence, indicating which rolled or slap prints to capture at each step of the capture process. The system checks the quality of each image in real time and allows the operator to skip prints when necessary (e.g., for amputated, bandaged, or scarred fingers). NeoScan 45 can connect to any communication or computing device using Bluetooth or WiFi and works with multiple NEC and third-party mobile biometric applications that comply with the open HTML 5 interface available in the NeoScan 45 software development kit (SDK)



Complete Customer Care

NEC's U.S.-based Support Center provides comprehensive 24/7 multi-tiered customer support for problem tracking and resolution, as well as advanced remote diagnostics. Highly experienced engineers and developers provide technical support and troubleshooting services to ensure that our customers get the information and help they need without delay.

Innovative Force in Identification

For more than 40 years, NEC has been a world leader in integrated, high-availability biometric identification systems. The unparalleled identification matching accuracy and speed of our fingerprint and face recognition technologies have been independently verified by NIST. Through these and other technologies, NEC aspires to promote safety, security, efficiency, and equality for all members of society. Under the company's corporate message of "Orchestrating a brighter world," NEC aims to help solve a wide range of challenging issues and to create new social value for the changing world of tomorrow.

Proven Benefits

- **Globally used by Federal, State and Local Law Enforcement Agencies in:**
North America and the Caribbean; Central and South America, Europe, Africa and the Levant; Asia, the Middle East, and Australia.
- **Superior Forensic 8-bit Grayscale image quality:**
Captures up to 600% more fingerprint image area at better quality in order to promote greater biometric search accuracy.
- **Flexible connectivity and interoperability:**
Supports both Bluetooth and Wi-Fi, Works with Apple, Android and Windows Smartphones, tablets, and computers.
- **Great return on investment (ROI):**
Law enforcement agencies can identify persons and offenders out of the office to accomplish more work in the field of operations.

Key Product Features

Form factor	Biometric Capture Peripheral
Size	3.2 x 6.8 x 0.7 in
CPU	ARM® Cortex®- A5 536 MHz
Operating System	Embedded Linux® V3.6.9
Memory and Storage	768 MB
Functional Command and Control	Rolled and slap fingerprint capture Magnetic stripe: 3-track reading Status LEDs: Battery, Wireless, Data Reading, and Image Capture Command buttons: Power, Scan, Add New, and Skip
Networking	Wireless LAN 802.11b/g/n, Bluetooth® Class 1 Version 2.1+ EDR, Micro USB 2.0 (for power and control)
OS Compatibility	Android V7–V12 Apple iOS V12–V16 Microsoft Windows 7, 8.1, 10, and 11
Software Compatibility	NEC IDcheck Plus, and Mobile WAY DHS EDDIE
Environment	Operating temperature: 32°F to 105°F (0°C to 40°C) Storage temperature: -10°F to 140°F (-23°C to 60°C) Humidity: 10-95% RH (non-condensing)
Certifications	Apple MFi (PPID 223073-0001) FBI Appendix F IQS to FAP 45 and PIV CE Emissions: EN 55022:2006 Class A CE Immunity: EN 55024:1998/ A1:2001/ A2:2003, IEC 61000-4-2 FCC Certification: FCC Part 15 Class A RoHS2 and WEEE Compliant to RoHS2 Directive 2011/65/EC

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