Mobile Biometric Identification for Identity Management and Security Personnel
As the global community integrates across traditional boundaries, government agencies and corporations are seeking more reliable ways to identify their citizens and customers, protect them from fraud, and secure their personal information. Motorola understands this need and has responded with a comprehensive biometric handheld identity management solution, complete with capture, storage, transmission, and verification tools operating in the seamless mobility environment—Motorola Mobile AFIS.

Motorola has been delivering powerful public safety solutions for over 75 years. With the recent acquisition of Symbol technologies, Motorola is building upon its current portfolio of innovative products to bring advanced rugged handheld solutions for the identity management marketplace. The two companies individually helped set the standard in enterprise communications and biometrics. Motorola and Symbol defined technologies like bar code scanning and image capture, RFID, wireless local area and wide area communications and integrated them into industry leading mobile computing devices. Now together, we lead the biometric industry with the first installation of a minutia-based system, and the first Real-Time ID. Motorola has a legacy of putting new ideas to work, around the world, for thousands of organizations – from retail, utilities and transportation, to government, petrochemicals and manufacturing.

We’ll bring solutions that empower government and commercial agents with the information they need to make real-time on-the-spot decisions, irrespective of physical location using mobile technology so intuitive and transparent, that it’s almost as if the enterprise is no longer a fixed entity….it is everywhere.

**Motorola Mobile AFIS delivers four key capabilities:**

**Motorola Mobile AFIS** (Automated Fingerprint Identification System) is a handheld biometric tool that can capture fingerprint and facial images, analyze the data, and match this information against databases stored locally on the device, in centralized biometric matching systems, or on smart cards.

- **1:N remote identification** – perform searches against remote databases using records transmitted securely via wireless technology from the device
- **1:N local identification** – capture and search one or more fingerprint(s) against a portable database stored on the handheld device in situations where communications may be limited
- **1:1 local verification** – match one or more fingerprints against other known fingerprints to verify that the two are the same using a smart card, barcode or other secure credential
- **1:1 remote verification** – match one fingerprint against another fingerprint stored at a remote location to verify identity and establish that the record is maintained in the database

As a trusted leader in biometric installations, Motorola is the secure choice for mobile identification solutions that meet your mission-critical needs. **Motorola Mobile AFIS provides identification with unprecedented speed and accuracy in identity management applications such as:**

**Mobile Identification in Border Patrol:**

Mobile AFIS can be deployed at air, land, or sea border control points to verify the identity of individuals against ePassports, ID cards, visas or other secure documents. Mobile AFIS enables agents to capture fingerprints, facial images, and demographics and to compare this to information stored on a secure credential or to transmit wirelessly to a remote matching system for 1:N or 1:1 remote identification. With Mobile AFIS, travel and visa records, identity cards, and criminal justice information can be queried without delay to determine an individual’s identity and if this person has proper privileges to enter a country.

**Mobile Identification in Event Security:**

During large events such as music festivals, political rallies or sporting events, security personnel and
officers are often tasked with managing unruly attendees or safeguarding secure areas. The Motorola Mobile AFIS enables the capture, transmission and search of biometric information against remote databases. Additionally, with smart-card enabled ID badges, the Mobile AFIS is capable of performing a 1:1 comparison of the fingerprint stored on an ID badge with that captured through the fingerprint sensor. Event security can verify the authenticity of an ID badge and confirm an individual’s access privileges during a particular event. With the devices wireless capabilities, the information can be vetted, in real time, against remote databases to ensure that access privileges have not changed.

Mobile Identification in Refugee Management: With Mobile AFIS, personnel can be provided with badges containing descriptors, biometric information, and permission level for secure areas. Once cards are issued, personnel can quickly verify the identity and permission level of rescue workers using fingerprint verification against the smart card, an accurate and efficient process on Mobile AFIS. In addition, Mobile AFIS can be used in evacuation shelters, hospitals, and morgues to check the identity of individuals who have suffered trauma, have amnesia, are comatose, or are dead. Furthermore, Mobile AFIS can be used at evacuation shelters to check for criminals and/or sex offenders who may be amongst the crowd and to separate them from children and other individuals in the shelter.

Mobile Identification in Health Care: Mobile AFIS can be used by hospital staff to efficiently identify patients and connect them to their issued prescription and dosage levels, symptoms, or other necessary information to ensure they receive proper medical treatment and care. This is an especially significant tool for patients who have lost consciousness or are otherwise unable to communicate this information to their doctor or nurse. Capturing a fingerprint, barcode, or RFID issued tag and submitting to a hospital’s central system allows such details to be retrieved immediately and viewed on the handheld’s screen.

Mobile Identification in Social Services: Using Mobile AFIS, social workers and case managers can validate that the correct services are delivered to the correct people. Mobile AFIS arms field agents with the ability to instantly identify individuals, queue up real-time information about treatment plans, and see what benefits have been provided to date, all while maintaining secure access to sensitive information. After positive identification is complete, the agent can easily transition to updating case notes and filling out the required electronic forms using the same all-in-one device. This capability also assists in detecting duplicate aid and has been proven to successfully deter people from attempting to receive duplicate aid.

Mobile Identification in Enterprise Security Operations: Enterprise security personnel have the responsibility of protecting their company’s most sensitive information and securing areas such as R&D labs, warehouses, central IT infrastructure (IDF) rooms, or hazardous materials storage areas. Motorola Mobile AFIS enables security officials to verify the identity and access privileges of employees who are issued smart cards, 2D barcode ID badges or RFID-enabled cards/badges. Security officers on patrol, who encounter suspicious persons, can use the handheld device to scan the smart card or RFID badge, capture a fingerprint and perform a verification of that person against the ID badge. Access privileges can be viewed to confirm the individual’s granted permissions to enter or be within a secure area. If connected wirelessly to remote servers, security personnel can, in real time, pull information about employment or privilege status.

The Solution Details: The Motorola Mobile AFIS solution consists of industry proven software on industry leading hardware. Mobile AFIS is intuitive, enabling government and company personnel to easily capture biometric and biographic information with minimal training. Images are analyzed for quality prior to capture and encoding, ensuring the best possible inputs for biometric matching. One to ten fingerprints can be captured and the interface enables easy alternative functionality in the case of an amputee or worn fingerprint. Workflows are configurable to the specific requirements of individual agencies or companies. The Mobile AFIS can be configured to submit standards compliant templates (ANSI INCITS 378 or ISO SC37) or images (ANSI INCITS 381 or ISO SC37), enabling search on a variety of AFIS systems. Biographic information can be auto-populated through the 1D or 2D barcode scanner, contact card reader, or contactless reader. The Motorola Mobile AFIS supports FIPS140-2 VPN or encrypted email transmissions.
The Motorola Mobile AFIS is enabled with our integrated hardware solution that includes a MC7x Series Enterprise Digital Assistant (EDA) rugged handheld mobile computer coupled with our biometric attachment.

The MC7x is a family of rugged handheld mobile devices that put the power of a cell phone, PDA, computer, scanner and imager in the hands of your mobile workers with the first rugged enterprise digital assistant. Designed to withstand all-day everyday use in nearly any environment, this rugged compact device delivers true anywhere anytime wireless WAN/LAN/PAN voice and data communications, including superior voice functionality, data capture and the power to run nearly any application.

**Key features of the MC70**
- Windows Mobile® 5.0 Premium or Phone Edition
- GSM/EDGE, CDMA EVDO Rev.0, GPS, WLAN 802.11 ajbg, Bluetooth® v1.2 communication options
- Integrated data capture options – 1D or 2D scanning
- Up to 128/128 MB of RAM / ROM on board memory
- Color 3.5” QVGA touchscreen

**Key Features of the MC75**
- Windows Mobile® 6.0
- 3G HSDPA or CDMA-EVDO Rev A, GPS, WLAN 802.11 ajbg, Bluetooth® v2.0 communication options
- 2MP color auto focus camera
- Integrated data capture options – 1D or 2D scanning
- 128/256 MB of RAM / ROM on board memory
- Color 3.5” full VGA touchscreen

The biometric attachment provides rugged, IP54 rated, functionality equivalent to all environment specs of the MC7x handheld unit. GSA certified fingerprint capture supplies highest quality images within a variety of lighting conditions. ISO 7816 compliant contact card reader provides read/write capabilities with all ISO 144443 compliant cards.

The Motorola Mobile AFIS solution can be connected to other Motorola products including its flagship Biometric Identification System (BIS) and Metro ID. The Motorola BIS is a premiere offering incorporating industry-leading biometric matching algorithms, powerful storage and records management technology providing agencies superior accuracy and speed. The Motorola Metro ID is an entry level biometric matching and storage subsystem delivering advance data management and security tools.

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