

TrioMetrics: Portable, Embedded, '3-metrics' Biometric System



- Forensic quality fingerprint/latent fingerprint, facial and iris scanning
- Designed to MIL-STD 810F and IP-67 ratings for water, dust, impact (etc) resistance
- Weighs less than 950 grams
- On-board watch list of up to 100,000 individuals
- Remote connectivity via GSM/GPRS, WiFi or Bluetooth
- GPS enabled for tagging enrolments with location data
- Meets NIST/ISO, ANSI & FBI biometric image requirements
- Software customisable for defence, homeland security & law enforcement applications

The **TrioMetrics** multi-modal biometrics system raises the bar by integrating three metrics (live and latent fingerprint, plus face and iris) into a compact, 'military rugged' platform that allows real time verification and enrolment of individuals in the field, even in the most hostile of environments.

TrioMetrics is based on our 'military rugged' **RmPC 5-M**, which is the world's smallest MOTS (Military Off The Shelf) UMPC. Because it's a 5" LCD UMPC solution, not a 4" LCD PDA one, it offers a superior GUI, as well as on-board data processing currently only available on tablet or notebook based systems.

With a Windows XP Pro operating system (optionally Windows 7), an ATOM 1.6GHz CPU and 1 Gigabyte of RAM, it's a powerful computing platform in its own right. With the biometrics interface added, it's the world's most powerful handheld biometrics data collection, verification and communication solution.

What sets **TrioMetrics** apart is its unique 'Warfighter System', which is a 'biometrics engine' that creates EFTs (Electronic Fingerprint Templates) and EBTs (Electronic Biometrics Templates) on the fly, but which can check identities against non-NIST/FBI compliant file types (eg those that only store minutae, not full EFT or EBT information). And because it can convert 'open' data formats and carry out real-time cross-checks against on-board proprietary format watchlists, it opens up the

possibility of inter-agency operations through sharing of disparate data types.

The result is a flexible, durable solution that preserves any investment in existing backend databases by utilising that data.

TrioMetrics integrates:

- a 1000dpi imaging system to deliver NIST/FBI compliant fingerprint images (500dpi) and latent fingerprint (1000dpi) images
- a 3 Megapixel/24 bit camera for taking mugshots
- a 760nm/850nm infrared auto-capture iris imaging system
- a simple, intuitive, menu-driven enrolment system

TrioMetrics was designed to deliver superior durability in a more compact format than available from any other vendor; while delivering the flexibility only available from a more complex, more expensive networked solution.

The solution, comprising a complete hardware and software package, is ideal for military personnel undertaking land border or maritime patrols, counter terrorism activities or disaster relief operations. It's also ideal for users who may not have access to high levels of training, but regardless need a reliable ID verification and enrolment system.

Three biometrics in one compact unit!



Features include:

- finger imaging plate is in same plane as UMPC for improved ergonomics and greater operator safety
- is lightweight, weighing less than 950 grams
- exceeds Mil-Std 810F requirements for durability
- exceeds Mil-Std 461E requirements for emissions
- is modular, allowing parts sharing in the field, plus future upgrades via new attachments
- is WiFi, Bluetooth, 3/3.5G and GPS enabled

Biometrics System Specification

Processor	Intel Atom 1.6 GHz Processor with Menlo Chipset		
Environmental, Safety & EMC	Certified to MIL-STD 810F & IP65 Rain, dust, vibration, & shock resistant design, Sealed ports & connector covers		
RAM Type/Capacity	1GB DDR2 RAM	Operating System	Microsoft Windows XP Full Version (Featuring "Instant On" Capabilities)
Dimensions (HxWxD)mm	100 x 200 x 50	Weight incl Batt & SSD	950 grams
Screen Type	5" Sunlight Readable WVGA (800x600 pixel) touch screen		
External I/Os (ports)	1 x Serial (DB9 RS-232) 2 x USB 1 x LAN (RJ45)		1 x DC Power In 1 x Accessory / Docking Connector
Storage	32MB Samsung SSD (standard) upgradable up to 64MB or 128MB		
Wireless Connectivity	Bluetooth	GSM/GPRS/EDGE	WiFi 802.11 a/b/g/n

TrioMetrics System

Facial Image Capture	3-Megapixel Face Camera, Auto-Capture Iris Scanner, Built-In Acoustic		
Fingerprint Image Capture	Optical, 500 dpi FBI PIV		
Latent Fingerprinting	1000 dpi FBI compliant		
Iris Image Capture	Auto-capture 760nm and 850nm IR		
Database Fields	Name or Alias Address or GPS location DOB or Age	Sex Height Biometric Capture	Fingerprint Facial Iris Palm 

