



For when the going gets beyond tough

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



- Forensic quality fingerprint/latent fingerprint, facial and iris scanning
- Exceeds MIL-STD 810F and IP-65 ratings for water, dust, impact (etc) resistance
- Weighs less than 850 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 new TrioMetrics '3-metric' biometric identification system raises the bar by integrating fingerprint/latent fingerprint, facial and iris recognition into a compact, rugged device that allows real time verification and enrolment in either stand-alone mode, or by connecting wirelessly to a remote ID database.

Based on our tried and proven RPDA 5 platform, which features a 4" full VGA (480x640 pixel) colour LCD touchscreen and a 624MHz Intel Bulverde CPU, the unit integrates:

- a 500 dpi ruggedised, FBI standards compliant, finger scanner/1000dpi latent print scanner
- a 3 Megapixel/24 bit camera
- a 760nm and 850nm infrared auto-capture iris scanner and a simple, intuitive, menu-driven biometrics ID and enrolment software package.

The unit is ideal for any police, security, defence or counter terrorism application where portability, extreme durability, ease of use and remote connectivity is required; and where users may simply not have access to high levels of training but regardless need a reliable ID verification and enrolment system that can feed data into central ID and intelligence databases.

The Opentec TrioMetrics system is unique because it combines the following features:

- it allows 3 metrics to be captured and used to identify individuals
- the scanner/imaging head is at 180 degrees to the PDA LCD, and not at 90 degrees, which addresses feedback from police and military personnel in Australia and the US
- it is lightweight, weighing about 600 grams, even when fitted with double thickness, longer life Lilon batteries
- it exceeds Mil-Std 461E emissions requirements for use in EW rated environments
- it is modular, allowing users to select WiFi, Bluetooth, GSM/GPRS, 3G and GPS as required
- it comes standard with a full Type II PCMCIA and an SD card slot, as well as a USB mater and USB Sync port; allowing substantial additional on-board storage to be added
- it has a compact, joystick type navigation pad with 4 programmable hotkeys, rather than a full QWERTY keyboard, making it more compact and easier to use with one hand
- it supports either Win Mobile 5 or Win CE.net 5 operating systems
- the on-board watch list can carry records for as many as 100,000 individuals and carries full open-standard finger and facial/iris images, rather than proprietary image formats, making integration with any AFIS or FBI standards compliant database easier

Three biometrics in one compact unit!



TrioMetrics allows real time identification using fingerprint, facial or iris recognition, by first comparing scanned metrics with the on-board watch list (of as many as 100,000 individuals), before then doing a remote database lookup (using WiFi, Bluetooth, GSM/GPRS or HSDPA/UMTS connections). The on-board GPS allows lat/long data to be appended to individual's records, and the database can be populated with a variety of data, including 'links' that allow intelligence analysts to review associations between enrolled individuals.

As a stand-alone or networked ID and enrolment tool, the TrioMetrics system enhances law enforcement and national security by delivering real time biometric identification in a streamlined, highly ruggedised, and compact format that is easy to use and highly adaptable.

TrioMetrics System Specification

Product in brief	RPDA 5: Rugged MIL-Std 810F compliant PDA with 4" VGA daylight readable touch screen LCD; removable primary battery; double sealed ports; includes 240VAC and vehicle chargers Biometrics system: Fully integrated, ruggedised, forensics quality, optical finger imaging system, 3Mpixel camera (for mugshots) and infrared iris imaging system		
Environmental, Safety & EMC	IP-66 rated (non- GSM phone) or IP-54 rated (GSM phone enabled modls), MIL-STD-810F compliant; -20°C~50°C operating range; ACA, CE, FCC compliant		
RAM Type/Capacity	128Mb RAM / 128 Mb ROM	Operating System	Windows Mobile 5; optional Win CE.net 5
Dimensions (HxWxD)mm	90mm(W)x232mm(L)x59mm(D) with standard battery; 90mm(W)x232mm(L)x69mm(D) with longer life, double thickness battery	Weight incl Batt & HDD	less than 900 grams
Screen Type	4" transfective VGA (480x640 pixel) touch screen		
External I/Os (ports)	1 x Serial (DB9 RS-232) 1 x USB (1 x Host, 1 x Mini Client) 1 x PCMCIA Type II	1 x SDIO 1 x Ext Mic/Earphone Jack	1 x DC Power In 1 x Docking Connector
Internal I/Os (ports)	3x USB 2.0, 1x serial (COM3)		
Wireless Connectivity	WiFi 802.11 b/g Bluetooth	GSM/GPRS/EDGE	Next-G (UMTS/HSDPA)

TrioMetrics System

Facial Image Capture	3 megapixel, 24 bit		
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