



Superior Full Hand Capture Technology Beyond Appendix F

- High resolution, real-time preview of palm (approximately 10 frames/second) for optimal pre-capture positioning
- Full hand capture in less than 1.5 seconds
- Scan resolutions available in 500 ppi or at more than 1000 ppi (exceeding the FBI certified requirement)
- Cylindrical platen helps ensure contact with all the contoured regions of the hand
- Our patented Moisture Discriminating Optics™ ensures details in pores and no obscured ridge contours
- Designed to eliminate variability that directly impacts image quality: no moving parts, no pads or coatings

Cabinet Configuration



TouchPrint™ 5900

Capture All Critical Data from a Full Hand

The TouchPrint™ 5900 is our FBI-certified full hand and four-finger slap/roll scanning for complete booking applications. This device scans images at 500 ppi or greater than 1000 ppi - exceeding FBI requirements - using our anti-smear and anti-smudging technologies.

With latents found at crime scenes coming from parts of the hand other than fingerprints, the ability to capture all the fine details and minutiae of a subject's entire hand can make all the difference in solving a crime. The TouchPrint™ 5900 provides the image quality that delivers superior resolution – so critical for maximum AFIS performance and positive identification.

GOES BEYOND FBI CERTIFICATION

Only one fingerprinting system, the TouchPrint™ 5900, combines the standards of the National Institute of Standards and Technology (NIST) with an Image Quality Standard (IQS) FBI Appendix F certified full hand scanner. It is capable of a splice-free, continuous capture of the whole hand from the carpal crease to the fingerprints. Other scanners require specific hand positioning to

capture a full hand image; our hand scanner uses an imaging concept recommended by the FBI, rolling the hand over a curved surface.

Our patented optics ignore moisture, dirt and latent prints left behind on the platen, making it easier to capture high quality images – consistently – regardless of the challenges faced, such as dry or sweaty fingers or an unclean platen. “Best in class” in image capture quality, rather than “good enough” is the choice to make in deciding which live scan to use in accurately identifying people.

The TouchPrint™ 5900 provides the image clarity needed to prevent artifacts and capture important friction ridge detail. This model boasts high dynamic range sensor results in maximum contrast and grayscales, bringing out the minutiae and pore detail in the finger and hand print images with virtually no distortion, which makes the image ideal for latent print comparison.

ADVANCED CABINET DESIGN

A sealed unit permits for deployment in demanding environmental conditions that may be dusty, wet, hot or humid, while an ergonomic structure with small foot print design, allows for ease of use in space-constrained environments. The adjustable, 17” LCD flat panel monitor allows for optimal, high-resolution fingerprint imaging. In addition, optional accessory trays are available for extra workspace.



- 1 Fingerprints
- 2 Interdigital
- 3 Cup
- 4 Thenar
- 5 Hypothenar
- 6 Carpal Crease
- 7 Writer's Palm

With the TouchPrint™ 5900 our unique, cylindrical platen enables the capture of the entire hand minutiae at 500 ppi or 1000 ppi in a single pass, providing superior image quality



TouchPrint™ 5900 Product Features Impacting Image Quality

FEATURES	BENEFITS
MegaView Camera System	Greater image detail – over 50% more pixels than conventional 1000 ppi scanners.
Grayscale	Linear, 256 levels with no lost detail from grayscale compression. Full ridge detail maintained for optimal latent comparisons.
Clean Image View™	100% better than the FBI specification for signal-to-noise ratio for greater ability to read features and ridge detail in fine ridge structures.
Balanced Image Distribution™	100-200% less geometric distortion equals enhanced accuracy of minutiae and ridge detail location.
AntiSmear™ Technology	Prevents smudging and smearing during finger rolls. High quality prints with less-skilled operators.
Clear Trace Imaging™	Prevents false minutiae by ignoring dirt or latents left on the platen. Provides greater uniformity across platen region. Less platen cleaning equals faster throughput.
Moisture Discriminating Optics™	Our patented optic technology ignores moisture and sweat to prevent loss of fine feature detail essential for realizing the benefits of 1000 ppi scanning.
Dual Beam Illumination™	Delivers uniform illumination across entire platen, improving geo-accuracy
Auto Light Balancing	Maintains consistent image quality over time. Best prints all the time.

TouchPrint™ 5900 Live Scan Technical Specifications*

Model Numbers	TouchPrint™ 5900
Scanning and image capture resolution	Scan Resolution: 1000 ppi (v) x 1549 ppi (h) Scan Depth: 8 bits/pixel (256 gray levels) Capture Resolution: 1000 ppi (v) x 1000 ppi (h) Capture Depth: 8 bits/pixel
Active Image Dimensions	Multi-Finger Plain: 3.2 (h) x 2.0 (v) (nominal) inches Single Thumb Plain: 1.6 (h) x 1.5 (v) inches Rolled Impression: 1.6 (h) x 1.5 (v) inches Full hand scan: 5.15 (h) x 8.0 (v) inches
Image Quality	Geometric Distortion: Exceeds FBI IQS specification without calibration Linearity, Signal to Noise, CTF, Scanned gray levels: Meets or exceeds FBI IQS specifications
Illumination	White LED light panel for low operator eye fatigue and no color memory
Scanner Data Interface	IEEE 1394 Firewire
Size (appliance)	Deck Width: 12.5in (31.8cm); Deck Height: 6.3in (16.0cm); Deck Depth: 14.0in (35.6cm)
Size (cabinet)	Width: 30.5in (77.47cm); Height: 65in (165.1cm); Depth: 29.0in (73.66cm)
Weight (appliance)	14.0lb (6.4kg)
Power Requirements	110-120/220-240 VAC, 50/60Hz/-less 15.5 watts, Includes separate DC power module
Operating Environment (nominal)	Ambient temperature: 40°-104° F (5°-40° C) Relative humidity: 20-90% non-condensing Altitude: 0-7500 ft (2460 m) AMSL
Logical Scanner/Host Interface	<ul style="list-style-type: none"> • Software Development Kit (SDK) includes application program interface and device drivers for Windows XP and Vista operating system • (Available for licensed developers)

* Specifications subject to change without notice.
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