# Biometrics Applied The Blending of Science and Art







## **The Science**

**Our Technologies** 

The need to identify people is as old as humankind. People recognize each other by sight and sound. However, in today's complex society, it's impossible to personally know everyone and as a consequence, systems rely on recognizing a credential rather than the individual. Our biometric readers recognize people - not credentials. Biometrics is the science of using physical characteristics to identify an individual. They assure that "you are you." Recognition Systems is the first biometric manufacturer to offer the two most widely used biometric technologies - hand geometry and fingerprint. As a multi-technology company, Recognition Systems is uniquely qualified as a consultant to help our customers apply the right technology to their application.



### **Fingerprint Technology**

Recognition Systems' fingerprint readers analyze fingerprints located between the tip of a finger and first knuckle. An image is captured by a patented algorithm which then extracts unique points from the image and converts the data into a unique mathematical template. The fingerprint reader compares this information with a "template" of the individual's print that has previously been stored. Once the person has been verified as a valid user, a door can be opened or access can be granted.

- Low cost biometric technology
- Low volume, low throughput openings
- High security environments

### **Hand Geometry Technology**

Recognition Systems' biometric HandReaders simultaneously analyze more than 31,000 points and instantaneously records more than 90 separate measurements of an individual's hand-including length, width, thickness and surface area-to verify that the person using the device is really who he or she claims to be. The HandReader compares this information with a "template" of the individual's hand that has previously been stored in the reader, on a server or on a card. Once the person has been identified as a valid user, a door can be opened, access can be provided, or time recorded. The reading and verification process takes less than a second with impeccable reliability.

- High volume, high throughput openings
- Maintains industry leading performance in harsh environments
- High security environments





### The Art

Which Technology is Right for You?





**HandKey®** 



**FingerKey®** 



**HandPunch®** 



Blizzard

Each biometric technology has its own unique advantages, therefore, no one biometric technology fits all applications. Applying the right technology is key to success. That is why Recognition Systems offers a family of products designed to meet your needs for access control, time and attendance or identity verification.

#### **Access Control**

For access control, we provide the ultimate in security by insuring that only authorized people are allowed access, protecting your valuable assets.



#### **Time and Attendance**

For time and attendance, we verify that the right person has punched in or out for the day, eliminating costly time fraud.



### **Identity Verification**

For identity verification applications, we automate client identification systems, guaranteeing the system is addressing the right person, in a fast and cost-effective manner.





### **Access Control**



### **HandKey**<sub>®</sub>

## ...when high volume, high security and durability in harsh environments count the most, you can count on it.

From major government applications to commercial buildings, our HandKey hand geometry products provide the ultimate in security, reliability and convenience. While perfect for applications large and small, their low, field proven error rates translate into incredible reliability. High volume, high throughput environments cannot tolerate errors, so the value of handreaders increases as the population grows. For this very reason, HandKeys protect 95% of all nuclear power plants in the United States insuring all of their thousands workers are who they say they are.

San Francisco International Airport has depended on the security and reliability of HandKeys since 1993. More than 18,000 employees count on the speed and ease of use of the handreader to gain access to the tarmac each and every day. Even in this harsh, demanding environment over 100 million successful verifications have been logged.

- Meets the needs of strict security requirements
- Convenience of never worrying about keeping track of a card or key
- Integrates into existing systems
- High volume, high throughput openings
- Fast and easy enrollment and use

"Simple ID badges can be lost or stolen or given to friends. The RSI HandReaders are reliable and enhance security. They do a great job."

- Roger Case, San Francisco International Airport

## FingerKey.

## ...provides improved security, convenience, and a low cost biometric solution for low volume openings.

FingerKeys are ideal for low volume openings, from computer server rooms to drug dispensaries, while providing increased security over a "card only" system - to verify that the person using the device is really who he or she claims to be. For these low volume openings, cost is a key consideration and our fingerprint products can meet that need. Our FingerKeys' low cost makes it easier to justify the higher security everywhere you need it.

- Lower cost biometric solution for low volume openings
- Know who has access, not what
- Attractive, durable design





### **Time & Attendance**

### HandPunch.

...improves payroll accuracy and simplicity by eliminating "buddy-punching."



Businesses of all sizes continually strive to control costs. When administrators realize the cost advantages of biometrics, they put them to work in time and attendance. For example, over 3,400 employees at 85 McDonalds' restaurants clock in and out biometrically, eliminating expensive "buddy punching." In addition to verifying that "you are you", the HandPunch meets the special needs of computerized time and attendance systems. Together they reduce the large overhead and inaccuracies of a manual payroll process to just a simple "punch" of the hand with an integrated biometric payroll process.

- "Buddy-Punching" is impossible
- Cards and associated administration costs can be eliminated
- Integrated with leading time & attendance software systems
- True time clock functionality including department transfers, supervisor override, and time restrictions

Just five minutes equals 1% of a worker's daily pay. Small amounts of time fraud can add up quickly - increasing payroll cost and decreasing productivity. HandPunches eliminate time fraud and you get a quick return on your investment!





## **Identity Verification**

### **HandKey**®

...guarantees that the people accessing automated identification systems actually have rights to the system.



From airport check-in to health clubs, HandKeys assure that an automated identification system is addressing the right person in a fast and convenient manner. At Ben Gurion International Airport, in Tel Aviv, Israel, over 25 self-service immigration inspection kiosks integrated with RSI HandReaders reduce or in some cases eliminate waiting times for over 100,000 Israeli citizens traveling abroad. As a result, airport and border security authorities can focus on higher risk travelers, which improves security and expedites air travel. The HandKey's low error rates ensures that the right people are permitted access while maintaining extraordinary customer service and customer satisfaction.

Real biometric performance can be hard to decipher amongst the many competing claims in the industry. As a field proven biometric company, our Biometric Consultants help you pick the right technology for your application.

- High user acceptance, non-intrusive technology
- Fast and easy enrollment and use
- High reliability equates to a positive user experience

"The HandReaders eliminates ID switching and no longer do our 50,000 members have to remember to bring an ID card. The HandReaders allows us to provide better service."

- Vicki Greene, San Diego State University





## **Our Company**

**Recognition Systems, Inc.** 

Recognition Systems, Inc (RSI) is a worldwide leader in biometric access control, time and attendance and identity verification solutions. Since 1986, Recognition Systems has been dedicated to developing the science of biometrics and the art of applying biometric technologies to meet the needs of our customers. Our technology portfolio includes the most widely deployed biometric approaches, hand geometry and fingerprint. Coupled with our unique understanding of the nuances of our markets, Recognition Systems develops biometric solutions tailored to meet your needs and expectations. Our biometric devices recognize people not credentials - such as PIN, keys or badges.

While many biometric companies are in a startup phase, Recognition Systems has decades of experience and an unparalleled track record in our markets. We are a well established leader in our markets and draw on the strengths and stability of our parent company, Ingersoll-Rand (IR), a multi-billion dollar, global, diversified industrial enterprise with market leading brands. Traded on the New York Stock Exchange, IR has developed an extensive global infrastructure that provides engineering and sales expertise, technical support, and financial resources. It is on this foundation that we are uniquely positioned to drive the long term development of our industry.



### **Our Customers**

Our customers are as diverse as the needs of their work places. For decades, more than 100,000 of our biometric devices have been installed throughout the world, in a wide variety of applications.

Ben Gurion International Airport | INSPASS | KLM | Malta International Airport | Nippon Express Co., Ltd. | United Airlines | Toledo Air Transportation

Express Airport | San Francisco International Airport

Casinos Oneida Bingo Casino | Sahara Casino | Caesar's Palace | Flamingo Hilton | Treasure Island Resort & Casino

Correctional Colorado State Corrections | Federal Bureau of Prisons | Hawaii Department of Public Safety | Liman County Prison | Megasson Israeli Prison | Minnesota Department of Corrections | Nassau County Jail | Ohio State Penitentiary | Utah Department of

Corrections | Washington, D.C. Jail | Washington Department of Corrections-Parole Kiosks | Wisconsin Department of Corrections

Courthouses Jackson County Courthouse | Lane County Courthouse | Los Angeles County Courthouse | Sonoma County Courthouse

Education Iona College | New York University | San Jose State University | University of Georgia | University of Pennsylvania | San Diego State

University | Johnson & Wales University | University of Central Florida

American Express | Banca di Roma | Bank House | Bank of America | Bank of Hawaii | Brinks | Chevy Chase Bank | Chicago Board of Trade | Citicorp | Deluxe Check | Federal Reserve Bank | First Bank of Minnesota | FirstBank Puerto Rico | First Interstate Bank | **Financial** 

Jefferson Bank | MBNA Bank | Mid-Med Bank, Card Products Division | National Bank, Ukraine | QwikCash | Seafirst Bank |

Security First of America | Swiss Bank Corporation | Wells Fargo Bank

Governement

DARPA, Arlington, VA | The Defense Agency of Japan | Department of Commerce Data Center, Springfield, VA | Lawrence Livermore Labs | Ministry of Foreign Affairs, Jerusalem | NSA, Ft. Meade, MD | Pentagon, Crisis Management Center, Washington, D.C. | Republic of Lebanon | Sandia National Labs | Singapore Ministry of Defense | U.S. Air Force | U.S. Customs Data Center, Springfield, VA | U.S. Drug Enforcement Agency | U.S. Embassies | U.S. Post Office, NJ | U.S. State Department |

Los Alamos National Labs

**Internet Data Centers** Above Net Communications | Cogent | Equinix | eVault | Exodus | Hurricane Electric | Level 3 | Pilot Network Security | Qwest

Laboratories Bristol Myers Squibb | DuPont | Merck | Miles Laboratories | Pfizer | Southwest Bell

**Local Government** Alameda County Sheriffs | Carmel Fire Department | Chula Vista Police Department | City of Pompano Beach | City of West Palm

Beach | Focused Hope Retraining | San Bernardino Sheriffs | Chesterfield County Virginia

Manufacturing California Cryobank | Honda Motor Co., LTD | Mitsubishi Heavy Industries, LTD. | Owens Corning | Phillips Electric

**Medical Facilities** Rex Hospital, North Carolina | University of Florida Medical Center | Veteran's Hospital

> Arizona Public Service Co. | Baltimore Gas & Electric | Boston Edison | Carolina Power & Light | Chubu Electric Power Co. | Cleveland Electric | Commonwealth Edison | Connecticut Yankee | Duke Power | Duquesne Light Co. | Entergy | Florida Power & Power

Light | Georgia Power Co. | Houston Lighting & Power | Illinois Power Co. | Japan Atomic Power Co. | Kakima Nuclear Power Plant JV | Kansai Electric Power Co. | Nippon Nuclear | North Atlantic | Northeast Utilities | Pacific Gas & Electric | PECO Energy Co. |
Portland General Electric | Public Service Electric & Gas | South Carolina Electric & Gas | Southern California Edison | Southern Nuclear Operating | Texas Utilities | Tohoku Electric Power | Tokyo Electric Power Co. | TVA | Virginia Power Co. | Washington

Public Power | Westinghouse | Wolf Creek Nuclear | Yankee Atomic Electric Co.

Retail/Hospitality Graeter's Ice Cream | Joe's Stone Crab | Krispy Kreme Donuts | TK Maxx

1996 Olympic Games-Atlanta | The Arrowhead Pond of Anaheim | Busch Gardens | Chicago Housing Project | Les Fontaines Special Interest Retirement | Lotus Development Day Care Center | Public Broadcasting Services-Malta | Raytown Parks & Recreation | Reliance

Petroleum Co., India | Rotterdam Harbor | Royal Caribbean Cruise Lines | Sea World | Walt Disney Attractions

"The RSI HandReaders are reliable and enhance security. They do a great job."

-Roger Case. San Francisco International Airport

"We needed a positive identifier for people carrying out critical county functions at off-hour times." -Dennis Lacey, Chesterfield County

"Our users love the handreaders."

Rodger Orr, Owens Corning