FALKEN Secure Networks RFID

STUDENT TIME & ATTENDANCE

with Student Identity Integrity

PalmSecureID for the EDUCATION MARKETPLACE

With the continued effort to increase efficiencies in the world of education, PalmSecureID can be utilized in a variety of settings to address processes, security and identity authentication for students, administrators and staff alike.

For students, the traditional school ID card has been a mainstay for identifying students and is often associated with meal plans, classroom and school event attendance and school bus. This method is rife with issues, including "buddy punching", essentially sharing ones ID with others for meal plans, "shoulder surfing" to steal PIN numbers, and ghost swipes for attendance. PalmSecureID addresses these shortcomings by tying a student's ID to their Palm Vein Template, the result of a PalmSecureID initial enrollment scan. By requiring a palm scan for each class or field trip attendance validation, boarding and off-boarding school buses or for a meal plan transaction, school administrators can more accurately track attendance, provide audit data to governments to support funding as well as gain better control over food service supply chain and planning, thus contributing to overall savings in food costs.

PALMSECURE ID is FSN's industry-leading hardware and software integration based on Fujitsu's unique Palm Vein Scanning technology. Like Finger Prints and Iris eye patterns, each vein pattern in the palm of the hand is unique to each individual including those born as twins. It is hygienic, more accurate and less invasive than fingerprinting and iris scanning with authentication response speeds less than 2 seconds. This offers a highly reliable, contactless, biometric authentication solution that is non-intrusive and easy to use in a small cube-sensor form factor which is normally encapsulated with hand guide and LED verification of a palm read and match. PalmSecure™ technology has been deployed worldwide in a wide range of vertical markets, including security, financial/banking, healthcare, commercial enterprises and educational facilities. Additional applications include physical access control, logical access control, retail POS systems, ATMs, kiosks, time and attendance management systems, visitor ID management and other industry-specific biometric applications.
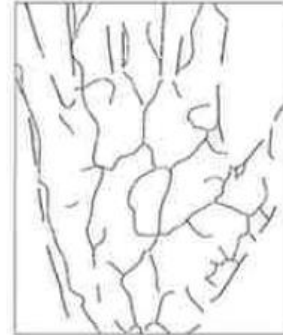
The vein pattern in your palm is totally unique to you.
No one else in the world can match it.

Specialist RFID, GPS and Video Surveillance System Integrators for Challenging Environments

Hold palm over scanner

Scanner reads vein pattern

Your identity is verified

SAFE - LOW COST - ACCURATE - SECURE - ENCRYPTED

Optimal palm positioning

Optimal Hand Guide Unit – U GUIDE

Ruggedized Wall Mounted Unit

Ruggedized Tablet Mobile Unit

PalmSecure LogIn Mouse

Ruggedized Secure Access Control

• Positive student and staff identification
• Point Of Sale applications in lunch rooms
• ID authentication for final examinations
• Time and attendance for school and classes
• Reduce truancy
• Eliminate identical name problem
• After school programs
• School buses for pick and delivery
• Field trips
• Fire drills
• Mustering off site for emergencies

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This one of a kind biometric signature is captured by taking a scan of a patient's palm which only takes a few seconds. During the scan an invisible infrared light is directed on the patient's palm. This light is very similar to the light used in a TV remote control.

Each Scanner is connected via USB cable to a local network-connected Desktop PC, Laptop or Tablet(utilizes the driver to access the stored palm templates for authenication) . In most educational institutions, there is normally one on the teacher's desk in each classroom which would facilitate the installation. Alternatives and work-arounds do exist. For example, a wall-mounted Tablet at the door can be used and also provide other functions such as:

- Larger screen sign for identity validation confirmation & directional messaging
- Classroom use schedule for that day
- Student instructions for Special Field Trips
- Todays specials at the Cafeteria
- Pin # Input for two factor authorization for secure access or door unlock.
- Exam schedules, etc.

• Enroll once and done
• Prevent errors & omissions
• Speed processing at all points of use
• Increase student flow in the morning
• Reliable & easy to use
• Reporting & Trend analysis for management
• Paperless & a part of your **GREEN** program

Real-time.   Real value:

- ✓ Save time
- ✓ Save money
- ✓ Absence management
- ✓ Eliminate manual record keeping

PalmSecureID can also be integrated into turnstiles at school entrance/exit doorways. This enables administrators to confirm that a student is in school but not yet in a classroom or has left school which may have funding implications.

Hand guides: Several versions are available and are integrated with the Palmsecure scanners. The UGUIDE is a popular selection along with *optional* ruggedized versions with LED's. These are planned to be wall-mounted with a 45° bracket but could be desk mount units also. The Enrollment Stations would be network connected and powered to PC's or Laptops via USB cable(included).
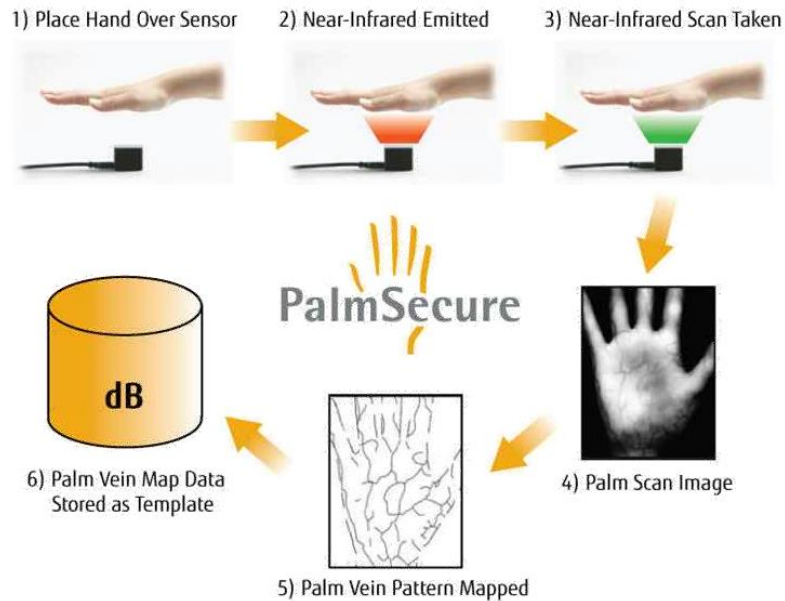
Optional Considerations include a separate scanner for the left hand which some military and correctional institutions use to indicate an emergency or if a person has an arm in a sling as a result of a broken wrist, arm or shoulder. Also if time and attendance is desired to be tracked upon exit from the classrooms, an additional scanner could be installed for exit.

Technology Validation:
- ❖ Over 190 Hospitals in the US are now using the PalmSecureID technology for patient registration.
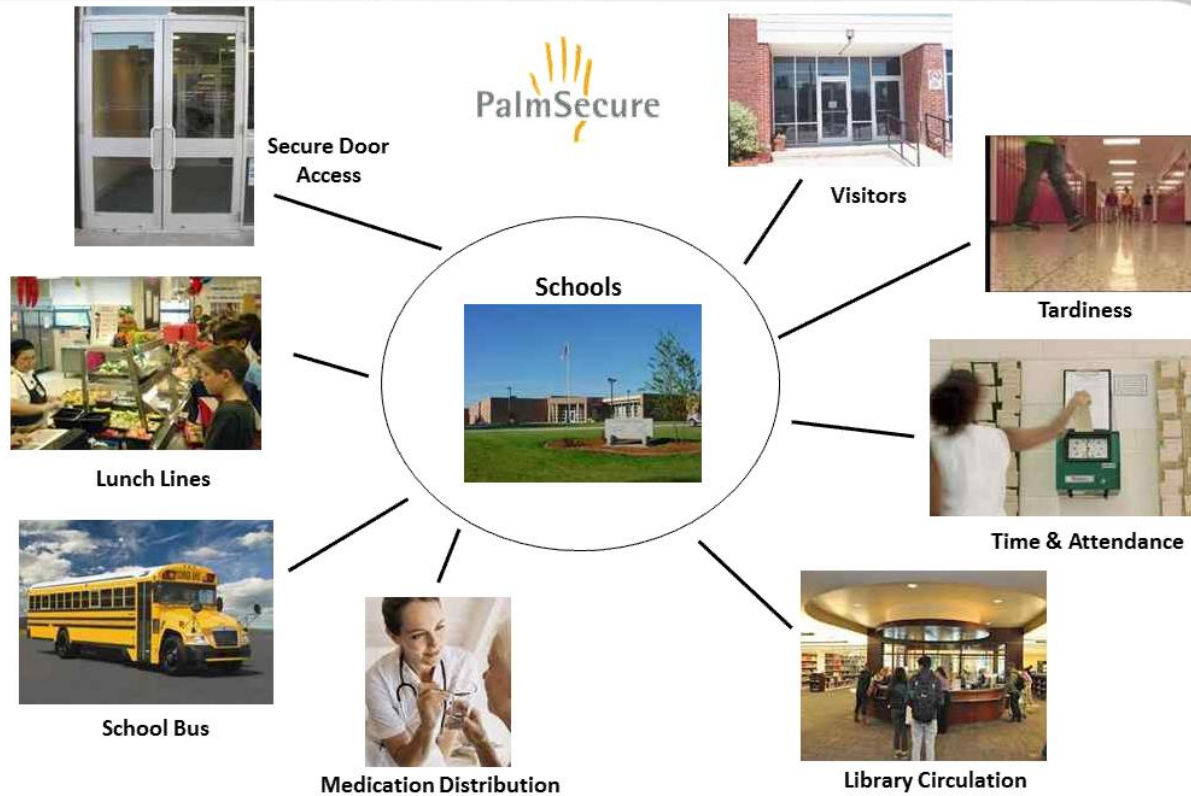- ❖ Over 50 USA School Districts are now using PalmSecure for lunch lines.

❖ Financial institutions in both Japan and Brazil are now using PalmSecureID for ATM authorizations. These and similar products are in use by the US Navy; US Army; the State Of Pennsylvania and private sector clients. In March 2013, Unibank was announced as the first European bank to implement PalmSecure, initially in its Papillon mobile payment systems at various retailers.

PalmSecure Workflow

1) Place Hand Over Sensor   2) Near-Infrared Emitted   3) Near-Infrared Scan Taken

PalmSecure

dB

6) Palm Vein Map Data Stored as Template

5) Palm Vein Pattern Mapped

4) Palm Scan Image

PalmSecureID with 'Magic-Eye' integrated into a turnstile

Education PalmSecure Solutions

FUJITSU

PalmSecure

Secure Door Access

Visitors

Tardiness

Schools

Lunch Lines

Time & Attendance

School Bus

Medication Distribution

Library Circulation

Desk Mount PalmSecureID

Wall Mounted PalmSecureID with voice instruction "Access Granted"

45º Bracket Mounted PalmSecureID

Pillar Mounted PalmSecureID with ID Card Reader

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THE SOFTWARE- FSN PalmClock™-Time & Attendance

The FSN-PalmClock™ software is affordable and rapidly deployed. Stand-alone solutions or interoperable with existing systems and hardware.

A proprietary algorithm takes this image, converts it into a digitized biometric template, and then matches it against a database of pre-registered templates. If a perfect match is found, your identity is verified. The PalmSecure technology false accept rate is just 0.00008 percent with an exceptional false reject rate of 0.01 percent. Authentication response time is less than two seconds. The network and power connectivity interface is PoE or USB 2.0. For Privacy and Identity theft protection, an encrypted template repository in the SQL Database is included.

Totally Mobile:
It isn't just about the perimeter, its about the whole facility, inside or out. Use the FSN PalmSecure software anywhere and we mean *anywhere*. It can be fixed to a door, a turnstile, a gate or deployed in the field or even *in* a field! A complete solution that lets you take it to the tactical front to secure your business.

Real Time:
Information in real time is everything. The ability to *know* there is a problem and have that knowledge available to everyone in the organization, *as it happens,* is priceless. Stop trouble in it's tracks and do it *now.*

Highly Secure:
Your information is secure and encrypted. We do it well enough for our Military customers and conform to the highest commercial protection standards.

- Positive student and staff identification
- Point Of Sale applications in lunch rooms
- Time and attendance for school and classes
- Reduce truancy
- Eliminate identical name problem
- After school programs
- School buses for pick and delivery
- Field trips
- Fire drills
- Mustering off site for emergencies

Import
Export

Integrate with payroll & HR   **Safe, Secure, Encrypted**

Living System:
It's the real world. It changes. We change with it. Our PalmSecure software is a living system that seamlessly and rapidly adapts and adjusts to new regulations, policies and procedures.

Link Locations:
Link together all your locations into one common operating picture. It doesn't matter if it's two facilities or twenty you can see all activity in real time and receive security alerts from any location our PalmSecure software is active in.

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Your information is secure and encrypted. We do it well enough for our Military customers and conform to the highest commercial protection standards.

Easy to Use:

So easy to use a *child* can do it. Contactless; hold your hand over the reader and it's done. We built it so you can use 2 or 3 factor authentication as well. We read drivers licenses, passports, TWIC cards, CAC cards or any form of ID *you* decide is OK.

Accurate Identity Verification:

Our Palmsecure software integrates palm vein scanning to confirm identity in *under* 2 seconds (benchmarked with databases of less than 1000 palm templates).
Combined with our sophisticated rules engine, it is a total solution.

Open Architecture:

FSN- PalmClock™ uses Postgres database which is a database which is free and downloadable on the internet and now very similar in functionality and speed with MySQL. FSN-PalmClock™ has an export function (CSV format) so they can export the data to use for reporting.

PalmSecure SafeBus™

Install a PalmSecure™ scanner with a Laptop and Cellular GPRS(or load the student database on the Laptop) and you have real time student time and attendance on and off the bus along with leveraging the powerful rules engine to send location, time and attendance status email alerts to parents.(see separate **PalmSecure SafeBus™**brochure)

Interested in a detailed proposal?…………………

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