FALKEN Secure Networks
>>>>>>>>>> RFID

PalmSecureID
Safe Bus™
with Student Identity Integrity

For accurately identifying, locating, tracking students and alerting parents while in the custody of the School Bus in Real-Time. Includes features for Special Needs students.

PalmSecureID-Safe Bus™ *addresses several of the greatest concerns of school transportation administrators and parents: the accurate identification, location and safety of student bus riders. The solution provides instant and real-time student rider activity including safe pick up/drops off notifications and alerts when a problem occurs. The PalmSecureID-Safe*Bus™ *system provides visual confirmation of the student palm scan authentication and picture on the on-board Tablet upon boarding the bus and audio alerts to the bus driver if a student gets on or off the bus at wrong stop. Because the system reports information in real-time it can preserve precious minutes needed by local authorities when a missing child or kidnapping event has occurred*.

SafeBus™ System uses the world's first integration between Biometric Palm Vein Scan Identity Authentication and GPS (Global Position System) and Cellular GPRS technology. That hardware integration along with our **Safe**Bus™ software application creates highly secure, accurate and direct communication between the technologies *in real-time*.

The system will send instant alerts to school administrators, parents and bus drivers when students are safely picked up and dropped off at their drop off location and at school with timestamp and Attendance, arrival and departure for special field trips.

Unless a parent has notified the school of a student absence, a failure to get on the bus will trigger immediate alerts to school and parents. According to law enforcement officials, the first 30 minutes is critical to finding a missing child. **FSN-Safe**Bus™ solution provides the Real-Time data and alert.

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

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 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, and ghost swipes for attendance. For School Buses, RFID Tags can be forgotten, multiple tags read or not read by the Readers. PalmSecureID addresses these shortcomings by tying a student's ID to their Palm Vein Template, the result of a PalmSecureID system scan. By requiring a palm scan for each attendance validation, or for a meal plan transaction, or entry and exit from the school bus, school administrators can more accurately track attendance 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 and in many cases 1 second. This offers a fast, highly reliable, contactless, biometric authentication solution that is non-intrusive, hygienic 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.
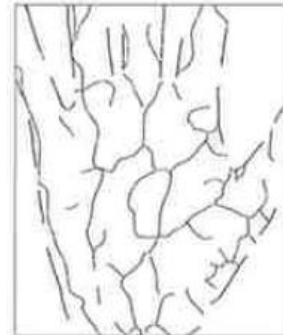No one else in the world can match it.

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
• 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 student's palm during school enrollment 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 Enrollment Scanner is connected via USB cable to a local network-connected Desktop PC, Laptop or Tablet for initial student enrollment and storage of the master palm scan template in a centralized school database. On- board the school bus the PalmSecure™ scanner unit is similarly connected to a Tablet beside the Driver which is equipped with GPS for location and other GPS data and Cellular GPRS for real-time connectivity with the centralized admin server.(The scanner unit utilizes the Tablet driver to access the stored palm templates for authentication and receive database updates). Since the application is somewhat data intensive, we recommend the palm scan templates be loaded to the on-board Tablet for bus 'X' only for the students registered for Bus'X'. This minimizes the cellular data communications cost while eliminating any network latency to maximize the speed of authentication.

- 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
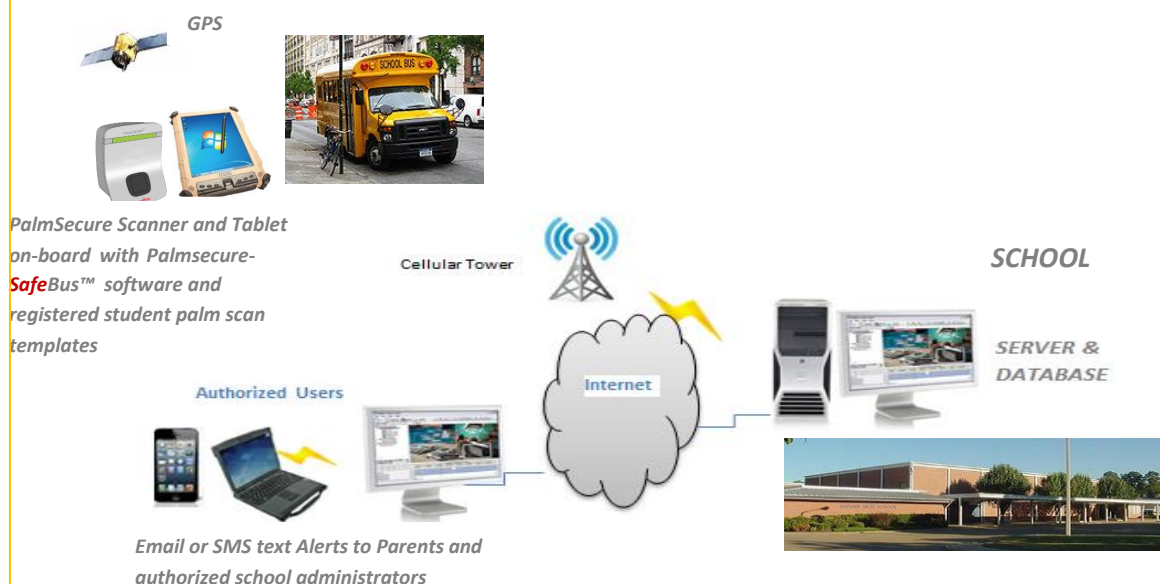- Paperless & a part of your **GREEN** program

Real-time.   Real value:

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

Hand guides: Several versions are available and are integrated with the Palmsecure scanners. We would propose using the standard handguide due to a child's smaller hand than the UGUIDE or *optional* ruggedized versions with LED's better suited for adults. These are planned to be wall-mounted with a 45° bracket just inside the bus door. A similar unit would be installed at the rear door if that was utilized for student entry or exit.

Optional Considerations include a separate scanner at the Bus Driver console for the left hand to indicate an emergency or if a person has an arm in a sling as a result of a broken wrist, arm or shoulder.

AUTHENTICATION AT THE PICK-UP POINT

Child abductions have become increasingly reported at defined school and day-care locations defined for parents or guardians picking up the students after school. **PalmSecure**-**SafeBus™** system is used to create an authenticated palm scan database of those authorized to pick up the students and do a palm scan and authentication every time before the child is released

from the school's custody. A PalmSecure™ scanner and a Tablet with the software and database is all that is required. PalmSecureID is also useful to provide an audit trail if schools use taxis or if pick up addresses change to verify billing and eliminate any over charging.

GPS

PalmSecure Scanner and Tablet on-board with Palmsecure-SafeBus™ software and registered student palm scan templates

Cellular Tower

Internet

SCHOOL

SERVER & DATABASE

Authorized Users

Email or SMS text Alerts to Parents and authorized school administrators

Palmsecure-SafeBus™ SYSTEM SCHEMATIC

THE SOFTWARE- Palmsecure-SafeBus™

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

A proprietary algorithm takes the scanned 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.

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

You Know Your Job:

We don't set security policy, *you* do. We build tools to let you implement the policies and practices that make sense for *your* facility. Built from the ground up so they work we give you solutions that are practical, fast and reliable to answer your security requirements, where ever or *whatever* they may be.

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.

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.

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.

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Accurate Identity Verification:

Our Palmsecure software integrates palm vein scanning to confirm identity in *under* 2 seconds. Combined with our sophisticated rules engine, it is a total solution.

Students with Special Needs

An On-Board Education Assistant, if applicable, has access to the mobile Tablet PC to verify the identity of students on and off boarding as well as validating the correct drop off stop for each student and the identity of the parent/guardian who then takes custody of the student. The On-Board Assistant may also be empowered(always subject to school policies) to do new or changed Guardian enrollments on the spot utilizing the on-board PalmSecure or a mobile version.

On Tablet Screen special instructions for each student(eg. Car Seat restraint required, etc)

Confirmation of correct bus for on-boarding and correct drop off. Driver and school admin alerts if planned drop off did not occur(no parent or guardian to meet, fell asleep on bus, etc.)

Additional features

Optional features are available including audible tone for driver if student is getting off at wrong stop, alert if student gets on wrong bus with GPRS access to the central database to verify correct bus, various fleet management telematics for speed/overspeed alert, harsh braking, location and route tracking with Google maps, fuel , battery, door ajar, etc.

 FSN- **PalmSecure-**SafeBus™ 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. It has an export function (CSV format) to enable the export of data to use for reporting.

It's your solution so you should have a say in what it does and customization is available. FSN works with you as a partner to create solutions that work. Our expertise in business process, secure networks, identity validation and tracking informatics integrates the real world, real people, management goals and technology to meet the required business objectives in real

time. All information is secure and encrypted. These and similar products are in use by the US Navy; US Army; the State Of Pennsylvania and private sector clients.
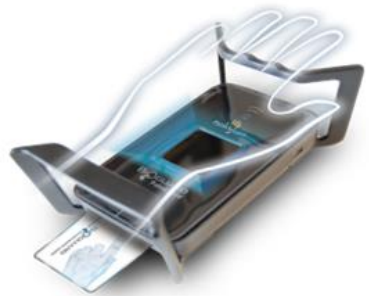
Discover the new standard in user identity validation. PalmSecure ID

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

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