



SL-Tech is proud to bring to you a new student access device that uses a touchpad scanner as a method to identify students. Finger scan recognition, one of the oldest methods of biometric identification, is a relatively new technology for school foodservice. We have put together this list of Frequently Asked Questions about biometrics and our product to help you better understand this technology and its application.

What is biometric scan technology?

Biometric technology is the use of automated touchpad scanning to recognize a person based on their finger image or template. A finger consists of ridges (lines across fingers) and valleys (spaces between ridges). The pattern of the ridges and valleys is unique for each individual, making it one of the most popular biometric tools that can be used for identification. It can be deployed in a varied range of environments. For example, this technology has been used as a security system for ATMs, computer networks, cell phones; for membership management and access control at Disney World or SeaWorld; and for keyless entry to homes and cars. It is fast, accurate and cost-effective.

How does it work?

SL-Tech's biometric solution uses a scanner to generate an image of the ridges and valleys that make up an image. This image is converted to a template which consists of minutiae points on a finger that are unique to an individual. The measured area consists in average of about 30-60 minutiae points depending on the finger and on the scanner area. The template sizes vary from 100 bytes to 1500 bytes depending on the algorithm. The device can store up to 9090 templates.



How does it work in the school cafeteria?

There are two processes involved when using touchpad scanning in the cafeteria:

• After selecting his/her meal, a student places his/her finger on the touchpad scanner in the school cafeteria.

• The device scans the finger, extracts the template, and performs a look-up in its internal list of templates.

• If found, the device sends the matching student PIN to WebSMARTT. The application program processes the ID and returns the student information to the program.

Registering the student during first use

• The student places his/her finger on the scanner two times as directed by the display on the device.

• The scanner generates an image of the finger each time it is placed on the device. These images are converted to a template that is a super-set of features extracted from the two images.

• This template of minutiae is added to a database, which completes the enrollment of the student. Matching

Enrollment

Search during normal cafeteria hours

In addition to these two common processes, SL-Tech's biometric software, SLIDE (School-Link IDentity Engine), can synchronize templates enrolled in two or more PAD devices connected to the POS terminal. Prior to running a meal session (or at another time as chosen by the school district),

SL-Tech's SLIDE communicates with all of the attached devices and updates their individual template databases with any new, deleted, or updated templates.

How is privacy of the data ensured?

The information stored on the PAD device and/or database is ONLY a template generated from a finger scan. The template consists of points, which cannot be used to generate a fingerprint or its image since there would be infinite number of finger images that could generate the same point.

What features are included in the new device?

Multi-function all-in-one design: Accepts 3 forms of input: touchpad scans, PIN numbers or barcode ID cards integrated together in a single unit connected to the POS terminal by a single cable

Touchpad scanner accepts finger scans and performs look-ups to identify students Privacy wings to help protect student's PIN number from being seen by others

Reads all code 39 barcodes, including those produced by myCard@School™ software

Easy to clean: Flat keyboard is easily cleaned and sealed from splashes and spills *Connectivity Choices:* USB, DIN

Easy to use: Prompts user with visual and audio feedback

What are the software requirements for the device to work?

The new device is compatible with WebSMARTT 2.6.3. SL-Tech's biometric software SLIDE will also need to be installed.

What hardware interfaces are supported by the new device?

The new device interfaces with USB only. The chart below indicates the terminals that can be used with this interface.

INTERFACE	FIRMWARE	TERMINALS
USB	4.2.14	PCs and Thin Clients (e.g. Wyse thin client with WinXPe, WebDT)
DIN	4.2.14	Mira Terminals