■ Technical specifications

		FIC-200	FUS-200N	MUSB200-COMBO	COMBO-Mini
Fingerprint sensor	Sensor type	Capacitor type silicon sensor			
	Sensor area	0.5 x 0.6 (in) / 12.8 x 15.0 (mm)			
	Resolution	500 dpi			
IC card	IC card type	N/A		Contacting type	Contacting UIM type
	Standard compliance	N/A		ISO7816-1, 2, 3, 4	ISO7816-1,2,3,4 GSM11.11
	Synchronization mode	N/A		T=1, T=0	
	Power requirement	N/A		3.3V, 5V	5V
Device Interface		PC Card Standard 1997 5V, Type-II	USB 2.0 Full Speed*1		
Power consumption		max. 50mA	max. 100mA	max. 150mA	
Operating condition		Temperature : 41 – 131 ° F / 5 – 55 ℃ , Humidity: Max. 85% RH (non condensing)			
Storage condition		Temperature : -4 – 149 ° F / -20 – 65 ℃ , Humidity: Max. 85% RH (non condensing)			
Dimensions		3.4 x 2.1 x 0.2 (in) / 85.6 x 54 x 5 (mm) – When sensor retracted; 4.6 x 2.1 x 0.2 (in) / 115.6 x 54 x 5 (mm) – When sensor extracted	1.8 x 4.0 x 0.8 (in) / 44 x 101 x 20 (mm)	2.1 x 4.2 x 1.3 (in) / 53 x 106 x 32 (mm)	3.0 x 1.5 x 0.5 (in) / 77 x 38 x 13 (mm) – When cap is attached; 2.2 x 1.5 x 0.5 (in) / 55 x 38 x 13 (mm) – When device is connected to PC
Cable length		N/A	60 (in) / 1.5 (m)		7.9 (in) / 20 (cm) (for extension)
Weight		1.2 (oz) / 34 (g)	4.9 (oz) / 140 (g) – incl. cable	5.1 (oz) / 145 (g) – incl. cable	0.9 (oz) / 25 (g) – excl. cable
Regulatory approval		VCCI Class-B, FCC Class-B, CE, UL, cUL	VCCI Class-A, FCC Class-A, CE, UL, cUL		VCCI Class-A, FCC Class-A
LED indicator		ON: Device in operation, Blink: Scanning in process	N/A	ON: While card inserted	N/A

SX-Biometrics Suite

	FIC-200	FUS-200N	MUSB200-COMBO	COMBO-Mini
Authentication method	Minutiae matching verification			
Authentication accuracy	FRR (False Rejection Rate) 0.1%, FAR (False Acceptance Rate) 0.001%			
Authentication level	3 levels selectable (High, Medium, Low)			
Max. registerable users	32 users		300 users	
Max. registerable fingers	5 fingers / 1 user			
Minutiae data storage area	PC Hard drive		IC card	UIM card
Verification speed	Less than 1 second*2			
Supported OS	Windows 2000, Windows XP			

※1: Equivalent to USB1.1 performance.   ※2: Verification speed may vary depending on your finger condition or PC specification.

silex technology, Inc.
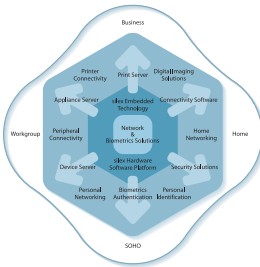
silex facts

silex technology has over 30 years experience designing, manufacturing and marketing embedded connectivity products to help businesses improve the way they move, print and secure information.

Leveraging its OEM foundation, silex provides its quality print connectivity and biometric products under its own brand.

silex offers superior support for customers across the globe.

ISO 9001
JQA-QMA0367
silex technology,Inc.

ISO 14001
JQA-EM0515
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Fingerprint Technology

Fingerprint readers & SX-Biometrics Suite™

Biometric personal identification verification

Utilizing its own fingerprint authentication algorithm, silex technology provides proven, unmistakable and accurate personal identification verification solutions through its own proprietary hardware and software.

Controlling access to sensitive data such as: financial data, intellectual property and personal records enhance a country's, a company's and individual security.

A fingerprint is your lifetime ID - it is always with you. It is something you never leave behind and something you never lose.

Your lifetime ID
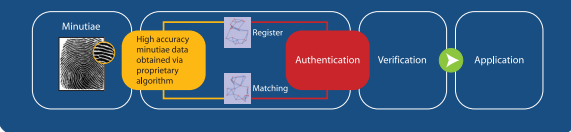**Something you never lose**

Fingerprint - Your lifetime ID

silex technology offers various fingerprint reader device options to work with silex's own fingerprint authentication software. The proprietary security solution allows the users to protect their business information residing in PCs, laptops, or anywhere within the intranet & Internet.
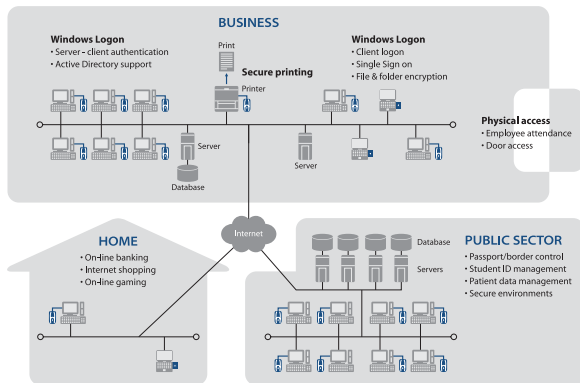
▶ What makes silex fingerprint technology unique:

○ Robust and high quality capacitor detection type silicon sensor.
○ Proprietary minutiae matching verification method.
○ Protected user's privacy. The minutiae obtained from the fingerprint is compressed and encrypted. No fingerprint image can be restored from the minutiae data.
○ High degree of accuracy 0.001% FAR (False Acceptance Rate) & 0.1% FRR (False Rejection Rate) 360 degree finger placement support allows flexible fingerprint data entry.

Fingerprint authentication process

Minutiae → High accuracy minutiae data obtained via proprietary algorithm → Register / Matching → Authentication → Verification → Application

▶ silex fingerprint technology applications

BUSINESS

Windows Logon
• Server - client authentication
• Active Directory support

Print
Secure printing
Printer

Windows Logon
• Client logon
• Single Sign on
• File & folder encryption

Server
Database
Server

Physical access
• Employee attendance
• Door access

HOME
• On-line banking
• Internet shopping
• On-line gaming

Internet

Database
Servers

PUBLIC SECTOR
• Passport/border control
• Student ID management
• Patient data management
• Secure environments

silex fingerprint reader line up

◎ FIC-200
• PCMCIA Type II Fingerprint reader card with pop-in/out sensor.
• Angle free fingerprint data entry allows the card to be inserted in laptop PCMCIA slot on either side with fingerprint placement from any direction.
• Ideal for notebook PC users, especially for the business traveler with customer, financial or client data on their PC.

◎ FUS-200N
• Fingerprint reader with USB interface for desktop / laptop application.
• Compact, stylish and robust design.
• Universally deployable for any 1:1 authentication application.

◎ MUSB200-COMBO
• Provides enhanced security by using a combination of fingerprint, IC Card and Password identification, enabling 1:N personal authentication.
• Stores fingerprint minutiae matching data on the Smart Card, which allows the user to use it for multiple target devices, or carry the Smart Card so the card holder can access from any MUSB200-COMBO unit.
• Enables flexible user application by sensor IC card (Connector ISO7816 compliant) + USB interface device module (PC/SC).
• Perfect for the environments with unspecified staff requiring access to the protected information, such as schools, hospitals or municipal facilities.

◎ COMBO-Mini
• Compact and stylish, ideal for laptop / desktop PCs with a USB interface.
• Provides enhanced security by using a combination of fingerprint, UIM (User Identity Module) card and password identification.
• Stores fingerprint minutiae matching data on the UIM card.
• Designed to be easily carried by the user, serving as a portable ID verification.

silex fingerprint software line up
◎ SX-Biometrics Suite™

SX-Logon (Windows Logon)
• Protect your PC privacy by authenticating fingerprint data for PC log-in.
• Can register up to 5 different fingerprint data per person for a maximum of 32 users.*
• Stores authentication activity log for 100 days or 5000 entries. *Max. 300 users for the MUSB200-COMBO.

SX-Pass
• Replaces user names and passwords with a fingerprint, eliminating the need to remember and manage conventional multiple user names and passwords.
• Prevents from potential password / ID thefts.
• Ideal for on-line banking, member site login applications.

SX-Lock
• Easily encrypts your data files with fingerprint data entry in just a few seconds.
• Additionally it can enforce the user to enter fingerprint data in order to open software applications, protecting from any illegal access to sensitive information.
• Provides high data integrity and privacy.

Screen saver lock
• You can activate / deactivate your screen savers with your fingerprint.
• The screen saver can be locked by removing the Smart Card from the MUSB200-COMBO.

◎ Fingerprint SDK
• Designed to develop applications utilizing silex fingerprint readers.
• Microsoft Visual C / C++6.0 based.
• Compatible with Windows 95/98(SE)/Me, Windows NT 4.0, Windows 2000/XP.
• Includes: device driver, fingerprint sensor control library, minutiae extraction library, verification control library, application for a device operation check, definition file, sample source code, and PDF manual.