Santek

Finger Vein Modules developed by Hitachi Japan

high-speed process, accuracy, security

For Access Control, Time Attendance and Security of Residence

Identification and enrollment less than 1 sec. Meeting enterprises, offices and houses' demand for identification efficiency.

FV-530 Finger Vein

Secure Access Control System Relevant Application Solutions

The utmost state-of-the-art biometric identification system ever in the world.







Product features

Complete prevention of fraud.

The utmost state-of-the-art biometric identification system ever in the world.

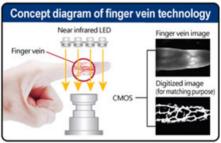
Along with the development of the information industry, the importance of passwords has caught the eyes of all trades. However, passwords are subject to the risk of theft, forgery and loss. Very often the account may also be locked out due to the user entering an incorrect password, resulting not only in inconveniences but also in increased workload of system maintenance personnel.

The widely used ID Cards bring convenience to access control, yet besides card issuance and management problems, there are still risks that the card may be stolen, fail to be brought along, or be lost. Since the card represents all, its loss will cause the holder enormous troubles.

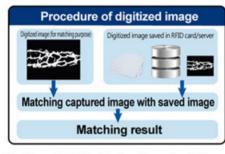
Identification via internal characteristics of finger veins offers stabilized log-in and verification without being affected by exterior features of the identified subject.



ATM Applications







➤ Finger Vein Verification Procedure (internal)

The application of biometrics is now very popular in Japan, not only in access control and information safety control, but also in financial ATM systems where security is of grave importance. The merit is no need for entering a password. Since password databases no longer exist, hackers entering the system by assuming a user identity can be reduced and the user no longer has to worry about remembering the password. Everybody has and brings along biometric features, therefore no more forgetting or missing problems as well.

High accuracy, security, operability, scalability, and reliability provides you with the most powerful and theft-free ID authentication.

Taiwan Jantek's FV/530C Finger Vein Secure Access Control System employs authentic Finger Vein Modules developed by Hitachi Japan. Such biometric verification technology comes from medical examination of veins in our fingers. Unique vein distribution in the finger is used as the baseline of ID verification of individuals, so is the blood-flow in the finger capillary. This feature is unique to each individual, even twins do not have identical vein distribution. The probability of identification error is 1 millionth. Identification time is 0.5 seconds only. The identification is undeniable, therefore suitable for being a means for ID verification.

We are able to deal with high-speed process and super large capacities. We offer fast verification procedures and increasingly log-in quantities.

Many financial operators in Japan use this technology in ATM applications. Its market share has now reached 79%, significantly improved user convenience, and reduced risks of fraudulent withdrawal.

In the Taiwanese market, references of multiple installations include access management of luxury condos, access control of equipment rooms, duty management of general enterprises and government entities, plant duty management and outsourced contractor management, attendance management of tutoring classes and schools, as well as administration of specific medicines in health care institutes. In the future, the enforcement of the Personal Information Protection Act in Taiwan will increase the application of this technology at large for data security management.

Utmost State-of-the-art Identification Technology Easy to Read and Operate

FV-530C employs latest finger vein identification technology. Comparing to fingerprint identification, finger vein identification is living identification. Even user's fingerprint can't be identified, finger vein can still be clearly identified. Hand Dermatitis, Hyperhidrosis, damaged fingerprint, extremely dry fingers, extremely wet fingers and bad blood circulation won't affect finger vein identification. It is a great advantage to those users who don't work out with fingerprint identification.



FV-530C

Biometric Access Control Reader

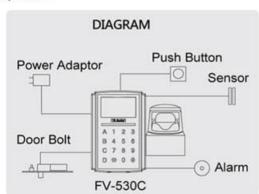
Finger Vein Secure Access Control System

- Effective reading range for EM is 10~16 cm. For Mifare is 3~5 cm.
- Capable to read EM cards, PC-1180, PC-1076 and KT-2500. Mifare 1 S50 is optional.
- Programmable door closing delay time. Adjustable from 0 to 255 seconds.
 Alarm will be triggered after set delay time.
- RS232, RS485 and RS422 interface, TCP/IP is optional.
- · Built-in RTC.
- · Built-in watch dog.
- · Reader ID is settable with keypad.
- · Built-in tamper switch and alarm.
- 130,000 history capacity. 50,000 card capacity while standalone.
- 12,000 finger vein template capacity. It says 6,000 people capable when using 2 templates per person
- · Available for contacting detector.
- Compatible with push button and readers (EX: PR-200 and PR-400) for IN and OUT access control.
- · Both English and Chinese LCM.
- 3 programmable time zones per day.
- Operation modes: card + pin code, card only, card or keying in card number and pin code, facility code only, prohibited mode, open mode. For the first 3 modes, finger vein recognition is optional.
- With 5 RS232 contacts and 3 RS485 contacts. Available to connect printer.
- . With 1 Wiegand output and 2 Wiegand input.
- ARM Cortex-M4 32 bit MCU. Computing speed is 84 MHz.
- 1:1 recognition less than 1 second. 1:2000 recognition less than 2 seconds.
- · 1:1 and 1:N finger vein recognition.
- ISP available.
- · 48M bit flash memory.
- FAR less than 0.0000007%
- FRR less than 0.01%
- · Failure to enrollment rate: less than 0.03%



▼ FV-530C

143(L)× 166(W)×86(H)mm



LCD	Humidity	Interface
128 x 64 dot backlit LCD	20%~90%	RS232/ RS485/ RS422/ TCP/IP
Display	Power	
4 x 4 backlit keypad	DC 12V 1A	
Operation Temperature	Relay	Dimension /mm
0~50°C	4 relays Max. DC 12V 1A	143(L) ×166(W) ×86(H)

Fingerprint Identification

Hyperhidrosis, Hand Dermatitis, damaged fingerprint seriously affects.



Finger Vein Identification

Identify subcutaneous finger vein. Secure and convenient.

System architecture diagram

