VIRDI-3000
Fingerprint Access Control Terminal

UNION COMMUNITY

1. COMPANY OVERVIEW

A. Our businesses

Union Community is a leading biometrics company for access control, time & attendance, door lock, PC peripherals, safety box, etc., that incorporate Union's groundbreaking fingerprint biometrics technology.

B. Background information

- Incorporated in 2000 & Headquarters in Seoul, Korea
- By sales revenue, the biggest and the most promising company in the commercial sector of biometrics industry in Korea
- Union exports its fingerprint products to more than 70 countries all over the world
- Korean World-class Product Award presented to Union by Minister of Commerce, Industry and Energy on December 30, 2005
- Registration of ISO 9001:2000 / 14001:2004
- Received the NPS Award in Biometrics from SIA at '07 ISC WEST
- The "Jang Young-Sil" Award by the Korea Industrial Technology Association on 18 Nov 2008

2. KEY SUCCESS FACTOR

Top-quality Fingerprint, RFID Card & Smart Card authentication technology (proprietary Module and Programming)

Core Technology

Best Variety

Access control, T & A, fingerprint door lock, RF & Smart Card OEM module, etc.

Various major reference sites with accumulative technology over for years

Qualified Reliability

Strong R & D

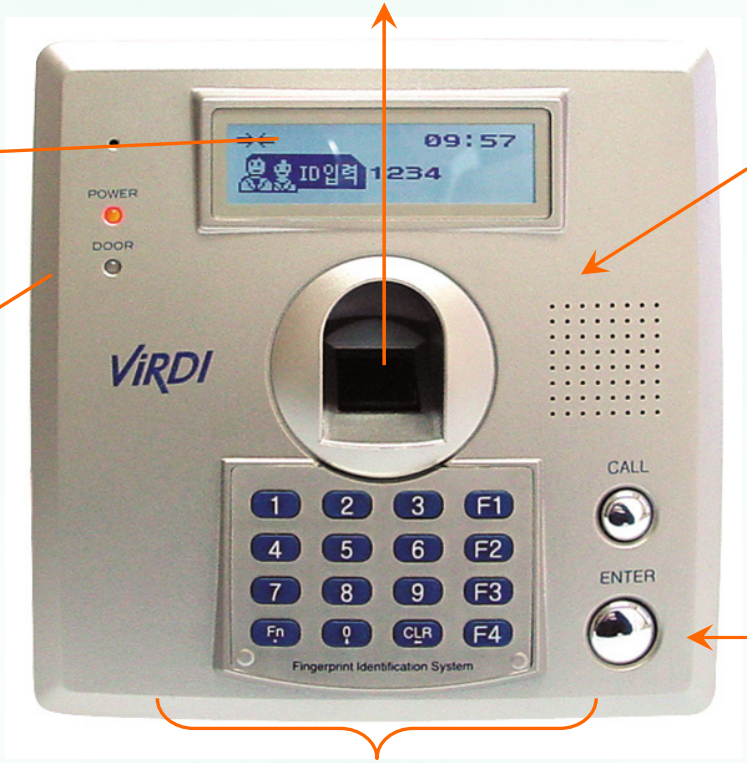
In-house one-stop processing capability (hardware, software, product design, etc)

3. PRODUCT FEATURES

Fingerprint Input Window
-Touch Sensor
-Fingerprint Authentication

LCD
-This panel displays test message about operational status.

SPEAKER
-Indicate Operational status, as playing voice message when the interphone is connected



LED
-Indicate operational status of the terminal

Function Key
- Equipment Setting

KEYPAD
-Environment Setting
-Input authentication ID
-Input PWD

3. PRODUCT FEATURES

A. Integrated Card Reader Option

- Optional card reader available
- 125KHz RF or 13.56MHz Mifare

B. External Card Reader Option

- Connect standard 26bit, 34bit Wiegand card readers directly to the Virdi 3000
- The Virdi 3000 is also able to produce a Wiegand output for integration to 3rd party Access Controllers

C. Tamper Resistant

- The Virdi 3000 is installed with tamper resistant screws & has an onboard tamper switch with output

3. PRODUCT FEATURES

D. Intelligent Image Capture

- Designed to scan and compare moist, dry, small & large fingers

E. High Performance Algorithm that analyzes fingerprint data processing

- 1 to 1 search in less than 0.5 Sec
- 1 to 2000 search in less than 1 Sec
- FRR 0.1%, FAR 0.001%

F. Up to 5 Templates per "USER"

- Each user can store up to 5 fingerprint templates

3. PRODUCT FEATURES

G. Automatic Finger Scan

- The optical scanner automatically starts the scan when a finger is placed on the sensor

H. Max 7,000 Templates Capacity

- 16,000 "USER" Capacity (2 templates per user)

I. Template Carried on a Card

- With the 13.56MHz Mifare card reader, templates can be carried by the user for privacy or enhanced security purposes

J. Matching threshold

- Each user can have an individually assigned security level for both 1:1 & 1:N

K. Max 12,000 event log data

L. Transaction options & combinations set by "USER"

- Multi-level options such as
  Finger only, Pin + Finger,
  Group ID + Finger, Card + Finger,
  Card + PIN + Finger, etc.

- User with poorly defined fingerprints can be setup to transact with a PIN + Finger (1:1) in order to complete a direct comparison against their Master file template

M. Low Power Consumption

- The integrated motion sensor & capacitive sensor ensure the Virdi 3000 remains in standby mode unless finger is present

N. Network operation – Standalone or TCP/IP

- On board TCP/IP for real-time monitoring and data log management
- Variety of template storage options including local & server management

O. Support various applications

- Access Control System
- Time & Attendance system
- Meal Control System

P. Access Control Reader

- The Virdi 3000 can be integrated with any 3rd party Access Controller, in this configuration the Virdi 3000 "Acts" as a Biometric card reader. This configuration is always used for high level security applications.

Q. Access Control Integrated Controller & Reader

- For Medium security applications the Virdi 3000 has an On-Board Access Controller and therefore can manage the Access Control function on its own. The Virdi 3000 can be configured for Stand-Alone or Networked management.

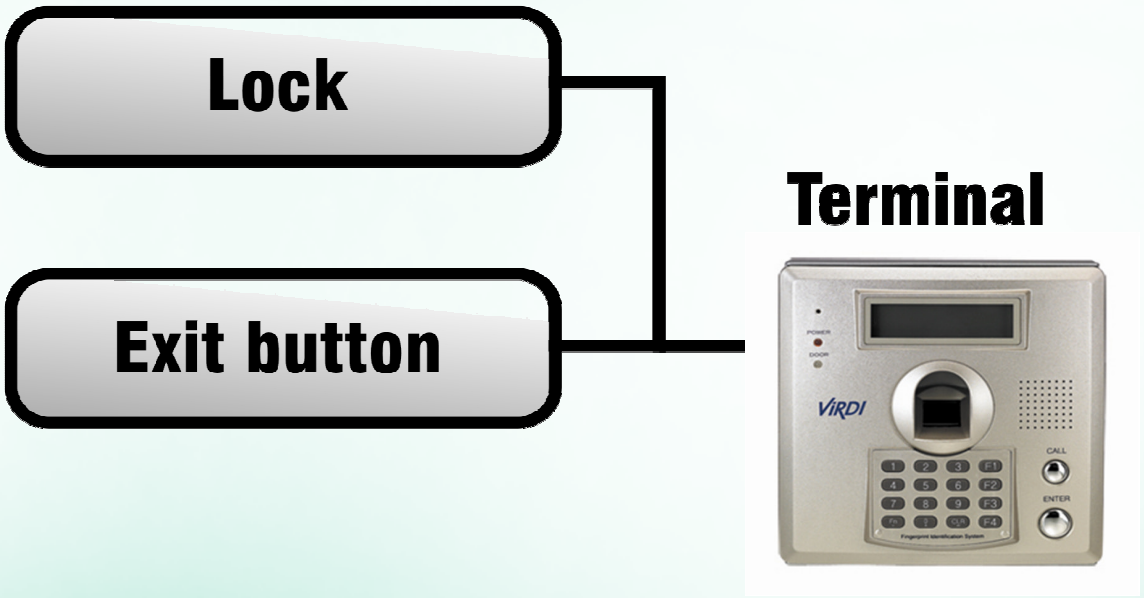
4. PRODUCT SPECIFICATIONS

Sensor Type	Optical
Sensing Area	15 × 17 mm
Resolution	500 dpi
Verification Time(1:1)	< 0.5 sec
Identification Time(1:N)	< 1 sec
FRR / FAR	0.1% / 0.001%
Template Capacity	Default (4M) : 7,000, Option (8MB) : 16,000
Template Size	400 bytes per template

CPU	32Bit RISC CPU
RF Reader (option)	125 KHz proximity (EM) card (option) 13.56 MHz Mifare Card (option)
LCD Display	122× 32 White backlight graphic LCD
Keypad & Button	16 key numeric & function keypad plus additional buttons (Enter and Call)
Communications	10 Base-T(TCP/IP), 2 RS-232C, 1 RS-485 1 Wiegand IN, 1 Wiegand Out ,
Additional Ports	Door Phone & Lock Control
Power Consumption	Max DC 12V~24V / 450mA
Operation Environment	-20~50℃ / Lower than 90% RH (Non-condensing)
Dimension	137mm(W) × 137mm(H) × 48mm(D)

5. NETWORK CONFIGURATION (Stand-Alone)

- Medium sized security applications
- Users are registered on the Virdi 3000
- On board relay triggers lock
- No time zones
- No Anti Passback
- No reporting



5. NETWORK CONFIGURATION (TCP/IP)

- High security applications
- Users are registered on the FP Server through the USB fingerprint reader for template sharing
- On board relay triggers lock
- Limited time zones
- Anti Passback control
- Reporting via software