VIRDI-3000
Fingerprint Access Control Terminal

Experiences Tomorrow’s Technologies
The Number 1 Fingerprint Security Company
Our goal is to enrich the lives of our customers for a better world.

High Security & Convenient Use
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
- 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

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

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

Qualified Reliability
- Various major reference sites with accumulative technology over for years

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.

LED
- Indicate operational status of the terminal

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

KEYPAD
- Environment Setting
- Input authentication ID
- Input PWD

Function Key
- Equipment Setting
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
3. PRODUCT FEATURES

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
3. PRODUCT FEATURES

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
3. PRODUCT FEATURES

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

<table>
<thead>
<tr>
<th>Sensor Type</th>
<th>Optical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensing Area</td>
<td>15 × 17 mm</td>
</tr>
<tr>
<td>Resolution</td>
<td>500 dpi</td>
</tr>
<tr>
<td>Verification Time(1:1)</td>
<td>&lt; 0.5 sec</td>
</tr>
<tr>
<td>Identification Time(1:N)</td>
<td>&lt; 1 sec</td>
</tr>
<tr>
<td>FRR / FAR</td>
<td>0.1% / 0.001%</td>
</tr>
<tr>
<td>Template Capacity</td>
<td>Default (4M) : 7,000, Option (8MB) : 16,000</td>
</tr>
<tr>
<td>Template Size</td>
<td>400 bytes per template</td>
</tr>
<tr>
<td>CPU</td>
<td>32Bit RISC CPU</td>
</tr>
<tr>
<td>RF Reader (option)</td>
<td>125 KHz proximity (EM) card (option)</td>
</tr>
<tr>
<td></td>
<td>13.56 MHz Mifare Card (option)</td>
</tr>
<tr>
<td>LCD Display</td>
<td>122×32 White backlight graphic LCD</td>
</tr>
<tr>
<td>Keypad &amp; Button</td>
<td>16 key numeric &amp; function keypad plus additional buttons (Enter and Call)</td>
</tr>
<tr>
<td>Communications</td>
<td>10 Base-T(TCP/IP), 2 RS-232C, 1 RS-485</td>
</tr>
<tr>
<td></td>
<td>1 Wiegand IN, 1 Wiegand Out</td>
</tr>
<tr>
<td>Additional Ports</td>
<td>Door Phone &amp; Lock Control</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>Max DC 12V~24V / 450mA</td>
</tr>
<tr>
<td>Operation Environment</td>
<td>-20~50℃ / Lower than 90% RH (Non-condensing)</td>
</tr>
<tr>
<td>Dimension</td>
<td>137mm(W) × 137mm(H) × 48mm(D)</td>
</tr>
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</table>
Medium sized security applications
Users are registered on the Virdi 3000
On board relay triggers lock
No time zones
No Anti Passback
No reporting
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
6. WORLDWIDE CLIENTS

High Security & Convenient Use
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High Security & Convenient Use
## 7. CONTACT

<table>
<thead>
<tr>
<th>Region</th>
<th>Contact Person</th>
<th>Email</th>
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</tr>
</thead>
<tbody>
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</tbody>
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