Access Control
Single Door Access Controllers
About

FS10/C is the new member of F Series Standalone Fingerprint access control, as traditional it is in metal shell, anti-vandal, supports fingerprint, besides, FS10C support RFID card (125KHZ EM card) and wiegand interface. The high security and more powerful feature make it an ideal choice for door access.

User capacity 2160, including 160 fingerprint users and 2000 RFID card users. With the flexible user capacity, it is suitable to be installed from small house such as personal rooms, shops, office to public place such as large factories, companies.

By Remote control or Master card for programming, it is so user friendly that anyone can use it.

Key Features

✓ Metal shell, anti-vandal, Fireproof, Shockproof.
✓ FS10: 120 Fingerprints, FS10C: 160 fingerprints & 2000 Cards
✓ Remote infrared programmer
✓ Lock release relay, NO and NC, 12 Volt DC System
✓ FS10C Wiegand26.
✓ Programmable lock release time
✓ Sleep mode to save energy
✓ Built in PIR to wake up the device
✓ Working temperature: -20-55
✓ Two year warranty;
✓ One second activation time, after placing finger on reader
✓ Size: 110mm*70m*30mm

Rain Shield

Technical Specification

<table>
<thead>
<tr>
<th>Model</th>
<th>FS10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal Shell Fingerprint Access Control</td>
<td></td>
</tr>
<tr>
<td>Supply Voltage</td>
<td>12VDC±10%</td>
</tr>
<tr>
<td>Sleeping Current</td>
<td>&lt;20mA</td>
</tr>
<tr>
<td>Stay Current</td>
<td>&lt;90mA</td>
</tr>
<tr>
<td>Temperature</td>
<td>-15°C~60°C</td>
</tr>
<tr>
<td>Humidity</td>
<td>20%RH~95%RH</td>
</tr>
<tr>
<td>Memory capacity</td>
<td>160</td>
</tr>
<tr>
<td>Card capacity</td>
<td>2000</td>
</tr>
<tr>
<td>Card type</td>
<td>125KHZ ID card</td>
</tr>
<tr>
<td>Card reading distance</td>
<td>50 ± 30 mm</td>
</tr>
<tr>
<td>Lock output load capacity</td>
<td>20A</td>
</tr>
<tr>
<td>Alarm output load capacity</td>
<td>20A</td>
</tr>
<tr>
<td>Resolution</td>
<td>450 DPI</td>
</tr>
<tr>
<td>Fingerprint input time</td>
<td>&lt;1S</td>
</tr>
<tr>
<td>Identification time</td>
<td>&lt;1S</td>
</tr>
<tr>
<td>FAR</td>
<td>&lt;0.001%</td>
</tr>
<tr>
<td>FRR</td>
<td>&lt;0.1%</td>
</tr>
<tr>
<td>Dimensions</td>
<td>110L<em>70W</em>30H(mm)</td>
</tr>
<tr>
<td>N/W</td>
<td>500g</td>
</tr>
<tr>
<td>G/W</td>
<td>800g</td>
</tr>
</tbody>
</table>

FS10C [same plus]

- 160 Finger, 2000 Proximity Card
- Wiegand 26, (Connect to C520/NT)
C520/NT
Metal Shell Proximity Card & Pin Code Access Control

About
The C520 access control keypad and card reader uses the latest microprocessor technology to operate control the opening and closing functions of automatic gates, electric strikes, and most security systems that require a momentary (timed) or latching dry contact.

All programming is done through the keypad. Codes and operating parameters are stored within the microprocessor and cannot be lost due to power failure.

The C520 can store 1000 proximity cards and 1000 users with 4 digit password codes. Each 4 digit password code has 10,000 possible combinations.

Key Features
- Metal shell, anti-vandal, Fireproof, Shockproof.
- C520: 1000 User, C520NT: 1000 User, 1000 Records, Wiegand26, RS485
- Can be used as only keypad;
- Support password, card, card+ password
- Can be used as master controller or slave reader
- WG : wiegand output (Optional C520/WG)
- Very low power consumption(20mA)
- Anti-magnetic & lock output current short protect;
- So easy for connection of the lock: only 2 wires output, selecting lock type by programming menu;
- 2 pcs can be communicated; Double-door interconnected
- Full of 1000 users, recognizing speed <20ms.
- Size: 82mm x 128mm x 28mm.

Technical Specification

<table>
<thead>
<tr>
<th>Model NO.</th>
<th>C520</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal Shell Proximity Card &amp; Pin Code Access Control</td>
<td></td>
</tr>
<tr>
<td>DC Supply Voltage</td>
<td>Low voltage input 12Vdc unregulated</td>
</tr>
<tr>
<td>Current Consumption</td>
<td>100mA @ quiescent maximum</td>
</tr>
<tr>
<td>Door Relay:</td>
<td>3Amp 12Vdc</td>
</tr>
<tr>
<td>Alarm output load</td>
<td>150mA pull current</td>
</tr>
<tr>
<td>Memory</td>
<td>Nonvolatile EPROM memory</td>
</tr>
<tr>
<td>Codes</td>
<td>1 Master, 1000 cards and 1000 codes</td>
</tr>
<tr>
<td>Keypad</td>
<td>12 keys, 3 LED status indicators</td>
</tr>
<tr>
<td>Card Types</td>
<td>EM or EM compatible</td>
</tr>
<tr>
<td>Induction Distance</td>
<td>5-8cm</td>
</tr>
<tr>
<td>Wiring Connections</td>
<td>Electric lock, Remote Request to Exit, Door open detection, External Alarm</td>
</tr>
<tr>
<td>Tamper Protection</td>
<td>Negative loop, normally closed</td>
</tr>
<tr>
<td>Keypad Housing</td>
<td>Metal</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-10°C to 60°C (14°F to 140°F)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>82mm x 128mm x 28mm</td>
</tr>
<tr>
<td>Weight</td>
<td>500g</td>
</tr>
</tbody>
</table>

FS10C (same plus)
- 160 Finger, 2000 Proximity Card
- Wiegand 26, (Connect to C520/NT)
AC900 Network Access Controller

SOMAX AC900 series, a professional access control tool offers you the new experience with the innovation of combining the fingerprint verification and an optional function with RFID Card system. SOMAX AC900 series also provides security control alarm system to prevent any unauthorized dismantle of the reader.

With the features on the combination of fingerprint and card system in SOMAX AC900 series and together with the alarm system, any unauthorized entries or unwanted intruders can now be avoided to enhance the highest protection for your organization and premises.

Anti-scratch Fingerprint Sensor

### Specification

- **Templates**: 3200
- **Transactions**: 100000
- **Matching**: 1:N up to 3200 templates
- **Verification**: ≤ 1 second
- **Ver. Type**: FP, Card, Pin code (And/Or)
- **Identification**: ≤ 2 seconds
- **FRR**: ≤ 1%
- **FAR**: ≤ 0.0001%
- **LCD**: 4 lines, 16 characters each line Graphic Display LCD
- **Oper. Temp**: 105 F (0 - 42 C)
- **Relay Output**: 12V DC, 3A
- **Port**: RS 232/RS 485 – Ethernet 10/100 - USB
- **Oper. Voltage**: 12V DC
- **Idle Current**: 60 mA
- **Oper. Current**: 450 mA
- **Length**: 3.7 inches / 185mm
- **Width**: 3.3 inches / 85mm
- **Depth**: 1.45 inches / 37mm

### Key Features

**Fingerprint**
- Enrolled fingerprints are stored in the system and through the fingerprint reader; user can be verified with the presence of their genuine fingerprint.

**RF Card**
- RFID Card system as an alternative verification method, a combination of fingerprint, proximity card and password identification methods are available in SOMAX AC900 series for user’s comfort.

**TCP/IP Method**
- SOMAX AC900 series installed with TCP/IP as a communicator between reader and computer that supports real-time data transfer for easy and efficient data management.

**Smart Recognition Algorithm**
- Manage one-to-one (1:1) and one-to-many (1:N) verifications of maximum 3,000 templates. SOMAX AC900 series allows 360o rotation fingerprint placement with less than 2 seconds for identity authentication.

**High performance CPU**
- 32BIT Intel CPU for fast and sufficient process.

**Linux O/S**
- Embedded with advanced Linux Operation System which can operate consecutively for 24 hours with reliable and stable performance.

**Authentication**
- Multi-Verification methods of 15 different combinations with Fingerprint, Card with Password or ID with Password, or a combination of all to enhance security protection.

**Wiegand in & out**
- Wiegand in & out communication with any third party readers or door access controllers

**High speed USB data transfer**
- USB Host/Client for easy and sufficient data exchange between reader and reader/computer.

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AC800 Network Access Controller

Experience the simplicity for RFID technology in door access with SOMAX AC800 series Door Access Control system. SOMAX AC800 series is pickproof as it has no keyholes, together with the built-in alarm system.
SOMAX AC800 series will automatically activate if door is forcefully entered or with illegal dismantle of the reader.
SOMAX AC800 series allows a maximum data storage up to 30,000 individuals; each individual’s data were stored in the each card where access will not be acquired without presentation of theRF card.
SOMAX AC800 series is made user-friendly and reliable that offers the protection you required.

Key Features

RF Card
RFID Card system as an alternative verification method, proximity card and password identification methods are available in SOMAX AC800 series for user’s comfort.

TCP/IP Method
SOMAX AC800 series installed with TCP/IP as a communicator between reader and computer that supports real-time data transfer for easy and efficient data management.

High performance CPU
32BIT Intel CPU for fast and sufficient process.

Linux O/S
Embedded with advanced Linux Operation System which can operate consecutively for 24 hours with reliable and stable performance.

Wiegand in & out
Wiegand in & out communication with any third party readers or door access controllers

High speed USB data transfer
USB Host/Client for easy and sufficient data exchange between reader and reader/computer.

AC610 RF Reader
- Read range up to 10 cm
- Wiegand format 26 bits (RS232, RS485 format available)
- Fire Proof frame
- Wall mount
- PSK, ASK modulation
- 100% water proof
- Solid epoxy potted
- Reserve power polarity protection
- Reading time 30 ms
- External led control input
- Color dark pearl gray
- 2 color led (red and green), PIEZO buzzer
- External buzzer control input
### AC700 Web-based Access Controller

Experience the simplicity for RFID technology in door access with SOMAX AC700 series Door Access Control system. SOMAX AC700 series is pickproof as it has no keyholes, together with the built-in alarm system. SOMAX AC700 series will automatically activate if door is forcefully entered or with illegal dismantle of the reader. SOMAX AC700 series allows a maximum data storage up to 30,000 individuals; each individual’s data were stored in the each card where access will not be acquired without presentation of the RF card. SOMAX AC700 series is made user-friendly and reliable that offers the protection you required.

### Specification

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Card Holder</td>
<td>30000</td>
</tr>
<tr>
<td>Transactions</td>
<td>100000</td>
</tr>
<tr>
<td>RF Reader</td>
<td>125 KHz ID Card</td>
</tr>
<tr>
<td>Verification</td>
<td>30 ms</td>
</tr>
<tr>
<td>LCD</td>
<td>4 lines, 16 characters each line Graphic Display LCD</td>
</tr>
<tr>
<td>Oper. Temp</td>
<td>105 F (0-42 C)</td>
</tr>
<tr>
<td>Relay Output</td>
<td>12V DC, 3A</td>
</tr>
<tr>
<td>Port</td>
<td>RS 232/RS 485 – Ethernet 10/100 - USB</td>
</tr>
<tr>
<td>Alarm Control</td>
<td>NO &amp; NC</td>
</tr>
<tr>
<td>Oper. Voltage</td>
<td>12V DC</td>
</tr>
<tr>
<td>Idle Current</td>
<td>60 mA</td>
</tr>
<tr>
<td>Oper. Current</td>
<td>450 mA</td>
</tr>
</tbody>
</table>

### Key Features

**RF Card**
- RFID Card system as an alternative verification method, could be programmed by in or out function and it’s slave reader too.

**TCP/IP Method**
- SOMAX AC800 series installed with TCP/IP as a communicator between reader and computer that supports real-time data transfer for easy and efficient data management.

**High performance CPU**
- 32BIT Intel CPU for fast and sufficient process.

**Linux O/S**
- Embedded with advanced Linux Operation System which can operate consecutively for 24 hours with reliable and stable performance.

**Wiegand in & out**
- Wiegand in & out communication with any third party readers or door access controllers

**High speed USB data transfer**
- USB Host/Client for easy and sufficient data exchange between reader and reader/computer.

### AC610 RF Reader

- Read range up to 10 cm
- Wiegand format 26 bits (RS232, RS485 format available)
- Fire Proof frame
- Wall mount
- PSK, ASK modulation
- 100% water proof
- Solid epoxy potted
- Reserve power polarity protection
- Reading time 30 ms
- External led control input
- Color dark pearl gray
- 2 color led (red and green), PIEZO buzzer
- External buzzer control input
F320C Network Time & Attendance
Fingerprint / Proximity Card Attendance Device

F320C Fingerprint / RF Card Time & Attendance

The SOMAX F320C Fingerprint Series Time & Attendance System not only simplifies your time clocking system but also providing you the most efficient way for human resources management as well as enhancing your employee’s punctuality and productivity. SOMAX F320C series offers the most efficient and simplest way for all business sectors on time and attendance management. Keying in of the employee identification number or time clocking card is no longer needed, just a touch of the registered fingerprint to verify a user to avoid any false check-in or enrollment occurrences. Apart from its functionality SOMAX F320C series also consider your needs on the outlook of the device; different color can be applied according to your own selection in order to meet the environment of your premises.

Ants-scratch Fingerprint Sensor

Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Templates</td>
<td>3200</td>
</tr>
<tr>
<td>Transactions</td>
<td>100,000</td>
</tr>
<tr>
<td>Matching</td>
<td>≤ 1 second</td>
</tr>
<tr>
<td>Verification</td>
<td>≤ 2 seconds</td>
</tr>
<tr>
<td>Ver. Type</td>
<td>FP, Card, Pin code (And/Or)</td>
</tr>
<tr>
<td>Identification</td>
<td>≤ 1%</td>
</tr>
<tr>
<td>FAR</td>
<td>≤ 0.0001%</td>
</tr>
<tr>
<td>LCD</td>
<td>Color Graphic LCD Display</td>
</tr>
<tr>
<td>Oper. Temp</td>
<td>32 ~ 105 F (0 ~ 42 C)</td>
</tr>
<tr>
<td>Port</td>
<td>RS 232/RS 485 ~ Ethernet 10/100 ~ USB</td>
</tr>
<tr>
<td>Oper. Voltage</td>
<td>5V DC</td>
</tr>
<tr>
<td>Idle Current</td>
<td>60 mA</td>
</tr>
<tr>
<td>Oper. Current</td>
<td>450 mA</td>
</tr>
<tr>
<td>Length</td>
<td>7.3 inches / 185mm</td>
</tr>
<tr>
<td>Width</td>
<td>3.3 inches / 85mm</td>
</tr>
<tr>
<td>Depth</td>
<td>1.45 inches / 37mm</td>
</tr>
</tbody>
</table>

Key Features

Fingerprint
Enrolled fingerprints are stored in the system and through the fingerprint reader; user can be verified with the presence of their genuine fingerprint.

RF Card
RFID Card system as an alternative verification method, a combination of fingerprint, proximity card and password identification methods are available in SOMAX F320C series for user’s comfort.

TCP/IP Method
SOMAX F320C series installed with TCP/IP as a communicator between reader and computer that supports real-time data transfer for easy and efficient data management.

Smart Recognition Algorithm
Manage one-to-one (1:1) and one-to-many (1:N) verifications of maximum 3,200 templates. SOMAX F320C series allows 360° rotation fingerprint placement with less than 2 seconds for identity authentication.

High performance CPU
32BIT Intel CPU for fast and sufficient process.

Linux O/S
Embedded with advanced Linux Operation System which can operate consecutively for 24 hours with reliable and stable performance.

Authentication
Multi-Verification methods of 15 different combinations with Fingerprint, Card with Password or ID with Password, or a combination of all to enhance security protection.

Voice
Geniality greeting voice system to instruct the user for device operation.

High speed USB data transfer
USB Host/Client for easy and sufficient data exchange between reader and reader/computer without complicated use of software and procedures.
AC5000 Fingerprint / RF Card Door Lock

The fingerprint lock offers state-of-the-art single door management solution that provides you with unmatched options that comes with OLED, Standard USB interface. You can verify a person and open the door with fingerprint, password and ID/Mifare cards. The All-in-one fingerprint lock is very convenient to operate.

Enrollment and management of users are done on the OLED display. There are three user levels available to manage the system effectively - administrator, supervisor and user. An administrator or supervisor can do add, delete or change users very easily at the lock.

The USB Port for data transmission is the main feature of the lock which makes it easy to download user transactions from the lock – Professional and Intelligent.

Specification

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>Zinc Alloy</td>
</tr>
<tr>
<td>Templates</td>
<td>500 fingerprint/Card , 100 password</td>
</tr>
<tr>
<td>Transactions</td>
<td>30,000</td>
</tr>
<tr>
<td>Matching</td>
<td>1:N up to 500 templates</td>
</tr>
<tr>
<td>Verification</td>
<td>≤ 1 second</td>
</tr>
<tr>
<td>Ver. Type</td>
<td>FP, Password &amp; Card</td>
</tr>
<tr>
<td>Identification</td>
<td>≤ 2 seconds</td>
</tr>
<tr>
<td>FRR</td>
<td>≤ 1%</td>
</tr>
<tr>
<td>FAR</td>
<td>≤ 0.0001%</td>
</tr>
<tr>
<td>Front Panel Colors</td>
<td>Black/Red/Blue</td>
</tr>
<tr>
<td>Oper. Temp</td>
<td>0°C ~ 45°C</td>
</tr>
<tr>
<td>Humidity</td>
<td>20 %~ 80%</td>
</tr>
<tr>
<td>Power input</td>
<td>4 x 1.5V AA Battery</td>
</tr>
<tr>
<td>Backup Unlock Mechanism</td>
<td>Emergency battery &amp; Mechanical key</td>
</tr>
<tr>
<td>Idle Current</td>
<td>60 mA</td>
</tr>
<tr>
<td>Oper. Current</td>
<td>450 mA</td>
</tr>
<tr>
<td>Length</td>
<td>315 mm</td>
</tr>
<tr>
<td>Width</td>
<td>78 mm</td>
</tr>
<tr>
<td>Height</td>
<td>38 mm</td>
</tr>
</tbody>
</table>

Key Features

**MULTI-FACTOR IDENTIFICATION METHODS**
Supports four identification mode which includes - fingerprint, password, RFID card and mechanical key or any combination.

**RUGGED SENSOR TECHNOLOGY**
Non-coating optical fingerprint sensor and cutting edge fingerprint matching technology.

**VERSATILE APPLICATION AND RELIABLE MECHANISM**
Strong stainless steel bar latch - suitable both for the main entrances as well as other doors. Keep visitor mode in Unlock-status if it is activated.

**ROBUST MECHANICAL STRUCTURE**
Pure stainless steel mechanical rotating structure with nanotechnology, which makes it last for many years under normal usage.

**EASY INSTALLATION AND OPERATION**
No wiring required – Standalone installation. Data transfer to and from PC can be done using USB flash disk. User registration and various settings can be done directly at the lock using OLED display.

**EXTENDED BATTERY LIFETIME**
Lock is powered by four standard alkaline 1.5 V batteries which can last up to 5,000 unlocking activities. The OLED display will show the status of the batteries power level.
Wiegand Readers
Outdoor Wiegand Proximity Card Readers, and Fingerprint Readers for Network Access Control Devices & for Access Control Panels

SM-AC610
Outdoor Wiegand Proximity Card Reader 10cm Reading Range
- Reading range up to 10 cm
- Wiegand format 26 bits
- Fire Proof frame
- Wall mount
- PSK, ASK modulation
- 100% water proof
- Reading time 30 ms
- External led control input

SM-AC625
Wiegand Pin Code/Proximity Card Reader 10cm Reading Range
- Reading range up to 10 cm
- Wiegand format 26 bits
- Proximity Card / Pin Code
- Wall mount
- PSK, ASK modulation
- 100% water proof
- Reading time 30 ms
- External led control input

SM-AC1640
Outdoor Wiegand Mid. Range Proximity Card Reader
- Power requirements: +12Volts linear regulated DC at 200mA typical, 300mA max.
- Interface: RS232/RS485/WIEGAND26
- Typical Maximum Read Range: Range 1000mm with ISO card
- Operating temperature: -10~+80
- Frequency: 125KHz typical
- Transponder: EM4100 Read Only
- Audio visual Indication: Buzzer output with external LED

SM-AC680
Fingerprint Access Control Reader
- CPU: 324MHz
- Sensor: SOMAX small-sized sensor
- Communication: RS485
- Standard function: ID Card Module
- Optional function: MF Card Module
- Voice Prompt: Buzzer
- Working Voltage: 12VDC
- Working Temperature: 0~45
- Dimension(W*H*D)mm: 50*102*37.3
- Protection Grade: IP65